

UNIVERSIDADE FEDERAL DO RIO GRANDE DO SUL
ESCOLA DE ADMINISTRAÇÃO
PROGRAMA DE PÓS-GRADUAÇÃO EM ADMINISTRAÇÃO
DOUTORADO EM ADMINISTRAÇÃO

YVES WANDERLEY ESTANISLAU DA COSTA NETTO

THE DEVELOPMENT OF IT IDENTITY DUE TO SOCIAL MEDIA USE:
ANTECEDENTS AND IMPACT ON COMPUTER-BASED OFFICE WORK DURING
COVID-19 PANDEMIC

Porto Alegre

Novembro, 2021

YVES WANDERLEY ESTANISLAU DA COSTA NETTO

THE DEVELOPMENT OF IT IDENTITY DUE TO SOCIAL MEDIA USE:
ANTECEDENTS AND IMPACT ON COMPUTER-BASED OFFICE WORK DURING
COVID-19 PANDEMIC

Tese apresentada ao Programa de Pós-Graduação em Administração da Universidade Federal do Rio Grande do Sul, como requisito parcial para a obtenção do título de Doutor em Administração.

Área de concentração: Gestão de Sistemas e Tecnologia da Informação

Orientadora: Prof^a. Dr^a Raquel Janissek-Muniz

PORTO ALEGRE

Novembro, 2021

CIP - Catalogação na Publicação

Wanderley Estanislau da Costa Netto, Yves
THE DEVELOPMENT OF IT IDENTITY DUE TO SOCIAL MEDIA
USE: ANTECEDENTS AND IMPACT ON COMPUTER-BASED OFFICE
WORK DURING COVID-19 PANDEMIC / Yves Wanderley
Estanislau da Costa Netto. -- 2021.
267 f.
Orientadora: Raquel Janissek-Muniz.

Tese (Doutorado) -- Universidade Federal do Rio
Grande do Sul, Escola de Administração, Programa de
Pós-Graduação em Administração, Porto Alegre, BR-RS,
2021.

1. IT Identity. 2. Social Media. 3. New Ways of
Working. 4. Self. 5. Organizations. I. Janissek-Muniz,
Raquel, orient. II. Título.

YVES WANDERLEY ESTANISLAU DA COSTA NETTO

THE DEVELOPMENT OF IT IDENTITY DUE TO SOCIAL MEDIA USE:
ANTECEDENTS AND IMPACT ON COMPUTER-BASED OFFICE WORK DURING
COVID-19 PANDEMIC

Tese apresentada ao Programa de Pós-Graduação em
Administração da Universidade Federal do Rio Grande
do Sul como requisito parcial à obtenção do título de
Doutor em Administração de Empresas.

Área de Concentração: Gestão de Sistemas e

Tecnologia da Informação

Data da Aprovação: __/____/____

Banca Examinadora:

Prof. Dr. Ariel Behr (avaliador)
Universidade Federal do Rio Grande do Sul – UFRGS

Profª Drª. Edimara Mezzomo Luciano (avaliadora)
*Pontifícia Universidade Católica do Rio Grande do Sul -
PUCRS*

Prof. Dr. Jairo Dornelas (avaliador)
Universidade Federal de Pernambuco – UFPE

Profª. Drª Raquel Janissek-Muniz (Orientadora)
Universidade Federal do Rio Grande do Sul - UFRGS

ACKNOWLEDGMENTS

I thank my parents, José Carlos and Cleide, and my sisters, Juliana and Yviana, for all the affection and support. My daughter Maria Clara who inspires me in every moment of my life. Thanks to the professors I had during the undergraduate and master's periods at PUCRS. Especially my friend Carlos Vicente de Souza and Professor Leonardo Rocha de Oliveira (who encouraged me to follow a master's degree). Thanks, professor Marie Anne Macadar Moron, whom I had the pleasure to team up with during one teaching internship at COPPEAD institute in 2019. Thanks, professors Edimara and Guilherme, for guiding me and being patient with me in a delicate moment I was going through during the master's period.

I would like to thank the colleagues I have made at UFRGS since 2015, such as Mariana, Maitê, Aline, Fernanda, Amanda, Cláudia, Leonardo, Gabriela, and many others. In addition, professor Ariel, thanks for constantly pushing us to be meticulous and pay attention to detail and accuracy when planning and executing our research. Thanks, my former advisors Antônio Carlos Gastaud Maçada and Elaine Tavares. For the teachings and lessons, I will take for the rest of my life. My advisor, Raquel Janissek-Muniz. I warmly thank you for the courage to accept to guide me, given the reduced time we had to finish the research and write the document. I will take your gesture of generosity and especially empathy as an example to be followed.

At PUCRS, I thank all the professors and employees of the PPGA secretariat (especially the dear Jana). At UFRGS, thank you, Sandra, who has always been concerned about attending to my demands. Finally, thanks to a great colleague who unfortunately left us in 2021, our dear Thiago, to whom I dedicate this thesis.

ABSTRACT

IT identity is a relatively new concept in the area of Management Information Systems (MIS). Its importance has become increasingly pronounced as identity is one of the predictors of human behavior. At the same time, understanding the behavior of individuals when using information technology (IT) in the workplace represents the link between technology investments and increased performance through IT. In this respect, one of the most used communication technologies recently, social media, allows individuals to extensively experience different facets of their identities. The overall objective of this thesis is to understand the development of IT identity due to social media use and assess its impact on computer-based office work during the COVID-19 pandemic. Three specific objectives were defined for this purpose. Thus, the thesis is structured in three papers that sought to respond to each of the specific objectives, which are: (i) identify the possible antecedents of the development of IT identity due to social media use, (ii) the connection between them and the three reflective dimensions that constitute the identity of IT and, finally, (iii) the impact of IT identity due to the use of social media in the organizational scope. The first paper is a theoretical study and proposes the adaptation and expansion of Carter's original theoretical model (2012) from the theoretical instances related to this technology and that can influence the development of IT identity due to social media use. As a result, a conceptual model was developed. Ten propositions related to the concepts derived from the literature and inserted in three main instances of IT identity development were presented due to the use of social media. The empirical investigation of the relationship between the antecedents of the model proposed in the first paper and the three dimensions of IT identity began in the second article of the thesis. For this purpose, a netnography was proposed and executed between 2019 and 2021. One of the paper's findings indicated that the frequency of use of WhatsApp can lead to precipitation of the most strongly polarized behavior and that one of the reflective dimensions of IT identity, relatedness with WhatsApp, can play a preponderant role in the precipitation of such behavior. From this result, in paper 3, a quantitative and exploratory study, based on duality theory, sought to develop and test hypotheses about how IT identity concerning social media can benefit, but at the same time bring negative consequences for computer-based office workers in the current period of the COVID-19 pandemic. For this, a model was proposed showing the relationship between the dimensions of IT identity and four facets of the so-called New Ways of Working. Among the study's findings, it was verified that IT identity in relation to social media platforms could be a positive factor in preserving the cohesion of employees'

professional identity since feelings of affinity and emotional energy in relation to these technologies favored access to organizational knowledge and colleagues when working remotely. This thesis can contribute to expanding Carter's (2012) model to contemplate a class of IT as social media is constituted (paper 1). In turn, the expansion of the original model can potentially contribute to broadening the understanding of this technology's role in fostering polarized behavior in the use of WhatsApp, one of the most used social media these times (paper 2). Finally, in the third paper, the indication that the frequency of WhatsApp use may be associated with a strong IT identity about this technology (verified in paper 2) led to the proposition of a model to empirically test how the three dimensions of IT Identity in relation to the use of social media, directly and indirectly, influence the aspects of new ways of working for workers using computer devices to perform their duties. Emotional energy in relation to social media (i.e., prolonged feelings of confidence, enthusiasm, and energy toward social media) is positively related to superior performance when individuals direct it to their work use, allowing them to better handle the work-life conflict. The thesis presents limitations regarding its ability to inferences that were addressed in each of the papers. Similarly, suggestions for future research were presented in each paper. Finally, the conclusion chapter presents the integration of the thesis papers to form the complete study, the overview of research objectives, the main results, contributions to academia and practice, its limitations, and suggestions for future research.

Keywords: IT Identity, Social Media, New Ways of Working, Self, Organizations.

RESUMO

A identidade de TI é um conceito relativamente novo na área de Gestão de Sistemas de Informação (GSI). A sua importância tem se tornado cada vez mais acentuada na medida que a identidade é um dos preditores do comportamento humano. Paralelamente, a compreensão do comportamento dos indivíduos ao utilizar a tecnologia da informação (TI) no ambiente de trabalho representa o elo entre os investimentos em tecnologia e o aumento do desempenho por meio da TI. Sob esse aspecto, uma das tecnologias de comunicação mais usadas em tempos atuais, as mídias sociais, permitem de forma extensiva que os indivíduos experimentem diferentes facetas das suas identidades. O objetivo geral dessa tese é compreender o desenvolvimento da identidade de TI devido ao uso de mídias sociais e avaliar o seu impacto para os trabalhadores de escritório que utilizam dispositivos computacionais para executar suas funções de trabalho durante o período da pandemia de COVID-19. Para isso foram definidos três objetivos específicos. Sendo assim, a tese está estruturada em três artigos que buscam responder a cada um dos objetivos específicos, quais são: (i) identificar os possíveis antecedentes do desenvolvimento da identidade de TI devido ao uso de mídias sociais, (ii) a conexão entre eles e as três dimensões reflexivas que constituem a identidade de TI e, por fim, (iii) o impacto da identidade de TI devido ao uso de mídias sociais no âmbito organizacional. O primeiro artigo, de natureza teórica, propõe a adaptação e expansão do modelo teórico original de Carter (2012) a partir das instâncias teóricas aderentes ao uso e que influenciam o desenvolvimento da identidade de TI pelo uso de mídias sociais. Como resultado, foi desenvolvido um modelo conceitual em que foram apresentadas dez proposições interrelacionando os conceitos derivados da literatura e inseridos em três instâncias principais de desenvolvimento da identidade de TI devido ao uso de mídias sociais. A investigação empírica da relação entre os antecedentes do modelo proposto no artigo 1 e as três dimensões da identidade de TI iniciou-se na sequência no segundo artigo da tese. Para isso foi proposta uma netnografia que foi executada entre 2019 e 2021. Um dos achados do artigo indicou que a frequência de uso do WhatsApp pode levar a precipitação do comportamento mais fortemente polarizado e que uma das dimensões reflexivas da identidade de TI, a afinidade com o WhatsApp, pode desempenhar um papel preponderante na precipitação de tal comportamento. A partir desse resultado, no artigo 3, de natureza quantitativa e exploratória, tendo como base a teoria da dualidade, buscou-se desenvolver e testar hipóteses sobre como a identidade de TI em relação às mídias sociais pode beneficiar, mas ao mesmo tempo trazer consequências negativas para os trabalhadores de escritório que usam principalmente dispositivos

computacionais para cumprir suas tarefas no atual período da pandemia de COVID-19. Para isso, foi proposto um modelo apresentando a relação entre as dimensões da identidade de TI e quatro facetas das chamadas Novas Formas de Trabalho. Entre os achados deste estudo, foi verificado que a identidade de TI em relação às plataformas de mídias sociais pode ser um fator positivo na preservação da coesão da identidade profissional dos colaboradores, uma vez que sentimentos de afinidade e energia emocional em relação a essas tecnologias favoreceram o acesso ao conhecimento organizacional e aos colegas ao trabalhar remotamente. Destacam-se como contribuições dessa tese a expansão do modelo de Carter (2012) para contemplar uma classe de TIs como são constituídas as mídias sociais (artigo 1). Por sua vez, a expansão do modelo original contribuiu para ampliar a compreensão do papel dessa tecnologia em fomentar o comportamento polarizado no uso do WhatsApp, uma das mídias sociais mais utilizadas em tempos atuais (artigo 2). Finalmente, no terceiro artigo a indicação de que a frequência de uso no WhatsApp pode estar associada a uma forte identidade de TI em relação a essa tecnologia (verificada no artigo 2), levou a proposição de um modelo para testar empiricamente de que forma as três dimensões da IT Identity em relação ao uso de mídias sociais influenciam direta e indiretamente os aspectos das novas formas de trabalho para os trabalhadores que utilizam dispositivos computacionais para desempenhar suas funções. A energia emocional em relação às mídias sociais (ou seja, sentimentos prolongados de confiança, entusiasmo e energia em relação às mídias sociais) está positivamente relacionada a um desempenho superior quando os indivíduos a direcionam para o seu uso do trabalho, permitindo-lhes também lidar melhor com os conflitos entre a vida profissional e a vida pessoal. A tese apresenta limitações quanto a sua capacidade de inferências que foram endereçadas em cada um dos artigos. Da mesma forma, sugestões de pesquisas futuras foram apresentadas em cada artigo. Por fim, o capítulo de conclusão apresenta a integração dos artigos da tese para a formação do estudo completa, a retomada dos objetivos de pesquisa, os principais resultados, contribuições para a academia e para a prática, suas limitações e sugestões para pesquisas futuras.

Palavras-chave: IT Identity, Mídias Sociais, Novas Formas de Trabalho, Self, Organizações.

LIST OF TABLES

Table 1 - Results of the Bibliometric Search.....	21
Table 2 - The Relationship Between Research Questions and Objectives, Data Analysis and Research Instruments.....	25
Table 3 - The Four Main Identity Categories	30
Table 4 - Carter`s IT Identity Theoretical Model: Categories and Constructs.....	54
Table 5 - IT Identity Dimensions, Conceptual and Operational Definitions.....	54
Table 6 - Communication Theories: Definitions and Implications for Social Media Users [□] ..	58
Table 7 - The Influence of Social Media Characteristics on Users Perceptions	61
Table 8 - Social Media Self-Presentation Related Self-Process and their Implications for Individuals	65
Table 9 - IT Identity due to Social Media Use Schematization.....	74
Table 10 - Relationship between the Elements of the Proposed Model and Carter`s Original IT identity Model Elements.....	76
Table 11 - Summary of Self-Processes Involved in Social Media Self-presentation, and their Implications	101
Table 12 - Comparison of Quantitative and Qualitative Methods.....	105
Table 13 – Data Collect Methods and Expected Outcomes	108
Table 14 - Coding Criteria of Self-Presentations: Related Self-Processes and Examples	113
Table 15 -Participants` Profiles	114
Table 16 - Participants' IT Identity Dimensions Results	115
Table 17 - Data Source of the Nine Group Participants (N=39)	115
Table 18 - Frequency of a priori Codes (N=816) from Primary Data Source.....	115
Table 19 - The New Ways of Working Facets	143
Table 20 - Social Media Usage Positive Outcomes for Individuals and Organizations.....	150
Table 21 - IT identity Dimensions and Associated Outcomes for Social Media Usage	151
Table 22 - Social Media Usage Negative Outcomes for Individuals and Organizations	153
Table 23 - Respondents Demographic Profile.....	158
Table 24 - Corrected Item-Total Correlations and Constructs Cronbach Alpha Indexes	162
Table 25 - Items Outer Loadings and Cross Loadings	163
Table 26 - Manifest Variables Outer Loadings, Latent Variables, Cronbach Alpha, Average Variance Extracted, and Composite Reliability	164
Table 27 - Discriminant Validity by the Fornell-Larcker Criterion	166
Table 28 - Discriminant Validity Heterotrait-Monotrait Ratio (HTMT)	166
Table 29 - Convergent Validity: Constructs` AVE significance	167
Table 30 - Inner (Structural Model) VIF Results	168
Table 31 - Latent Variables Predictive Relevance Q^2	168
Table 32 - Results of Latent Variables Effects.....	169
Table 33 - Hypothesis Test Results	170
Table 34 - Unobserved Heterogeneity Results: Adjustment Indicators and Segments.....	171
Table 35 - Pair of Groups to perform MGA	174
Table 36 - Results of Permutations Significant Difference Between Path Coefficient of the Three Pair of Groups	174
Table 37 - Results of Differences between Coefficients of Determination (R^2) of the Four LVs among Hybrid vs. Remote Work Groups	175

Table 38 - Results of Differences between Path Coefficients (β) of Hybrid vs. Remote Work Groups	175
Table 39 - Results of Differences between Coefficients of Determination (R^2) of the Four LVs among Hedonic vs. Work-Oriented Social Media Use Groups	176
Table 40 - Results of Differences between Path Coefficients (β) of Hedonic Use vs. Work-Oriented Use	176
Table 41 - Results of Differences between Path Coefficients (β) of Heavy Users vs. Light Users	177
Table 42 - The Changes on Dimensions from Traditional to the NWW and their Implications for the Research of IT identity Acquired by Using Social Media	205
Table 43 - Cards Grouped by Percentage (N=15)	241
Table 44 - Heavy and Light WhatsApp Users' Groups: Means, Standard Deviations and Variances	245
Table 45 - Mann-Whitney U Test and Wilcoxon W Results	245
Table 46 - Levene's Test for Equality of Variances.....	247
Table 47 - Codebook Table: Chat Log	252
Table 48 - Codebook Table: Interviews	254
Table 49 - Audit Trail Categories: Outcomes, Details, and Years of Collect	255
Table 50 - Audit Process Stages: Steps and Dates	256
Table 51 - MICOM Analysis: Work Regimen Hybrid vs. Remote Work.....	262
Table 52 - MICOM Analysis: Hedonic Use vs. Work-Oriented Use.....	263
Table 53 - MICOM Analysis: Heavy Users vs. Light Users.....	264

LIST OF FIGURES

Figure 1 - Thesis Structure	23
Figure 2 - Thesis Papers and their Interconnected Outcomes	24
Figure 3 - Dewey's Model of Experience	27
Figure 4 - Dewey's Model of Inquiry	28
Figure 5 - The Identity Theory Premise	31
Figure 6 - Basic Identity Theory	31
Figure 7 - The Interconnected and Interrelated Nature of IT	37
Figure 8 - Thesis Preliminary Research Model	39
Figure 9 - Paper 1: Conceptual Model.....	40
Figure 10 - Paper 2: Netnography Research Model	41
Figure 11 - Paper 3: Survey Research Model.....	42
Figure 12 - Thesis Research Design	47
Figure 13 - Carter Initial Theoretical Model for IT Identity	55
Figure 14 - Defleur's Circular Model of Communication.....	60
Figure 15 - Impression Management Schematization	69
Figure 16 - The Influence of Individual and Technological Aspects in Development of IT Identity due to the Use of Social Media	78
Figure 17 - Conceptualization of Social Media IT Identity Development [□]	81
Figure 18 - The Relationship Between the Four Instances of Analysis	104
Figure 19 – Comparison of Self-Presentation Strategies among Participants with Higher and Lower Relatedness about WhatsApp.....	116
Figure 20 - Comparison of Self-Presentation Strategies among Participants with Higher and Lower Emotional Energy about WhatsApp.....	117
Figure 21 - Comparison of Self-Presentation Strategies among Participants with Higher and Lower Dependence about WhatsApp	118
Figure 22 - A Model of the Relationship of Social Media IT Identity Dimensions and the New Ways of Working Facets during the COVID-19 Period.....	155
Figure 23 - Social Media Main Usage Purpose	160
Figure 24 - Social Media Platforms Preferences	160
Figure 25 - Preference of Device to Access Social Media	161
Figure 26 - Structural Model Results	170
Figure 27 - Guidelines for Running MGA in PLS-SEM.....	173
Figure 28 - Thesis's papers, Outcomes, and Connection Between Papers.....	198
Figure 29 - Graphical Abstract	243

LIST OF ABBREVIATIONS

AI - Artificial Intelligence

AIS - Association for Information Systems

AISel - Association for Information Systems Electronic Library

AVE - Average Variance Extracted

CMC - Computer-Mediated Communication

FIMIX - Finite mixture partial least squares

FoMO - Fear of Missing Out

HTMT - Heterotrait-Monotrait Ratio

IT - Information Technology

ITID - IT Identity

LV - Latent Variable

MV - Manifest Variable

MGA - Multi-group Analysis

MICOM - Measurement Invariance of Composite Models

MRT - Media Richness Theory

NWW - New Ways of Working

SMIP - Social Media Induced Polarization

PLS - Partial Least Square

PU - Perceived Usefulness

PE - Perceived Enjoyment

SEM - Structural Equations Modeling

SNS - Social Network Sites (SNS)

TAM – Technology Acceptance Model

UGC - User Generated Content

UTAUT – Unified Theory of Acceptance and Use of Technology

VIF - Variance Inflation Factor

WFH - Work from Home

SUMMARY

INTRODUCTION	17
1.1. RESEARCH QUESTIONS.....	18
1.2. OBJECTIVES	18
1.2.1.General Objective.....	18
1.2.2.Specific Objectives.....	18
1.3. JUSTIFICATION.....	19
1.4. DOCUMENT STRUCTURE.....	21
2. GENERAL THEORETICAL BACKGROUND	26
2.1. THE PHILOSOPHICAL ANTECEDENTS OF IDENTITY THEORIES	26
2.2. IDENTITY THEORIES.....	29
2.2.1.Identity Theory	30
2.2.2.Social Identity Theory	32
2.2.3.Impression Management	33
2.2.4.Social Labeling	34
2.3. COMMUNICATION THEORIES RELATED TO SOCIAL MEDIA RESEARCH	35
2.4. IT IDENTITY DEVELOPMENT DUE TO SOCIAL MEDIA USE	36
2.5. PROPOSED THEORETICAL MODEL	38
2.5.1.Paper 1	39
2.5.2.Paper 2	40
2.5.3.Paper 3	41
2.6. THESIS METHODOLOGICAL PROCEDURES.....	43
3 PAPER 1: THE ANTECEDENTS OF IT IDENTITY DEVELOPMENT DUE TO SOCIAL MEDIA USE: A CONCEPTUAL MODEL PROPOSITION	48
1. INTRODUCTION	48
2. THEORETICAL BACKGROUND	50
2.1. SOCIAL MEDIA: A BRIEF HISTORY AND DEFINITION.....	51
2.2. THE INTERTWINING OF INDIVIDUAL AND COLLECTIVE PERSPECTIVES OF IDENTITY THEORY	51
2.3. CARTER’S IT IDENTITY CONCEPTUALIZATION AND INITIAL THEORETICAL MODEL	53
2.4. EFFECTS OF SOCIAL MEDIA USE ON INDIVIDUALS	56
2.4.1.Social Media Characteristics	56
2.4.2.Social Media Communication Structure	59

2.4.3.Social Connectedness and Sense of Belonging in Social Media Platforms	60
2.5. SOCIAL MEDIA SELF-PRESENTATION.....	63
2.5.1.Impression Manifestation in Social Media	63
2.5.2.Impression Internalization in Social Media	64
2.6. SOCIAL MEDIA AUDIENCE’S EVALUATION	67
2.6.1.Impression Verification in Social Media.....	68
2.6.2.The Influence of Interpersonal Ties (Strong and Weak Ties) in Social Media Interactions.....	71
3. A CONCEPTUAL MODEL OF THE ANTECEDENTS OF IT IDENTITY DEVELOPMENT DUE TO THE USE OF SOCIAL MEDIA:	73
4. CONCLUSION	82
REFERENCES	83
4 PAPER 2:DOES WHATSAPP'S IT IDENTITY ENCOURAGE ONLINE POLARIZATION? A NETNOGRAPHIC STUDY ON THE USERS’ INTERACTIONS	94
1. INTRODUCTION	95
2. THEORETICAL BACKGROUND	96
2.1. IT IDENTITY DIMENSIONS: RELATEDNESS, EMOTIONAL ENERGY AND DEPENDENCE.....	96
2.2. SOCIAL MEDIA AND ONLINE POLARIZATION.....	97
2.3. SELF-PRESENTATION THEORY	99
2.4. SELF-PRESENTATION IN SOCIAL MEDIA AND ITS RELATED SELF- PROCESSES	100
3. RESEARCH DESIGN: STRATEGY AND METHOD JUSTIFICATION	102
3.1. SOCIAL MEDIA CHARACTERIZATION, RESEARCH CONTEXT, AND SAMPLING STRATEGY	104
3.2. RESEARCHER`S ROLE	106
3.3. DATA SOURCES	107
3.4. DATA COLLECTION	107
3.5. CONTENT ANALYSIS.....	108
3.6. IT IDENTITY QUESTIONNAIRE	109
3.7. TRUSTWORTHINESS.....	109
4. RESULTS AND ANALYSIS	111
4.1. GROUP’S PARTICIPANTS PROFILES AND QUESTIONNAIRE RESULTS	114
4.2. ANALYSIS: WHATSAPP CHARACTERISTICS AND SELF PRESENTATION	119

4.3. ANALYSIS: IT IDENTITY DUE TO WHATSAPP USE AND POLARIZED BEHAVIOR	122
5. CONCLUSION	127
5.1. THEORETICAL AND PRACTICAL CONTRIBUTIONS	129
5.2. LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS	130
REFERENCES	131
5 PAPER 3: THE INFLUENCE OF IT IDENTITY DUE TO THE USE OF SOCIAL MEDIA ON COMPUTER-BASED OFFICE WORK DURING THE COVID-19 PANDEMIC	141
1. INTRODUCTION	141
2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT.....	143
2.1. THE NEW WAYS OF WORKING IN PANDEMIC TIMES	143
2.2. THE DEVELOPMENT OF IT IDENTITY DUE TO SOCIAL MEDIA USE.....	146
2.3. DUALITY THEORY IN MANAGEMENT	147
2.4. THE DUALISTIC ROLE OF IT IDENTITY ACQUIRED DUE TO THE USE OF SOCIAL MEDIA FOR EMPLOYEES IN DIFFERENT WORK SETTINGS	148
3. RESEARCH METHOD	156
3.1. INSTRUMENT DEVELOPMENT	156
3.2. SAMPLE ESTIMATION	157
4. RESULTS AND ANALYSIS	158
4.1. SAMPLE SOCIAL DEMOGRAPHIC CHARACTERISTICS	158
4.2. INSTRUMENT VALIDATION AND DATABASE DEPURATION	161
4.3. MEASUREMENT MODEL ANALYSIS.....	162
4.3.1. Items Reliability	162
4.3.2. Constructs Reliability	164
4.3.3. Convergent and Discriminant Validity	165
4.4. STRUCTURAL MODEL ANALYSIS	167
4.5. PATHS COEFFICIENTS ANALYSIS	169
4.6. HYPOTHESIS TEST SUMMARY	170
4.7. ANALYSIS OF UNOBSERVED HETEROGENEITY	171
4.8. MULTI-GROUP ANALYSIS RESULTS	172
4.8.1. Measurement Invariance of Composite Models (MICOM).....	172
4.8.2. Work Regimen: Hybrid vs. Remote Work.....	174
4.8.3. Social Media Use Habits: Hedonic vs. Work-oriented Use.....	176
4.8.4. Social Media Use Habits: Heavy Users vs. Light Users	177

5. RESULTS DISCUSSION	178
5.1. HOW DOES THE IT IDENTITY DUE TO SOCIAL MEDIA USE IMPACT THE NWW FACETS?.....	179
5.2. HOW DOES THE WORK-SETTINGS IMPACT THE RELATIONSHIP BETWEEN IT IDENTITY AND NWW FACETS?.....	180
5.3. HOW DOES SOCIAL MEDIA USE HABITS IMPACT THE RELATIONSHIP BETWEEN IT IDENTITY DIMENSIONS AND THE NWW FACETS?	181
6. CONCLUSION	183
6.1. THEORETICAL AND PRACTICAL IMPLICATIONS	185
6.2. LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS	186
REFERENCES	187
GENERAL DISCUSSION AND CONCLUSION	197
OVERVIEW OF RESEARCH OBJECTIVES	197
RESEARCH ORIGINALITY	200
MAIN RESULTS	200
CONTRIBUTIONS FOR ACADEMIA AND PRACTITIONERS, RESEARCH LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH	203
REFERENCES	207
APPENDIX A - LITERATURE REVIEW STRATEGY PROTOCOL	238
APPENDIX B – CARD SORTING RESULTS (PORTUGUESE)	241
APPENDIX C - GRAPHICAL ABSTRACT	243
APPENDIX D - IT IDENTITY DIMENSIONS QUESTIONNAIRE	244
APPENDIX E - DESCRIPTIVE STATISTICS OF HEAVY AND LIGHT WHATSAPP USERS’ GROUPS.....	245
APPENDIX F - INDEPENDENT SAMPLES TEST	247
APPENDIX G - INDIVIDUAL SEMI-STRUCTURED INTERVIEW PROTOCOL (Portuguese)	248
APPENDIX H - INTERVIEW CONSENT AGREEMENT (Portuguese).....	251
APPENDIX I - CODEBOOK TABLE	252
APPENDIX J – AUDIT TRAIL: CATEGORIES AND STAGES	255
APPENDIX K - SURVEY QUESTIONNAIRE (Portuguese).....	257
APPENDIX L - MICOM ANALYSIS RESULTS	262
APPENDIX M - QUESTIONNAIRE STATEMENT (Portuguese)	265

INTRODUCTION

In 2015, during a TED platform talk, Professor Ulrike Schultze uttered a vital remark about individuals' relationship with social media:

If we look historically, since the cavemen, we have relied on tools and technologies - such as social media - in order to become what we are. This relationship is codependent, which means that we build the technology, but technology also plays an essential role in the formation of our identity (SCHULTZE, 2015).

This statement rings even more true in recent times, given that mobile devices, like smartphones, tablets, and digital communication platforms, like social media, are ubiquitous in distinct parts of daily lives (KASPERIUNIENE; ZYDZIUNAITE, 2019; MELONASHI, 2019; HONG *et al.*, 2020; SWAIN *et al.*, 2020). Regarding social media, the growth in the use of this technology has brought consequences for various segments of society. One of them is the increasing difficulty in discerning between what is false and true in online realms. This may partially be explained due to the velocity of information spreading in these media (ALLCOTT, GENTZKOW, 2017; GERHART; TORRES; NEGAHBAN, 2017; JANZE; RISIUS, 2017; BRITES; AMARAL; CATARINO, 2018).

This symbiotic relationship between people and social media also reflects on the development of identities. At the individual level, the use of this information technology (IT) artifact has been changing the individuals' perceptions about themselves (CARTER, 2012; JANZE; RISIUS, 2017; PAN *et al.*, 2017; SHI; BOOTH; SIMON, 2017), as well as about the people and groups whom they interact daily (ETTER *et al.*, 2018). Under this aspect, Carter (2012) conceptualized IT identity (ITID) as the identity developed through the history of using IT artifacts, reflecting on the levels of dependence, relatedness, and emotional energy when individuals think about themselves concerning these IT. Academia and practitioners have been discussing the consequences of social media use. However, the individual aspects that influence the identity and consequently the social media users' behaviors - potentially impacting several areas of society - still need to be better investigated (BOUDREAU; SERRANO; LARSON, 2014; LECLERCQ- VANDELANNOITTE, 2014; BECKER; SERJE; SCHREIBER, 2015; PAN *et al.*, 2017; SAVOLI; BHATT, 2017). Given the complexity of interdependent relationships that individuals are exposed to when using social media (CHOI *et al.*, 2020; PRASETYA; MURATA, 2020), it becomes relevant to investigate how the IT artifacts influence and shape IT identity and its possible consequences.

Therefore, this theoretical gap justifies the search for an improved understanding of

the role of social media usage on the development of IT identity and its consequences for individuals in the social and organizational context (FAGNOT; PAQUETTE, 2010; CLIVE, 2011; SHEPHERD; 2011A; AOUN; VATANASAKDAKUL, 2012; LEE *et al.*, 2013; OLIVEIRA; WATSON-MANHEIM, 2013; ORSATTI; RIEMER, 2015; MOQBEL; NAH, 2017).

Thus, the current thesis sought to comprehend the (i) development of IT Identity due to social media use and (ii) evaluate its impact on computer-based office work during COVID-19 pandemic. Achieving these objectives can potentially contribute to understanding how social media platforms mold individuals' IT identity (that is termed in this thesis Social Media IT identity) and how they influence individuals' behavior in the organizational context.

1.1. RESEARCH QUESTIONS

Formally stated, the contextualization and justification for the development of this thesis can be summarized in the following research questions:

RQ1: What are the antecedents of IT identity due to social media use?

RQ2: How are the antecedents of IT identity due to social media use related to IT identity dimensions?

RQ3: How did the IT identity dimensions due to social media use impact the computer-based office work during the COVID-19 pandemic?

1.2. OBJECTIVES

1.2.1. General Objective

This thesis's overall objective is to comprehend the development of IT Identity due to social media use and evaluate its impact on computer-based office work during the COVID-19 pandemic.

1.2.2. Specific Objectives

The general objective will be achieved through the following specific objectives:

1. Building from Carter's (2012) original work, to propose an adaptation of her model to explain the antecedents of IT Identity development due to the use of social media (paper 1).
2. To understand the relationship of the antecedents of the IT identity due to the use of social media (proposed in paper 1) and IT identity dimensions under the context of the interactions in a WhatsApp group`s and its participants' polarized behaviors (paper 2).
3. To measure the relationship between IT identity developed due to the use of social media platforms (i.e., individuals' relatedness, dependence, and emotional energy due to the history of using this technology) and four of New Ways of Working facets related to the computer-based office work during the COVID-19 pandemic (paper 3).

1.3. JUSTIFICATION

The American real estate credit crisis marked 2008. Nevertheless, a less-noticed critical fact occurred in the same year. Facebook, one of the most well-succeeded social media companies worldwide, reached 100 million users. Putting it in perspective, the television needed 13 years to reach half of the users that Facebook has reached in just four years of existence (YIM; GOMEZ; CARTER, 2017; MCCONNELL *et al.*, 2018; THE ECONOMIST, 2018). The vertiginous growth in the use of social media also entered the radar of organizations since they represent an essential way to communicate and are inserted in the everyday life of the working environment - from corporations to government agencies (ALAHMAD *et al.*, 2018; KASPERIUNIENE; ZYDZIUNAITE, 2019). For instance, seeking to take advantage of social media in the work environment, organizations have been thriving to understand their effects on employees' and its consequences for areas such as knowledge management, adaptability, and innovative behavior [e.g., Alahmad *et al.*, (2018); Bennett, (2017); Garcia-Morales; Martín-Rojas; Lardón-López,(2018); Koscielniak,(2018)].

Even though authors like Edosomwan *et al.* (2011) argue that the concept of social media is not something original (i.e., it can be considered as an evolution of traditional mass media), since the technology, as it is currently known, was leveraged by the emergence of the so-called Web 2.0 technologies (KAPLAN; HAENLEIN, 2010; SUN; GOSCHNICK, 2018). Understanding how the changes in their resources, antecedents, and consequences impact organizations, individuals, and communities still present a challenge for different fields of knowledge. For this reason, the studies involving social media tend to adopt a multidisciplinary approach (HOGAN; QUAN-HAASE, 2010; KIETZMANN *et al.*, 2012; AHMED; SCHEEPERS; STOCKDALE, 2014; NGAI; TAO; MOON, 2015).

Carter and Grover (2015) emphasize that, according to the identity theories, the development of IT identity depends on the level and extent that the IT artifacts allow individuals to access their networks (both purely technology-based networks or previously physically established ones). The authors conclude that artifacts that enable access to a broader range of social contexts have an improved tendency to elicit individuals' identification. Nonetheless, Carter and Grover (2015) remark that even artifacts that allow restricted access to social contexts like spreadsheets or text editors can still significantly influence identity development because individuals spend a significant part of their time interacting with them.

The self - a concept originated in psychology that encompasses the overall psychic phenomena - comprises the set of identities manifested as roles when individuals interact with others in different social structures (BURKE; TULLY, 1977; ELLEMERS; SPEARS; DOOSJE, 2002). Individuals alternate roles when transiting between social structures (SERPE; STRYKER, 2011) to fit in the diverse social spaces they transit. Given that identity is the main factor influencing behavior, promoting positive attitudes consistently and integrating the social and individual contexts (CARTER; GROVER, 2015), understanding how the transitions between physical and virtual social structures influence identity development is even more needed in the present days (SCHLOSSER, 2020).

Social media are classified by Carter and Grover (2015) as a consumption artifact, in the same category as smartphones, tablets, and cloud services. However, when using social media, individuals are involved in more complex relationships than using static IT artifacts such as a spreadsheet or a text editor (ZHANG *et al.*, 2015). Under the aspect of individual identity, the intensive use of social media and the frequency of interactions in social networks has resulted in the emergence of a new type of self in the virtual world (HONGLADAROM, 2016; ROBINSON, 2016).

Considering both arguments, understanding identity construction due to a dynamic IT artifact, it is necessary to adopt an overarching theoretical perspective (CARTER; GROVER, 2015). Even so, to advance the knowledge about the theme, it is essential to define the literature review search strategy. This thesis adopted a semi-systematic literature review strategy approach (SNYDER, 2019). Initially, a search was performed for the term "Identity" in the titles of peer-reviewed journals and conference papers, thesis, dissertations, and books indexed in the following databases: AIS eLibrary, Google Scholar, Emerald, EBSCOhost, Scopus, Web of Science, and Science Direct. Up to September 2021, only 27 articles related strictly to the theme IT Identity, according to Carter's (2012) conceptualization.

Given that several authors still use the terms social network(s) and social media

interchangeably, it was carried out a second search relating the terms "social media," "social network," and "information technology" with the sentence "identity". Each of the three terms was sought with the Boolean operator "AND" then the word "identity". The searches were carried out with single sentences (or composed terms between quotes). The literature review strategy protocol is shown in Appendix A. Table 1 shows the results of the bibliometric inquiry.

Table 1 - Results of the Bibliometric Search

Database Index	Social Media and Identity	Social Network and identity	Information Technology and identity	IT identity*
Google Scholar	603	208	86	27
EBSCOhost	148	63	22	1
AISelibrary	5	4	3	6
Emerald	13	2	2	0
Science Direct	14	19	2	1
Scopus	181	200	29	14
Web of Science	92	50	16	3

Note. The papers' abstracts were read to verify if they treated the theme according to Carter's (2012) IT identity conceptualization. Appendix A shows the literature review strategy protocol

Since IT identity is a relatively novel concept in the Management Information Systems area, the theme still needs to be explored in different IT contexts (ESMAEILZADEH, 2019). Thus, the three articles that compose this thesis seek in an integrated way to identify the antecedents of the development of IT identity due to social media use, understand how this relationship occurs (antecedents and dimensions of IT identity) and the impact of the IT identity acquired by the use of social media in computer-based office work during the Covid-19 pandemic. Therefore, in the next section, the document structure is presented.

1.4. DOCUMENT STRUCTURE

In this section, the thesis's structure is presented. The three papers that compose the document are interrelated and aim to answer the three research questions. The document is structured as follows: in the introduction, it is presented the research justification, the research question, the general and specific objectives. The next chapter presents the general theoretical background with the following themes: the identity theories and their philosophical antecedents, social media IT identity conceptualization, and the thesis research model. The third chapter presents the first paper developed during the research called "The Antecedents of IT Identity Development due to Social Media Use: A Conceptual Model Proposition". The study was accepted and published in Annals of the 2019 EnANPAD conference. From the reviewers' and the audience's feedback, it has been adjusted since then, and subsequently, it will be

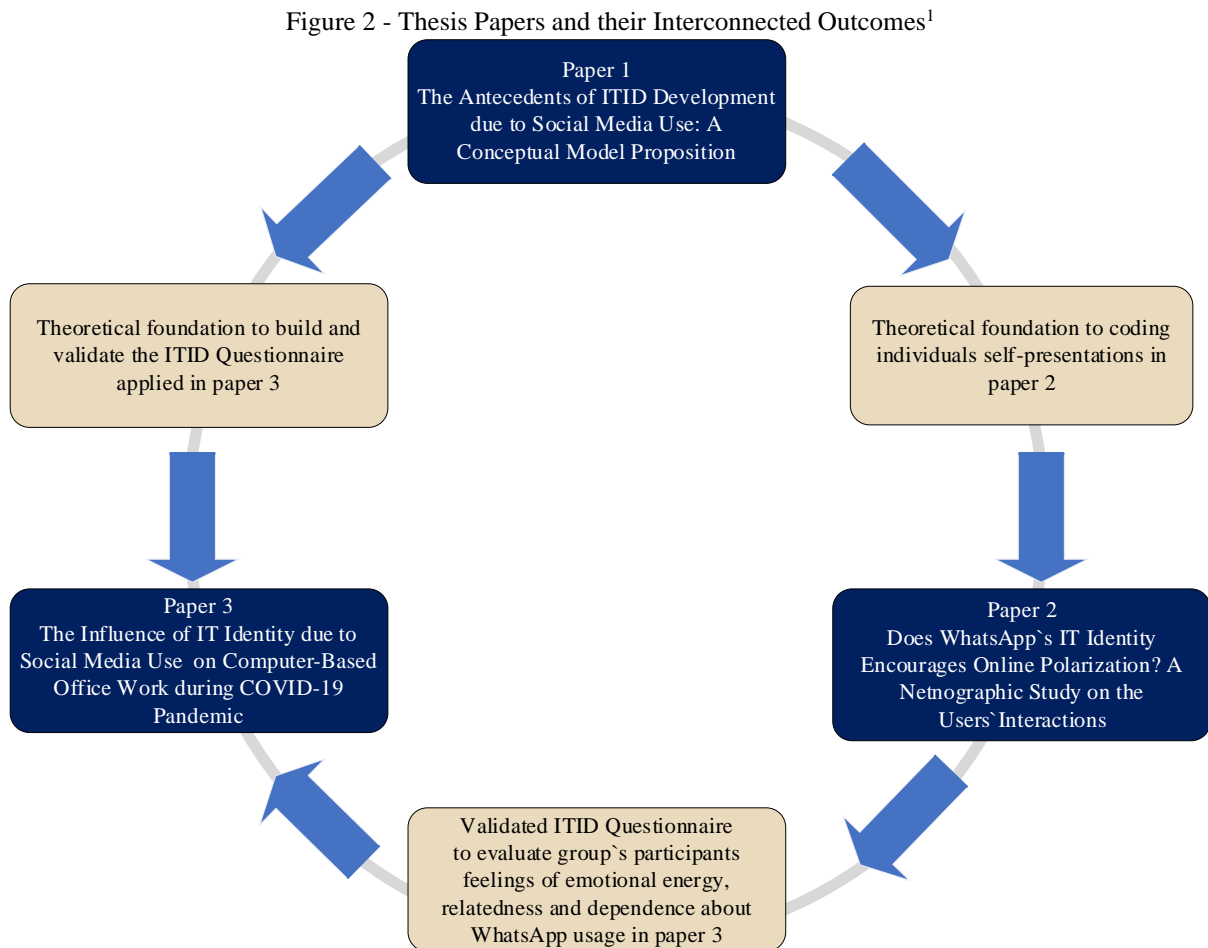
submitted to the journal *Information Technology & People*.

The fourth chapter shows the thesis's first applied research. It was based on the paper "The Influence of Filter Bubbles and Echo Chambers on IT identity Construction," accepted and published in the annals of the 2019 European Conference on Information Systems (ECIS) conference. This qualitative research is a netnographic study: Does WhatsApp's IT identity encourage online Polarization? A Netnographic Study on the Users' Interactions. The third paper is shown in chapter 5. It was adopted structural equation modeling (SEM) as the research analysis method to evaluate the influence of the IT identity acquired due to the use of social media on the New Ways of Working (NWW) facets. More specifically, the ones related closely to the computer-based office work settings. The final chapter shows the general discussion and the conclusion of the thesis encompassing the three papers. Figure 1 illustrates the thesis structure.

Figure 1 - Thesis Structure



In order to facilitate the comprehension of how the three papers intertwine themselves to answer the research question, Figure 2 shows their respective outcomes and their interconnections.



Source: The Author (2021)

Ubiquitous in everyday life, social media platforms influence how individuals perceive themselves, reflecting on their behavior. The comprehension of personality development has been significantly benefited from the studies of the self and its related processes (GUNNAR; SROUFE, 1991). Consequently, this evolution has substantially affected personal and social identities (KASPERIUNIENE; ZYDZIUNAITE, 2019).

The following themes are presented: the central theme, IT Identity, identity theories related to the use of social media, and the theories of mass communication adherent to the

¹ In paper 3, the questionnaire validated in paper 2 was submitted again to the whole process of validation and was adapted to cover the social media platforms in general (and not only WhatsApp as it was used in paper 2)

theme. Table 2 details the research questions, specific objectives, the data collecting instruments, and data analysis techniques.

Table 2 - The Relationship Between Research Questions and Objectives, Data Analysis and Research Instruments

Research Questions	Specific Objectives	Research Method	Data Analysis Technique	Research Instruments	Author(s)/(Year)
1. What are the antecedents of IT identity due to social media use?	a) To propose a conceptual paper to explain the antecedents of IT Identity acquired by the use of social media (paper 1).	Literature Review	Literature Review	Word Excel Endnote Publish or Perish	Carter (2012); Carter and Grover (2015); Hogan (2010); Kaplan and Haenlein (2010). Schlosser (2020)
2. How are the antecedents of IT identity due to social media use related to the IT identity dimensions?	b) To understand the intertwining of one of the overarching antecedents of IT identity by using social media (social media self-presentation) on fostering individuals' online polarization (paper 2).	Netnography	Content Analysis	Excel Word RQDA	Kozinets (2006; 2019); Bardin (2011)
3. How did the IT identity dimensions due to social media use impact the computer-based office work during the COVID-19 pandemic?	c) Measure the relationship between individuals' identification with social media platforms (i.e., individuals' relatedness, dependence, and emotional energy due to the history of using this technology) and the new ways of working facet related to the home-office regimen (paper 3)	Survey	PLS-SEM – Paths' analysis (strength and significance) FIMIX-PLS, MICOM Permutation MGA-PLS Comparison between Groups	Excel SPSS SmartPLS	Sarstedt, Schwaiger and Ringle (2009); Sarstedt, Henseler and Ringle (2011); Hair <i>et al.</i> (2016); Matthews, Hair and Matthews (2018)

Source: The Author (2021)

Before presenting the theme, it is necessary to contextualize the philosophical and epistemological origins of symbolic interactionism in Carter's IT Identity conceptualization. Given the inherent interactional aspect of social media, symbolic interactionism supports this thesis research model and outlines the three papers. Therefore, the following section shows the thesis theoretical background literature. In particular, Dewey's models of experience and inquiry (MORGAN, 2014) position intelligence in the relationship between impulse and habit.

2. GENERAL THEORETICAL BACKGROUND

This thesis' chapter presents the fundamental themes and concepts to support the articles that compose the study. The main theories of identity are epistemologically based on symbolic interactionism. For this reason, in section 2.1, the epistemological perspective is discussed in view of its philosophical origins in the work of the pragmatist philosophers William James, John Dewey, George Herbert Mead, and Charles Sanders Peirce.

Section 2.2 presents the two main theoretical currents of identity studies that underlie the conceptualization of IT identity. Next, the theories of social labeling and impression management are presented to support the instances of development of self-presentation in social media and the instance of attribution of characteristics by the audience from such presentations, respectively.

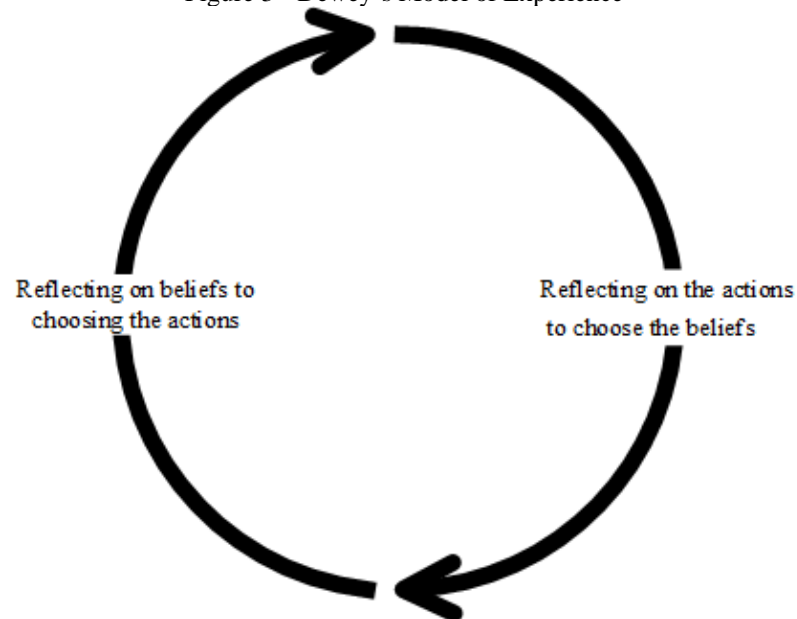
In section 2.3 it is shown the communications theories related to social media research, and 2.4 present the basis to propose the adaptation of Carter's (2012) model of IT identity development to the context of social media. Section 2.5 shows the general research model that outlines the development of the three papers that constitute this thesis. Finally, section 2.6 summarizes the methodological procedures adopted to conduct the three papers.

2.1. THE PHILOSOPHICAL ANTECEDENTS OF IDENTITY THEORIES

Serpe and Stryker (2011) observed that symbolic interactionism is the epistemological context of most identity theories in sociology, and it is defined by Carvalho, Borges and Rêgo (2010, p.148) as: "a theoretical perspective that enables the understanding of how individuals interpret the objects and other people with whom they interact and how such interpretation process conducts individual behavior in specific situations". Blumer (1986) notes that the three interrelated premises of symbolic interactionism are (i) the meanings that arise from social interactions, (ii) the actions of individuals that are motivated by these meanings, and (iii) as they interact with things and interpret them, the process of modification and manipulation of these meanings.

The pragmatic approach of James, Dewey, Mead, and Peirce underlies the origins of symbolic interactionism (HUBER, 1973). For Dewey, experiences occur through an interpretation process. That is, beliefs must be interpreted, and from these interpretations, actions are performed. Then, the actions are interpreted to generate or modify beliefs (MORGAN, 2014). Figure 3 shows Dewey's model of experience.

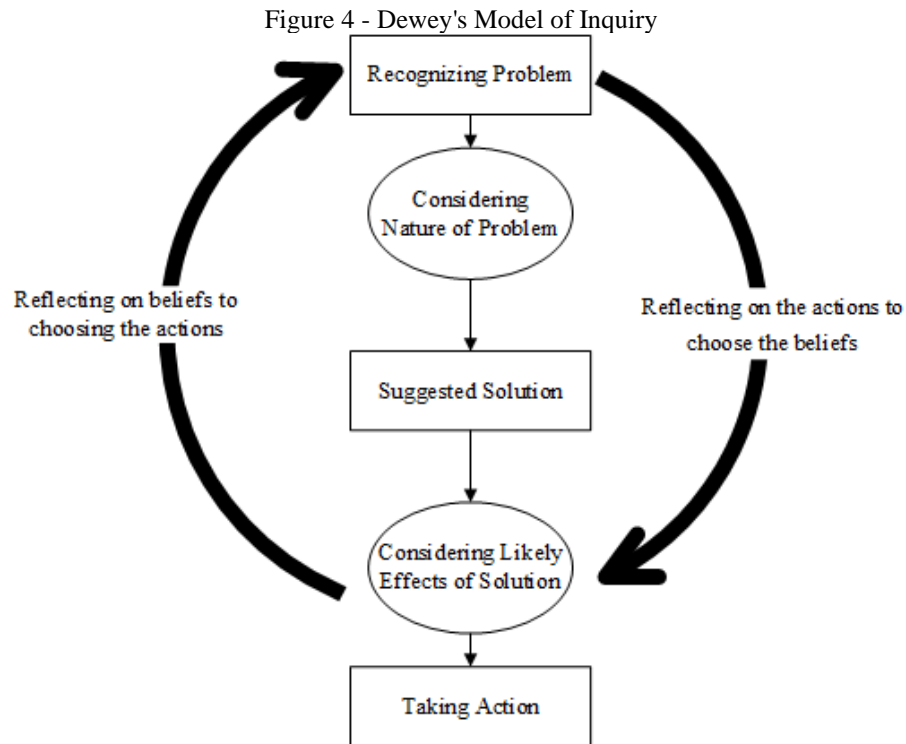
Figure 3 - Dewey's Model of Experience



Source: Morgan (2014, p.3)

The process of experience takes place in a semi-automatic state in which individuals take many of their choices in practically habitual form. In contrast to habit, Dewey describes inquiry as a self-conscious process (QUIRK, 2000; ABDI, 2001; RODRIGUES, 2008; WANG; SKOVIRA, 2017). Rodrigues (2008) defends that in the process of inquiry, individuals' thoughts should be treated as a natural process in which logical concepts such as judgment and inference are presented in two phases. First, when individuals are faced with doubt or a problem. Second, when they need to analyze and reflect on the problem to decide which course of action they will take.

By transposing this logic to the relational context, Morgan (2014) argues that, for Dewey, the human interaction with the environment should be an intelligent interaction, in which individuals perceive the setting in which they are inserted, make constant inquiries and act after reflecting about them. In this continuous process, new beliefs emerge and consequently are reflected in their self-concept. Figure 4 shows Dewey's Inquiry Model and its respective steps.



Source: Morgan (2014, p.4)

The influence of symbolic interactionism on the conception of the self can be verified in the work of William James. As Rocha de Macedo and da Costa da Silveira (2012) remarked, James proposed dividing the self into two active and passive knowledge instances. This division corresponds to the individual and social levels. The first level is the "I," where individuals constantly dialogue with themselves internally. The second level is the "me," which is formed through the influence of the external environment on the individuals' perceptions about themselves (SHAVELSON; HUBNER; STANTON, 1976; MCCALL; SIMMONS, 1978; WEHRLE; FASBENDER, 2018). About the second level, Harter (1999) argues that this instance of the self can also be defined as self-concept. The self is positioned as the central element in the construction of identity, which can be noticed in the words of Stets and Burke (2003, p.1):

The self influences society through the actions of individuals, thereby creating groups, organizations, networks, and institutions. And, reciprocally, society influences the self through its shared language and meanings that enable a person to take the role of the other, engage in social interaction, and reflect upon oneself as an object.

Internal and external elements combine to form the self-concept This dichotomous (apparently contrasting, but complementary) association can be perceived when comparing Stets and Burke's statement with Stryker and Serpe's (1982, p. 202) definition of the self: "we come to know who and what we are through interaction with others. We become objects to

ourselves by attaching to ourselves symbols that emerge from our interaction with others, symbols having meanings growing out of that interaction”.

Brenner, Serpe and Stryker (2014, p.232) define identities as “the set of possible meanings of roles in the form of expectations of the other for one or more of these possible meanings”. Scholars of identity theory are more interested in investigating the effects of role behavior and role identities on interpersonal social interactions. In this regard, they do not focus on investigating how individuals’ identities impact their relationship with out-groups. Diversely, social identity theory studies emphasize intergroup dimensions more thoroughly and how the social attributes influence the self (HOGG; TERRY; WHITE, 1995).

The presentations in digital environments need to rely on cognitive-motivational mechanisms to overcome the self-express limitations posed by technology. According to Hogg, Terry, and White (1995), social identity theory covers in more detail how sociocognitive processes contribute to molding individuals' identities. Michelle Carter based IT Identity conceptualization on identity theories. Which, in its turn, are heavily based on structural symbolic interactionism. Such theories focus on the proper identities internalized by individuals (CARTER; GROVER, 2015). With this in mind, in this thesis, the proposition of IT identity antecedents due to the use of social media comprises identity (personal) and social identity theories.

The philosophical antecedents presented in this section are the basis for understanding the definition of IT Identity. Furthermore, the influence of symbolic interactionism in IT identity development in social media extensively outlines this thesis and its respective papers. The following section shows four of the main identity theories related to social media IT identity development.

2.2. IDENTITY THEORIES

With the permeability of technology in the social fabric, the process of identity construction has been constantly influenced by personal routines at the expense of traditional institutions and institutional values (SIUDIKIENĖ, 2013). Identity studies are derived predominantly from three areas of knowledge, psychology (BAUMEISTER, 1982; 2011), sociology (DUGAN, 2001; JASON, 2011; SKINNER; MAY; ROLLOCK, 2016), and social psychology (HOGG, 2012). The influence of such areas can be perceived in the four perspectives in which identity is addressed. First, personal identity consists of how individuals perceive themselves and how they distinguish themselves from others. Second, role identity

encompasses the concepts attached to different roles played by individuals in their lives. Third, social identity reunites the set of common concepts attributed to a social category or a group (CARTER, 2012; HOGG, 2016; CARTER *et al.*, 2020). Lastly, organizational identity is defined as the collective understanding of the leading and relatively permanent characteristics that differentiate one organization from the others (ALBERT; WHETTEN, 1985; GIOIA; SCHULTZ; CORLEY, 2000). Table 3 shows the definitions of the four types of identities and their respective authors.

Table 3 - The Four Main Identity Categories²

Concepts	Definition	Author(s)/ Year
Identity (personal)	The set of meanings that individuals attach to their selves that makes their identity to be perceived as distinct from the others within the social structures in which they are inserted	Callero (2003); Stryker and Serpe (1982); Sparks and Shepherd (1992); Sparks and Guthrie (1998).
Social Identity	The classification of individuals into various social categories, such as members of an organization, religious affiliation, age, and gender	Tajfel (1974); Turner (1975); Ashforth and Mael (1989); Brown and Capozza (2000); Hogg and Terry (2000); Stets and Burke (2000)
Role Identity	The meanings claimed by individuals who are associated with a particular role or function	Burke and Tully (1977); Charng, Piliavin and Callero (1988); Grube and Piliavin (2000); Mccall and Simmons (1978).
Organizational Identity	The collective understanding of the main characteristics and relatively permanents that differentiate an organization from other	Albert and Whetten (1985); Whetten (2006); Gioia <i>et al.</i> (2013); Gioia and Hamilton (2016)

Note. The author designed the table, and the definitions are from the referenced authors

The interrelationship between individual and social dimensions is essential for IT identity conceptualization (CARTER; GROVER, 2015). Therefore, in this thesis, it is argued that the two theoretical views are relevant to understanding how interpersonal relationship networks created by social media influence the self (and, consequently, IT identity) due to the history of using this IT artifact.

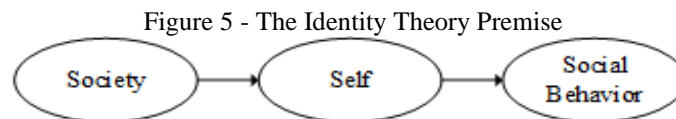
2.2.1. Identity Theory

Structural symbolic interactionism strongly influences identity theory since it emphasizes that society impacts the self, which, in turn, impacts social behavior (SERPE; STRYKER, 2011). According to Callero (1985), a set of hierarchically ordered roles forms the

² Although the proposition of Carter's IT Identity model is grounded primarily on identity and social identity theories, it was decided to show the remainder of the main identities categories (role and organizational identities) to illustrate the differences among them.

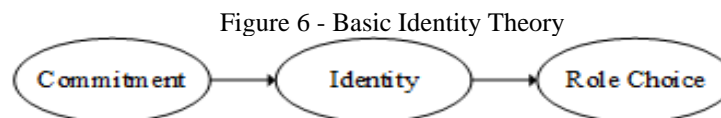
self. In the same vein, Burke and Tully (1977) defend that its measurement becomes quite complex due to the multifaceted nature of the self and the richness of its content. Thus, among the roles that constitute identity, predominant ones also become more representative of the individuals' selves.

Schultz and Tabanico (2007, p.1220) observed that the self has three main characteristics, which are: (i) it is organized as a hierarchical cognitive structure, (ii) it arises through the interaction of the individual with the world, and (iii) it is malleable throughout the various situations that activate relevant aspects of identity and direct the formation of attitudes and behaviors. Figure 5 shows the premise of the identity theory according to Serpe and Stryker (2011, p.233).



Source: Serpe and Stryker (2011, p.233)

From this premise, Serpe and Stryker (2011) refined the three constructs in a form that they could be measurable, allowing the theory to be empirically tested. The three constructs are shown in Figure 6 and comprise the basic scheme of identity theory, according to Serpe and Stryker (2011, p.234).



Source: Serpe and Stryker (2011, p.234)

From the perspective of identity theory, Brenner, Serpe and Stryker (2014, p.231) remark that society is seen as "a multiplicity of relatively stable and organized sets of role relationships that interact with each other". These sets are called social structures and act as frontiers that separate social entities within a given set from other entities outside it (BRENNER; SERPE; STRYKER, 2014; CALLERO, 2014). For example, family and work environment are two of the most basic social structures. In online environments, social interactions constantly change as individuals interact with strangers or people from their pre-existing relationship networks. For this reason, the dynamics of interpersonal relationships in the virtual social structures can influence positively or negatively individuals' interactions among diverse other environments (WALTHER; PARKS, 2002)

Identity salience occurs when individuals decide to play one or more roles among those

which constitute their self-concepts. Its principal function is to connect the influences of the social structure with interpersonal behavior (STRYKER; SERPE, 1982). As technologies such as smartphones and social media advance, the boundary between social structures and IT becomes less noticeable (CARTER; GROVER, 2015). In this respect, the social identity theory provides a complementary view for deepening this thesis's assumptions. The theory is presented briefly in the next section.

2.2.2. Social Identity Theory

Social identity theory shares some similarities (but also pronounced differences) with identity theory. As explained by Hogg, Terry and White (1995, p.255):

Identity theory is principally a micro sociological theory that sets out to explain individuals' role-related behaviors, while social identity theory is a social psychological theory that sets out to explain group processes and intergroup relations.

The theory relies heavily on social identification, which consists of perceiving that a group of people constitutes a unit. As a result, the process of formation of social identification results from the following factors: (i) categorization of individuals, (ii) the distinction and prestige of the group, and (iii) the differentiation concerning the other groups (ASHFORTH; MAEL, 1989). According to Whitley, Gal and Kjaergaard (2013), social identity theory is based on the premise that individuals seek to maintain a positive self-concept. For this, they tend to compare people of their groups with people from other groups.

As stated by Stets and Burke (2000), the distinction between identity and social identity theories lies in how they define the concept of the group. Thereby, social identity scholars define it as a collective of people with similar characteristics, beliefs, and opinions and share similar ways of seeing the world concerning those outside the group. On the other hand, identity scholars conceptualize a group as a set of individuals who relate to performing unique and integrated activities but maintaining their worldviews.

With the advent of the Internet, digital communication has progressively influenced personal network structures (HONGLADAROM, 2016). Robinson (2016) noted that the development of the so-called cyberself or "online self," through the interactions in the digital media, results in the perpetuation of the self that the individuals develop in the physical world. Therefore, this thesis argues that the people one knows (personal networks) and how they are connected (structure) are interrelated in the development of IT identity due to social media use.

For this reason, the following section shows two of the theoretical foundations to propose the antecedents of IT identity development due to the use of social media (presented in this thesis's first paper). First, through impression management, individuals choose which characteristics will show to the others in their personal networks (YOUNG, 2013; WILSON; PROUDFOOT, 2014; MARABELLI; NEWELL; GALLIERS, 2016). Second, through social labeling, the effects of the structure (the combination of social media platform characteristics and audience's response to individuals' presentations) will affect how they develop their online presentations (COSTA NETTO; MAÇADA, 2019A).

2.2.3. Impression Management

Stryker and Serpe (1982) note that self-development is essentially a social process. By interacting with others, individuals become what they termed "self-symbols". Accordingly, these symbols determine how they should behave in different structures that interact routinely. In the book "The Presentation of the Self in Everyday Life" (1959), the sociologist Erving Goffman traces through a dramaturgic allegory, a parallel with the form of how people assume the roles they play in society. Goffman argues that, as in theater, individuals' behaviors in social life occur in three main instances, which are: the (i) stage, the (ii) backstage, and (iii) off stage. For example, on stage, individuals are aware that they are being watched and present themselves the same way as actors when performing for the audience. In this instance, they tend to follow norms, beliefs, and cultural values in force in the respective environment (SCHEIBE; BARRETT, 2017; COLE, 2018).

In the second instance, backstage, individuals act more relaxed, knowing they are not being watched. The "masks" used on stage are left aside. In this instance, the ideal self appears, and individuals reflect on what aspects of identity will reveal on stage. At this moment begins the impression management process, in which the desired characteristics are internalized to the sense of self, and undesired impressions are discarded (BOZEMAN; KACMAR, 1997). Therefore, the rules and norms they follow are diverse from those observed on stage. In the third and final instance, Cole (2018) drew an analogy with casual occasions when the actors meet the audience outside their professional context. On these occasions, there is room for acceptance of new rules, norms, and a change in the performance of actors and audiences.

In recent times, Goffman's dramaturgical allegory has contributed to the theorization of identity development processes during human interactions on social media (HOGAN, 2010). When using social media platforms, individuals transit between the three instances described

by Goffman as they interact with people and groups at different levels of identification and intimacy (FUCHS, 2017; WANG; SKOVIRA, 2017; GARCIA-MORALES; MARTÍN-ROJAS; LARDÓN-LÓPEZ, 2018). Therefore, the way how to present themselves in each of these instances is distinct (HOGAN, 2010).

As virtual interactions can not rely on the physical world's traditional stimulus, the users' self-presentation becomes an essential self-process to understand identity construction in social media (SCHLOSSER, 2020). Despite occurring predominantly in internal instances, impression management depends either on individuals' interactions in daily lives. For this reason, the media richness allowed by the communication media will also provide a broader capacity to engage in a selective self-presentation (LEE; BORAH, 2020). On social media, communication takes place both in real-time and asynchronously. To emphasize this distinction, Hogan (2010) named "performances" as the interactions that occur in real-time. In this case, impression management depends on self-monitoring and continuous observation. He also termed "artifacts" as interactions that take place asynchronously. In this case, individuals can engage more meticulously in impression management (HOGAN, 2010; DAVIS, 2014).

2.2.4. Social Labeling

If it is true that individuals can fine-tune their presentations on one side, on the other, they will also be subject to the audience's scrutiny (BUI, 2016). In this respect, social labeling theory provides a theoretical framework for understanding how they internalize the audience's labels in different social structures. The theory arose in the 1960s to explain the recurrence of divergent behaviors that defy accepted social norms. According to Becker (1963), when individuals engage in suspicious activities and are inserted within social groups that reinforce this behavior, a continuous process of learning and reinforcing the deviant behavior occurs. Since then, the theory derived from sociology has been used by scholars in the field of criminal and criminal law (ROTENBERG, 1974; PETRUNIK, 1980).

To propose the antecedents of IT identity due to the use of social media, it is considered that social media platforms are (i) dynamic IT artifacts, (ii) their use involves the three instances described by Goffman (and therefore occurs synchronously and asynchronously). Moreover, and cyclically, due to the history of using this IT, individuals engage continuously in the process of internalizing the impressions attached by social media audiences to their sense of self.

For this reason, to analyze the background of the construction of IT Identity by using social media, it is necessary to consider the period in which the IT is being used (online) and

the asynchronous (offline) building instances. This instance's time gap allows individuals to reflect on themselves in relation to their social media personas and decide about their presentations. Correspondingly, these presentations will stimulate how the audience in personal networks labels them. Finally, the audience's view influences how (and what) labels are assigned (HOGAN, 2010). Given how social media-enabled networks are constituted and how communication occurs through this technology, it is necessary to approach the phenomenon from relevant communication theories. This relationship is discussed in the thesis' first paper.

2.3. COMMUNICATION THEORIES RELATED TO SOCIAL MEDIA RESEARCH

"When people become heavily dependent upon the mass media for the information they need to resolve ambiguity, the defining or structuring effect of mass-mediated information is considerable". This statement sums up the core of the Media Dependence Theory, proposed by Sandra Ball-Rokeach and Melvin Defleur in 1976 (BALL-ROKEACH; DEFLEUR, 1976. p. 10). Still, in the 1970s, Marshall McLuhan concluded that the role of mass medium devices was way more significant than just as simply "vessels" where the messages are transmitted and received. McLuhan already defended that mass media should be understood as autonomous structures that actively influence society's way of life. In a broader sense and, in his own words, positing media as "an extension of ourselves" (MCLUHAN, 1994, p.7).

Although the concept of mass communication dates back to the 1920s or 1930s (MCQUAIL; DEUZE, 2020), it was only with the rise of computer-mediated communication (CMC) that users could experience a higher level of interactivity (WALTHER, 2016). Over time, the Internet brought to the CMC what Holmes (2005, p. 49) termed "sophisticated reciprocity". For this reason, digital communication effectiveness relies upon (i) how platforms handle the content, (ii) how they affect the audience's behavior, and (iii) how the information navigates within networks (CHOI *et al.* 2020; PRASETYA; MURATA, 2020).

With the advent of the cybernetic paradigm, the investigation shifted from understanding only the message exchange between the communication agents to understanding their mutual effects under a systemic perspective. As a result, the non-linear models (following the cybernetic principles) focused on the effects between the communication objects and introduced the feedback loops (NARULA, 2006).

Three main factors are appreciably more appealing when comparing social media with mass media predecessors like radio, television, or even a well-known ancestor of the World Wide Web, as the Bulletin Board System (BBS). The two firsts are the volume and variety of

the content produced and consumed at a non-stopping pace. The third is the velocity in which the transmitter and receiver communicate with an unprecedented degree of personalization (KAPLAN; HAENLEIN, 2010; SHANAHAN; TRAN; TAYLOR, 2019; WINTER; MASLOWSKA; VOS, 2021).

The effects of social media characteristics on individuals are commonly investigated, approaching the media richness theory (MRT) [e.g., Lee and Borah (2020); Frenzel (2017), Sedigheh (2014)]. According to Lengel and Daft (1988), the three characteristics that determine the media richness are: (i) the ability to transmit and receive multiple information signals simultaneously, (ii) the capacity to promptly give messages feedback, and (iii) allow individuals to keep focused on the ongoing task.

More recently, Sheer (2020) noted that the richness of a medium depends on (i) the availability of instant feedback; (ii) the use of multiple cues, such as physical presence, voice inflection, body gestures, graphic symbols, (iii) natural language, which favors the comprehension of diverse concepts and ideas and (iv) the personal focus of the medium. The more a medium displays these attributes, the richer it is. As can be noted by comparing the two perspectives, the perception of the MRT approach did not change significantly in more than two decades. Nonetheless, since Lengel and Daft's (1998) formulation of MRT, digital media has vastly evolved to the modern social media platforms, which are more complex to be understood.

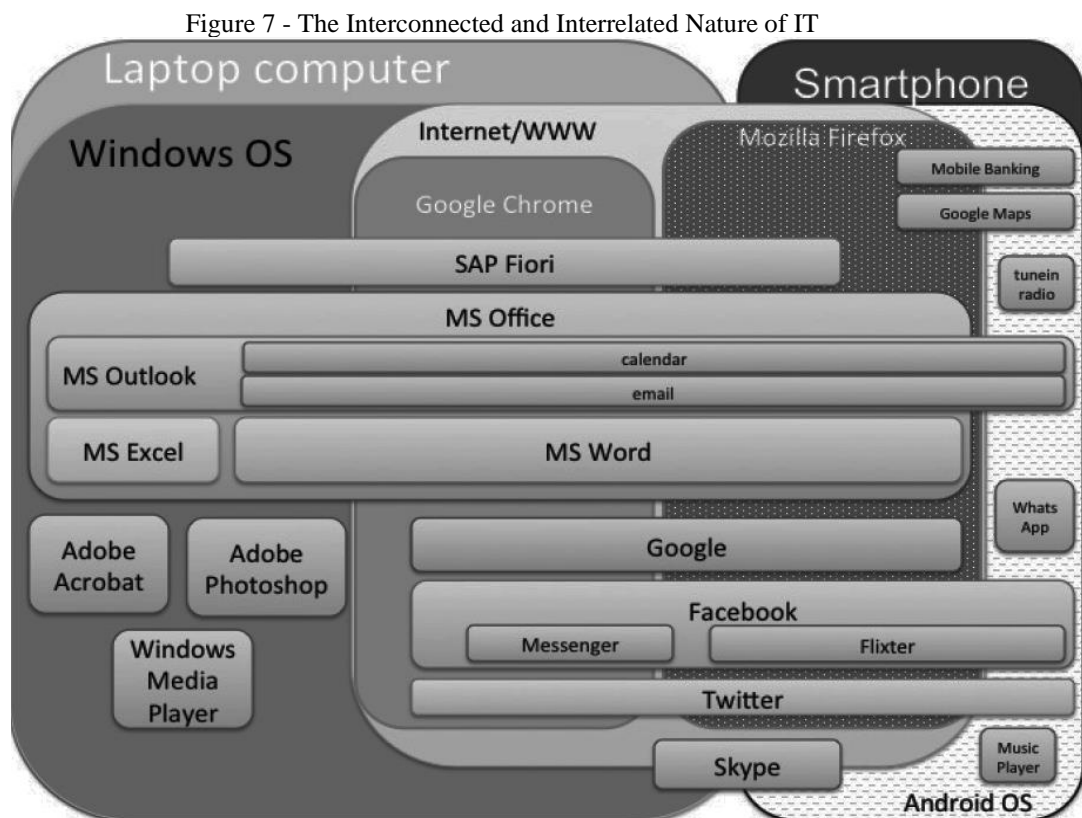
Well-established communications theories like MRT have been extensively adopted in social media research [(e.g., Frenzel (2017), Vithayathil, Dadgar and Osiri, (2017)]. However, a growing trend urges the need to expand the theoretical boundaries to embrace more distinct perspectives (SHEER, 2020). For instance, Sheer (2020) defends that versatile multimedia communication technologies such as social media demand theories and constructs to supplement MRT.

2.4. IT IDENTITY DEVELOPMENT DUE TO SOCIAL MEDIA USE

In a paper that investigated aspects of identity formation from the precepts of Dewey, Abdi (2001, p. 182) pointed out that "identity is, therefore, a product of several personal and or groups characteristics such as socially constructed categories of race, gender, nationality, professional status, social position, and even personal history". Abdi emphasizes the role of symbolic interactionism (and especially Dewey's work and his peers) to provide the basis of contemporary identity studies.

The first attempt to conceptualize IT identity was performed by Panyasorn, Panteli and Powell (2006). The authors carried out a case study that aimed to investigate the use of Lotus Notes in four different companies. At that point, they claimed that IT identity was not static but mainly socially constructed. Carter (2012) delved into symbolic interactionism – the epistemological basis of identity theories – to define IT identity (as it is treated in this thesis). The author noted that one of the fundamental principles of the structuralist aspect of symbolic interactionism is that identities are relatively stable. Carter and Grover (2015) extended this principle, arguing that it implies that it is possible to measure IT identity by the extension of manifest identities at a given time – in the presence or use of a particular IT artifact.

Figure 7 shows the integration and interrelationship between different types of IT artifacts. As can be perceived, social media sites such as Facebook and Twitter are inserted and interrelated with an extensive range of IT artifacts.



Source: Carter and Grover (2015, p.941)

Hogan (2010) defends that self-presentation in social media occurs both synchronously and asynchronously (HOGAN, 2010). Considering that self-presentation is one of the main motivations for using social media (HONG *et al.*, 2020; SCHLOSSER, 2020), in this thesis, it is argued that - on the contrary of static artifacts -, the process of IT identity

development in social media is neither constrained by time nor by the presence of IT. Moreover, this thesis argues that social media IT identity development is intertwined in three related instances. First, social media self-presentation resulted from the effects of social media characteristics on individuals. Second, on the audience's evaluation about these presentations. Finally, on how they assess these evaluations.

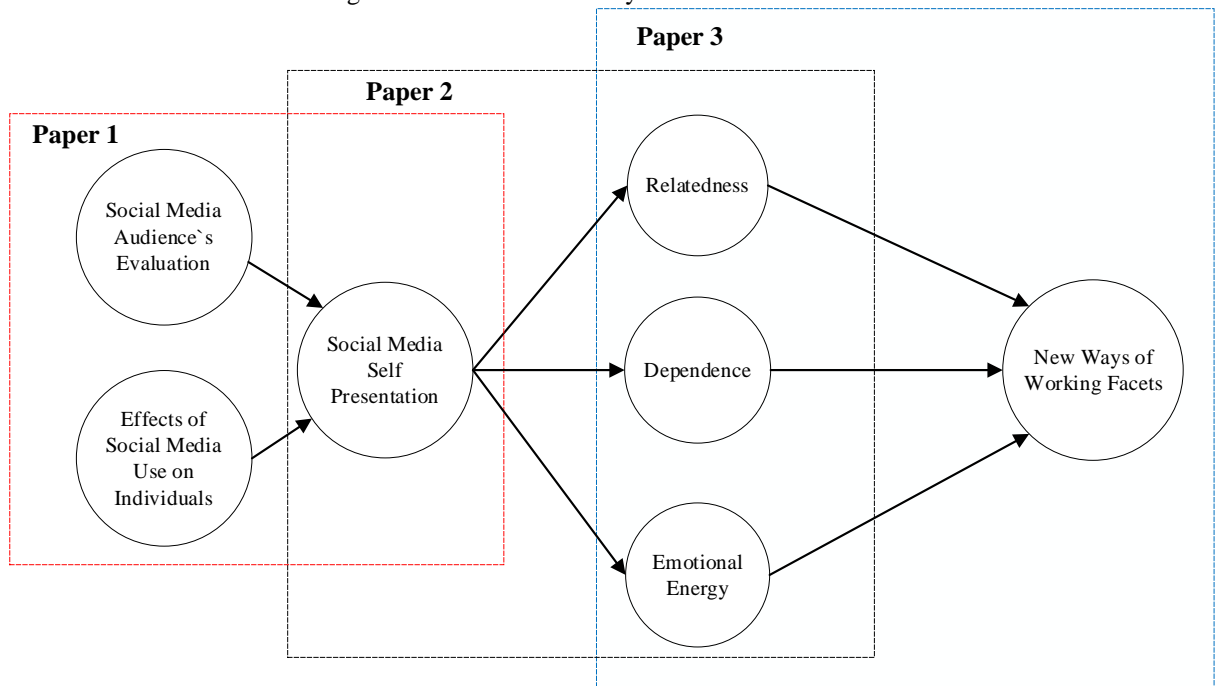
The asynchronous IT identity development step occurs when individuals engage in impression management to attach the most desirable traits to their self-concept. Impression management is defined by Mendonça (2004, p.16) as: "a form of social influence in which people seek to affect their own results by trying to influence the impressions that others form of them". Given that the construction of identity is an internal process and suffers the external influence of social pressure, this relationship implies that the multiple identities that the individuals claim for themselves must also be acknowledged by the people with whom they interact (MCCALL; SIMMONS, 1978).

In her conceptualization, Carter (2012) focused on static artifacts. Given that social media platforms may be considered as a dynamic and interbedded artifact (HOGAN, 2010; HOGAN; QUAN-HAASE, 2010), it is argued that understanding the IT identity development due to the history of using this technology - constantly modified by interpersonal relationships - demands expanding original Carter's (2012) IT identity conceptualization theoretical framework. Thereby, it covers the temporal spatiality (i.e., synchronous and asynchronous instances) and its respective presentational structures (i.e., online, offline, and physical).

2.5. PROPOSED THEORETICAL MODEL

In this study, social media is assumed as a medium to develop identity. According to Carter (2015, p. 935), the studies about IT and self-presentation can be classified into this group. Initially, this thesis research model posits IT identity acquired due to the use of social media as the result of intertwining three overarching dimensions (effects of social media use on individuals, social media self-presentation, and social media audiences' evaluation). Subsequently, it is investigated the two primary outcomes of IT identity acquired by using social media in the social and organizational contexts. Therefore, it was intended to examine the relationship between the effects of using social media, IT identity, and two social and organizational outcomes. This relationship is presented in Figure 8. Thus, the preliminary research model encompasses the three papers and emphasizes their relationships.

Figure 8 - Thesis Preliminary Research Model



Source: The Author (2021)

The themes and relationships discussed in the general theoretical background encompass the relationship between the antecedents and consequences of IT identity acquired by the use of social media. The investigation of this relationship can broaden the understanding of how individuals relate to IT, both individually and within organizations (LEVINSON; COGBURN; VODANOVICH, 2018; LIN; SPENCE, 2018; YU; SUN *et al.*, 2018; CRAIG; THATCHER; GROVER, 2019).

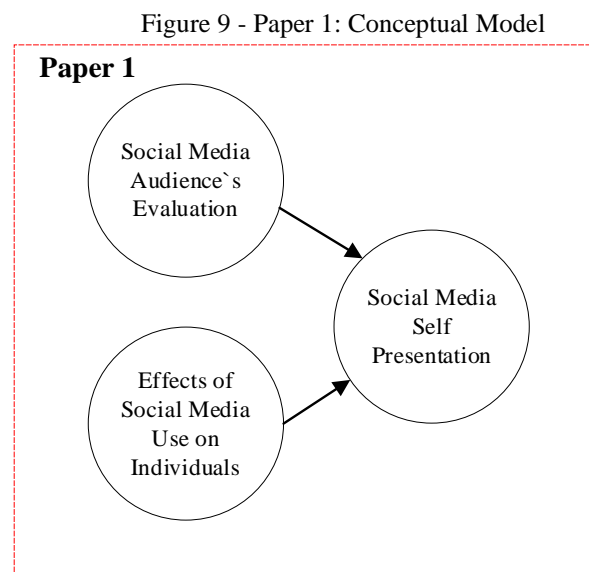
The research model aims to answer the three research questions: What are the antecedents of the development of IT identity by using social media? How are the antecedents of IT identity due to social media use related to the IT identity dimensions? Finally, how did the IT identity dimensions due to social media use impact the computer-based office work during the COVID-19 period?

2.5.1. Paper 1

The first paper, "The Antecedents of IT Identity Development Due to Social Media Use: A Conceptual Model Proposition", is a theoretical study that proposes to explain the antecedents of IT identity development due to the use of social media. This conceptual paper builds on Carter's (2012) original theoretical model. It approaches the IT identity development due to the use of social media by the relationship of internal self-processes involved in

individuals' presentations in social media and the corresponding audience's effects on individuals' impressions internalization.

The conceptual model comprises the three main instances of IT development due to the use of social media, which are: (i) Effects of Social Media Use on Individuals, (ii) Social Media Self-Presentation, and (iii) Social Media Audience's Evaluation. Figure 9 shows the preliminary conceptual model (it is detailed in the first paper).

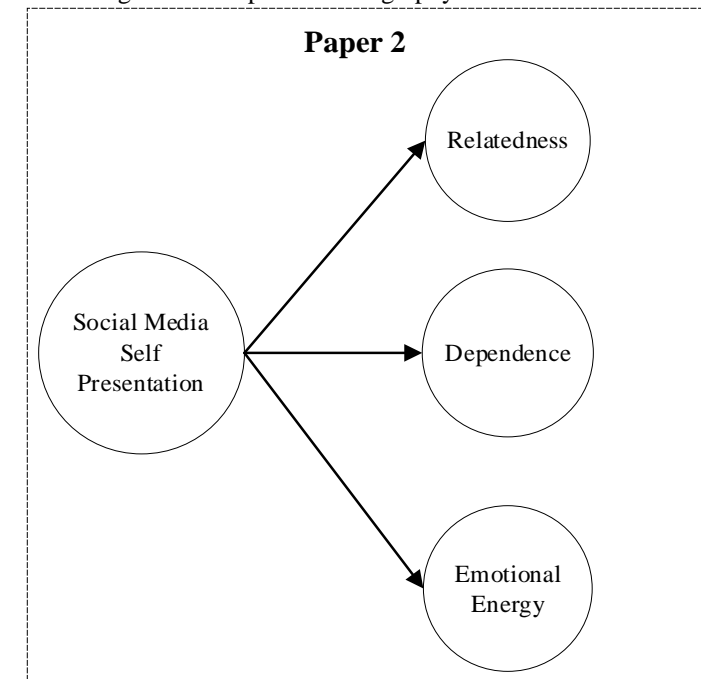


Source: The Author (2021)

This paper proposes that the effects of improved feelings of relatedness, dependence, and emotional energy about using social media platforms have a feedback loop effect on how individuals experience feelings of social connectedness and belongingness. Ultimately, reinforcing or wearing out users' IT identity acquired by using social media. Finally, this paper shows the propositions and details the relationships between the constructs.

2.5.2. Paper 2

Paper 2 title is "Does WhatsApp's IT Identity Encourage Online Polarization? A Netnographic Study on The Users' Interactions". This netnographic study explores the relationship between individuals' presentations (proposed in paper one as an IT identity antecedent) to understand the role of IT identity in inducing individuals' online polarization (social context). The data was analyzed through categorical content analysis. The *a priori* categories were defined according to the self-processes involved in the social media self-presentation proposed in the first thesis paper, as is shown in Figure 10.

Figure 10 - Paper 2: Netnography Research Model³

Source: The Author (2021)

This paper's findings can potentially contribute to understanding the interrelationship between technological and individual aspects of online polarization. Moreover, their combined effect on IT identity dimensions may further explain why certain people in social media demonstrate more radicalized behaviors compared to their physical world personas.

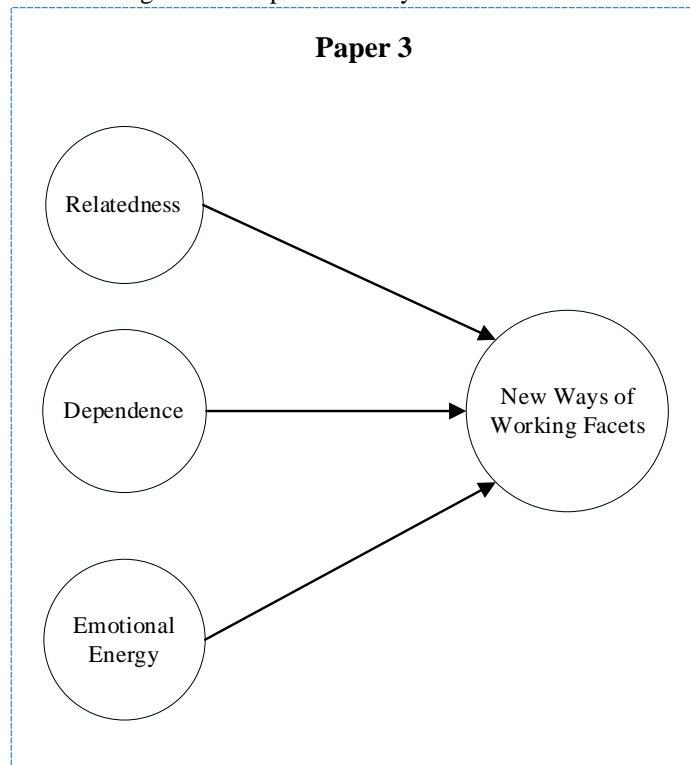
2.5.3. Paper 3

The third paper is also the second applied research concerning IT Identity dimensions and social media. Worldwide, the sudden enforcement of remote working posed an enormous challenge, especially for computer-based workers and organizations' higher management. This exploratory investigation aimed to identify the perceptions of Brazilian computer-based office employees during the COVID-19 pandemic. Although social media platforms are commonly associated with adverse consequences for employees' performance, such as information overload, addiction, and distraction, their use is also reported to elicit positive outcomes such as improved shared vision, strengthening personal ties, and enhanced trust. On the other side,

³ This study was carried out under the context of the polarized behavior. It was the stimulus to observe and analyze group's participants self-presentations in relation to the feelings of emotional energy, dependence and relatedness about WhatsApp

employees' adaptation to the home office regimen may also be problematic due to individuals' characteristics, outdated IT equipment, augmented technostress, and the pressure on the work-life conflict. Figure 11 shows paper three research model.

Figure 11 - Paper 3: Survey Research Model



Source: The Author (2021)

Self-concepts are flexible, assist individuals when determining which roles will assume in a specific social situation (WEHRLE; FASBENDER, 2018), and are composed of multiple contextualized identities. Closely related, the self is formed by identities that manifest as roles when individuals interact in social structures (BURKE; TULLY, 1977; ELLEMERS; SPEARS; DOOSJE, 2002). Given the ever-growing influence of digital technologies in peoples' lives, studies about the self and identity also must consider the effects of IT artifacts on users' perceptions and identities (PAPACHARISSI, 2018; SUN; GOSCHNICK, 2018). The first thesis' paper explores this influence by presenting the antecedents of IT identity development due to the use of social media.

2.6. THESIS METHODOLOGICAL PROCEDURES

According to Romero and Nascimento (2008, p. 51), the scientific method is "the set of procedures, techniques or operations, with a logic of thought and cognition, capable of constructing and basing the process of scientific knowledge, responding to a problem and thus enabling to achieve the research objectives".

This section describes the methodological procedures adopted in the three papers that compose the thesis. The literature for the development of the thesis was compiled according to the protocol of the semi-systematic literature review strategy (Appendix A). According to Snyder (2019), this modality is adequate when the research questions are broad and the researcher adopts qualitative and quantitative approaches.

Initially, it is important to emphasize that the strategy for developing the thesis in papers was defined in mid-2017, according to the guidance of the first advisor. At the time, it was defined that the antecedents of IT identity due to the use of social media would be explored initially, i.e., what instances and dimensions provoke feelings of relatedness, dependence, and emotional energy in individuals in relation to social media. Based on this premise, the theoretical essay of the thesis qualification essay was developed in 2018. Subsequently, the essay served as the basis for presenting a theoretical paper in EnANPAD in 2019 and a second presented at ECIS in the same year.

Returning to the strategy of development of the thesis, then, from the three reflective dimensions of IT identity, its consequences for individuals would be investigated. For this reason, paper 1 was a theoretical study and served as the basis for exploring in paper two the relationship between the antecedents proposed in the model. It was kept the adherence to the theoretical model proposed by Carter (2012), but also it was proposed its expansion and adaptation⁴. Social media platforms are IT artifacts that are not restricted and encapsulated in an object (e.g., a smartphone, a tablet, a laptop)⁵. Its use (and therefore the feelings aroused by their use) is based on the interaction in networks⁶. Given that, the first paper sought to demonstrate that an adaptation in the constructs proposed by Carter could benefit future research on IT identity in the context of social media.

Throughout 2019 and 2020, the paper was refined according to the suggestions of the thesis project's examination board and the peers' evaluation during EnANPAD and ECIS.

⁴ Cf. section 2.3 and chapter 3 of paper 1

⁵ Cf. section 2.4, Figure 7

⁶ Cf. section 2.4 of paper 1

Finally, in 2021, to extend the validity and reduce the author's bias in the construction of the model, a card sorting was applied with specialists to identify the proposed dimensions and their respective groups. According to the recommendations of Netizen (2021), 15 responses are enough to obtain a correlation score of 0.90. Therefore, this threshold was reached and collected through the Qualtrics platform. The link was forwarded to specialists in the area of communication, psychology, and sociology. The results are shown in Appendix B.

Subsequently, paper 2 explored the relationship between the antecedents of IT identity due to the use of social media, proposed in paper one and the reflective dimensions presented by Carter (2012). Initially, the observation of polarized behavior in a group of WhatsApp composed of 29 individuals served as a starting point for the analysis of self-presentation (one of the antecedents of IT identity due to the use of social media presented in paper 1). The choice of the unit of analysis was based on one of the few existing data regarding the socio-demographic profile of polarization in⁷Brazil. The netnography had two distinct phases of data collection. The first was held in 2019, lasted 158 days, and explored the relationship between the constructs of self-presentation in social media proposed in paper one and the IT identity dimensions. At the end of the content analysis of the conversation between the participants, the nine individuals who were most involved in the political discussions were identified.

A previously validated questionnaire that covered the dimensions of IT identity was submitted, and the means were calculated to identify individuals with higher and lower means on each dimension. Thus, a comparison was made between the participants with higher and lower means in each of the dimensions of the IT identity and their respective percentages of manifestations in each of the five internal mechanisms involved in self-presentation⁸ in the group. In the second phase, at the end of 2021, through semi-structured interviews with the group participants, the scope of the research was expanded to explore the relationship between the characteristics of social media and participants' self-presentations and IT identity about WhatsApp on polarized behavior. Finally, the data collected and analyzed were triangulated to assist in the study's inferences and answer the research questions. Adopting these methodological procedures, it was possible to make conclusions about the role of IT identity due to the use of social media (in this case, WhatsApp) on stimulating individuals' polarized behavior.

⁷Cf. ORTELLADO, Pablo; SOLANO, Esther; MORETTO, Marcio. Uma Sociedade Polarizada? In: Jinkings I, Doria K and Cleto M (eds) *Por Que Gritamos Golpe? Para Entender o Impeachment e a Crise Política No Brasil*. São Paulo: Boitempo, 2016, 194p.

⁸ Cf. section 2.5, paper 1

Concerning coding type, Kozinets (2010, p.124) recommends that when carrying out a netnography, the research should approach the codification through a mix of “analytic coding with a blend of hermeneutic interpretation” For this reason, it was used two different kinds of codification during the analysis of the chat log and the interviews. Regarding the validation procedures, in the first phase, the codes and manifestations of the participants were reviewed by a Ph.D. in the administration area. This measure helped reduce the researcher's bias considering that he was also a group member. Moreover, the role of the researcher is justified in section 2.7 of paper 2. Regarding the validation of the survey questionnaire that was applied to the nine participants with the highest number of interactions that demonstrated polarized behavior, this stage was performed during the preparation of paper3.⁹ This questionnaire covered the dimensions of IT identity and was extended to the six leading social media used in Brazil in 2019 (among them WhatsApp).

In this first phase, to expand the richness of the findings, the Levene test was performed between the groups and participants with higher and lower frequencies of use. This analysis is exposed in Appendix F and has two objectives. The first was to verify the equality of variance between the two groups and, therefore, the homogeneity of the sample. Thus, the conclusions regarding the relationship between self-presentation and the dimensions of IT identity acquire an additional element to support its validity.¹⁰ The second reason was to verify whether the difference between social media usage habits (in this case, the daily frequency of WhatsApp use) could indicate a possible explanation of the user's behavior when interacting in the media. From there, one more element is obtained indicating that the IT identity acquired by the use of this technology can fill a gap in the understanding of the use of technology and its effects on behaviors, as suggested by Carter (2012) in a recommendation of the first article of her thesis.

Finally, in the second phase of the research, the semi-structured interview script was prepared according to the three instances of construction of IT identity due to the use of social media (proposed as antecedents in paper 2) and was validated by a PhD in administration with extensive experience in validation of qualitative studies. Furthermore, the content analysis performed in the f phase for comparing the self-presentation of individuals with higher and lower means in each dimension of the IT identity indicated that the frequency of use of the

⁹ Cf. section 4.3, paper 3

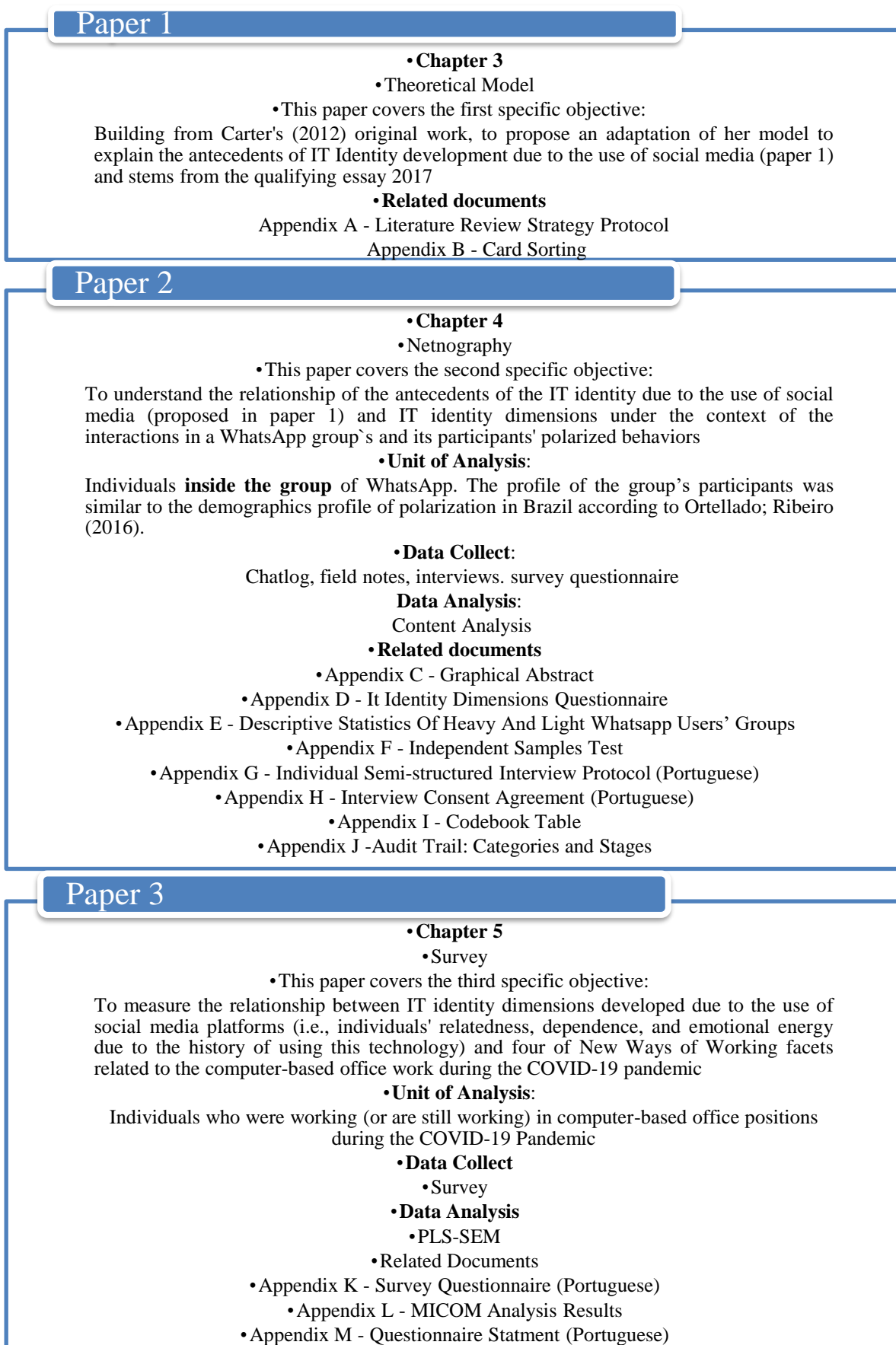
¹⁰ This analysis was made with the nine participants who answered the questionnaire in the first phase divided into two groups by the frequency of use of WhatsApp

application could be positively related to higher means in the dimensions.¹¹ This hint was then analyzed in the third paper of the thesis of a quantitative nature.

In this paper, the procedures of development and validation of the questionnaire were described to allow the research reproducibility. In addition, the procedures of sampling estimation were also justified. In the literature review, the hypothesis was developed. Sections .4.3 and 4.4 depict the measurement model and structural model estimation. Figure 12 shows the thesis research design, with the phases and outcomes.

¹¹ Cf. section 4.2, paper 2

Figure 12 - Thesis Research Design



3 PAPER 1: THE ANTECEDENTS OF IT IDENTITY DEVELOPMENT DUE TO SOCIAL MEDIA USE: A CONCEPTUAL MODEL PROPOSITION

Abstract

Among the most used technologies these days, social media platforms' usage brings consequences for individuals in the social and organizational contexts. Concerning the latter, social media use has been associated with improved job satisfaction, innovative behavior, employee engagement, and knowledge sharing (NKWE; COHEN, 2017). Diversely, the continued use of this technology in the social sphere is also associated with raising online polarization and the spread of fake news. To better understand this nuanced outcome of social media usage, this paper argues that it is necessary to consider both negative and positive outcomes in the context of social media's influence on individuals' identities. Therefore, this study builds and encompasses Carter's IT identity conceptualization (CARTER, 2012) to propose a conceptual model to understand the antecedents of IT identity development due to the use of social media. The intertwining of the two broad ways of identity theory, internal and external (GOFFMAN, 1959; SLATTERY, 2003; TAJFEL; TURNER, 2004), and communication literature (SHANNON; 1948; WESTLEY; MACLEAN JR, 1957; WALTHER, 2008) are this study's theoretical foundation. All in all, it is expected to extend IT identity theorization and, hopefully, offer academia and practitioners a framework to deepen the knowledge about individuals' relationships with this ubiquitous IT artifact.

Keywords: IT Identity; Social Media; Computer-Mediated Communication; Impression Management.

1. INTRODUCTION

Carrie Kerpen, CEO of Likable Media, questioned a group of women in leadership roles about the effects of social media on them: "How do you think social media has changed you? Do you think that others having more access to information about you has made you more confident? Less? Do you find yourself changing how and what you say based on the fact that you know things are so readily shared?" (KERPEN, 2016). Worldwide, questions such as those raised by Carrie have been frequently discussed as social media platforms became part of how people communicate and interact in everyday life. Furthermore, it has changed

individuals' perceptions about themselves and gave rise to "new" identities (CARTER; GROVER, 2015; PAN *et al.*, 2017). Collectively, its enabled networks influence how people assess their roles in virtual and physical environments (ETTER *et al.*, 2018; KASPERIUNIENE; ZYDZIUNAITE, 2019).

The ever-growing dependence on social media platforms to work or for hedonic motivations also brings insidious consequences for internal and external aspects of individuals' lives (BROOKS; LONGSTREET; CALIFF, 2017; BACCARELLA *et al.*, 2018; YU; CAO *et al.*, 2018). Internally, social media was already associated with adverse outcomes such as information overload, addiction, and task distraction. Coupled with this, the use of social media is frequently accountable for raising online polarization, facilitating fake news diffusion, and deliberately neglecting users' data privacy (BACCARELLA *et al.*, 2018; RHODES, 2019; BERMAN; KATONA, 2020). For example, in recent years, Facebook, one of the leading social media companies, has been facing legal complaints concerning the data breaching of 87 million users through the political consultancy firm Cambridge Analytica (THE ECONOMIST, 2018). Alongside that, the dissemination of fake news on social media sites like Facebook, Twitter, and WhatsApp has had repercussions in election races in many countries (ALLCOTT; GENTZKOW, 2017; SAEZ-MATEU, 2018; LOPEZ-CHAU *et al.*, 2019).

On a more favorable tone, within the work environment, social media use has been positively associated (directly and indirectly) to individual and organizational performance in distinct areas like improved job satisfaction, innovative behavior, employee engagement, and knowledge sharing (MOQBEL; AFTAB, 2015; NKWE; COHEN, 2017; CHENG *et al.*, 2020). Academia and practitioners exhaustively discuss the consequences of using this ubiquitous communication technology. However, the intricate combination of cognitive and motivational processes that elicit social media users' behavior still needs to be better understood (BOUDREAU; SERRANO; LARSON, 2014; LECLERCQ-VANDELANNOITTE, 2014; PAN *et al.*, 2017).

Considering that contemporaneous interactions in diverse social and cultural structures are increasingly predicated on the use of IT artifacts, it is essential to integrate IT in the context of identity research (DUNN, 2013; YAU; MARDER; O'DONOHUE, 2019). In this regard, Carter (2012) proposed an original construct - IT identity - to address the relationship between IT and identity and conceptualized it as "the extent to which an individual views use of an IT as integral to his or her sense of self" (CARTER; GROVER, 2015, p.932).

Given the ever-changing nature of social media technologies and the ubiquity of this IT artifact in everyday life, under a presentational approach (HOGAN, 2010), and observing

the relationship between social media communication agents, channel, transmitter, and receiver, this paper proposes a conceptual model to explain the development of IT identity development by the use of social media through the intertwining of three main instances. The first instance is termed *Effects of Social Media Use on Individuals* and comprises platforms (channel) characteristics, its effects on users' perceptions, and correspondingly on their presentations (KRÄMER; WINTER, 2008). The second one, *Social Media Self-Presentation*, encompasses the performer/transmitter's internalization and the manifestation of impressions, which stem from their experience of using the platforms and the audience/receivers' evaluation of their presentations.

Third, *Social Media Audience's Evaluation* reunites the audience/receiver's evaluation of the performer/transmitter's presentations and the role of network ties' strength, which may amplify this dyadic relationship (ANTIN; CHURCHILL, 2011; MERUNKOVA; SLERKA, 2019). As a result, to present themselves in social media, the processes of self-disclosure and self-enhancement will reflect on IT identity dimensions through the feelings of dependence, relatedness, and emotional energy about the platforms (COSTA NETTO; MAÇADA, 2019A). Cyclically, the IT identity acquired by using social media will reinforce how users experience feelings about the platforms. The following section discusses the three instances with the respective theoretical background to support the conceptual model's proposition. Firstly, it is shown a brief history and definition of social media.

2. THEORETICAL BACKGROUND

Traditional media was defined by McLuhan (1994, p.7) as “an extension of ourselves”. Presently, the interrelationship of internal and external instances on individuals' identities can be perceived in the use of social media (HONGLADAROM, 2011; ROBINSON, 2016). Virtual interactions can not rely equally on the stimuli common in the physical world. Hence, understanding how users bypass this obstacle to construct their self-presentations is essential to understanding identity construction in social media (SCHLOSSER, 2020).

The following themes discussed in this theoretical background aim to sustain that social media platforms assume a two-fold role in developing IT Identity: as an IT artifact and a social object.

2.1. SOCIAL MEDIA: A BRIEF HISTORY AND DEFINITION

When the Internet reached the consumer market, its decentralized network architecture and considerably wider geographic reach soon surpassed older mass communication media like the telephone, fax, and pagers (HOLMES, 2005). Shortly it revolutionized modern life, allowing faster and cheaper communication through several media formats (MORRIS; OGAN, 1996; PAPACHARISSI; RUBIN, 2000).

Social media is a technological evolution in the communication enabled by the Internet, which combines the features of mass media devices, such as a broader audience reach, with the benefits of interpersonal communication like the use of personalized messages and constant feedback (KAPLAN; HAENLEIN, 2010; CHOU *et al.*, 2013; KAPLAN; MAZUREK, 2018). Up to these days, social media conceptualization is still discussed within the specialized literature [e.g., Ouiridi *et al.* (2014); Prianka and Saloni (2020)]. Nevertheless, one of the most accepted definitions was coined by Kaplan and Haenlein (2010, p.61). In their seminal paper, they conceptualized social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content".

At that moment, they proposed that social media platforms should be classified according to two principles: (i) how they allowed individuals to engage in self-presentation and self-disclosure and (ii) how their characteristics like media richness can influence perceived social presence and, consequently, individuals' online presentations. Since Kaplan and Haenlein's classification, social media platforms have evolved into even more sophisticated and ubiquitous technologies, allowing individuals to experience constantly new facets of their personalities (STOKES; PRICE, 2017; HARRIS; BARDEY, 2019; HONG *et al.*, 2020; FOUQUAERT; MECHANT, 2021).

2.2. THE INTERTWINING OF INDIVIDUAL AND COLLECTIVE PERSPECTIVES OF IDENTITY THEORY

Identity theory has its origins in psychology, sociology, and social psychology (HOGG; TERRY; WHITE, 1995; STETS; BURKE, 2000) and is epistemologically grounded on the symbolic interactionist perspective (HOGG; TERRY; WHITE, 1995; SERPE; STRYKER, 2011; CARTER; GROVER, 2015). Proposed by Sheldon Stryker in 1968 (STRYKER, 1968), identity theory delves into three perspectives.

The first is individual and consists of how people perceive and distinguish themselves from others. The second is the role-based perspective regarding individuals' various roles within the social structures. Finally, the collective view encompasses the concepts and functions assigned to social categories or groups (STETS; BURKE, 2000; CARTER; GROVER, 2015).

From the individual and role-based perspectives, identity theory scholars state that identities form multiple self components. In addition, individuals' roles impact the self in this process, influencing their social behaviors (HOGG; TERRY; WHITE, 1995; SERPE; STRYKER, 2011). Finally, on the collective level, social identification provides the foundation for understanding social identity construction when it emphasizes that a group constitutes a unit (HOGG; TERRY; WHITE, 1995).

Social identity theory shares some similarities with the identity theory as social identification derives from the following factors: (i) individuals categorization, (ii) the distinction and prestige of the group, and (iii) the differentiation from the other groups (ASHFORTH; MAEL, 1989; HOGG; TERRY; WHITE, 1995).

According to Whitley, Gal and Kjaergaard (2014), social identity theory embraces the premise that individuals seek to maintain their positive self-concept and, in the process, engage in comparisons with people in the groups of which they are part and with people from other groups. However, Stets and Burke (2000) noted that the two theories are distinct about defining what a group is. The scholars of social identity argue that a group consists of a collective of people who share characteristics, beliefs, and opinions. Therefore, individuals acquire similar perceptions about the world when compared with those outside their groups. On the other hand, in the milieu of identity theory, the group is formed by individuals who execute unique and integrated activities - though maintaining their particular understanding of the world.

Individual and collective identity theory approaches are relevant to understanding how interpersonal relationship networks influence the self due to the use of social media (ORSATTI; RIEMER, 2015). This affirmation is in line with Carter and Grover's (2015) statement concerning IT Identity development, as they defend that the combination of individual and social aspects should be addressed when investigating this new technology-based identity (CARTER; GROVER, 2015). For instance, a quantitative study about Baidu Post Bar ^[12] carried out by Cheng and Guo (2015) concluded that social interaction ties and social identity explained about 55,7% of the variance in individuals' self-identity in online environments.

¹² Baidu Post Bar is integrated with the Baidu Search Engine. It allows users to immerse themselves into communities based on which keywords they are looking for - ultimately providing a high level of interaction among individuals with similar interests.

Social structures act as borders that separate social entities within a particular group from other entities outside of it (BRENNER; SERPE; STRYKER, 2014). Schultz and Tabanico (2007) have demonstrated in their study that the self and identity are two essential concepts to understand individuals' behavior in different social structures. Both elements are influenced by the social context (KRAUS; CHEN, 2012) and are closely linked when engaging in impression management in social media platforms (KIM, 2018). The efforts to engage in presentations on social media may lead individuals to a detachment from their "actual" selves (DAVIS, 2014; SCHLOSSER, 2020), as social media characteristics can amplify the possibilities to experience distinct aspects of personality (KASPERIUNIENE; ZYDZIUNAITE, 2019) and correspondingly, the traits to be subject to audience's appraisal (BUI, 2016).

The self-concept is defined by Wehrle and Fasbender (2018, p.2) as "the totality of a complex, organized, and yet dynamic system of learned attitudes, beliefs and evaluative judgment that people hold about themselves". On the same perspective, Baumeister (2010, p.681) remarks that "a self-concept is an idea about something; the entity to which the self-concept refers is the self". In its turn, the set of multiple and contextualized identities constitutes the self (HOGG; ABRAMS; BREWER, 2017). One of these contextualized identities (and in the scope of this study) is IT Identity (CARTER; GROVER, 2015).

2.3. CARTER'S IT IDENTITY CONCEPTUALIZATION AND INITIAL THEORETICAL MODEL

The IT identity was initially proposed in 2012 in Michelle Carter's doctoral thesis. The author developed the concept in her initial study and operationalized it in two empirical articles that composes the remainder of her thesis (CARTER, 2012). Carter's primary motivation in proposing the concept was to broaden understanding of why and how individuals use IT in the long term and thus offer organizations a new way of understanding IT assimilation processes in the organizational context.

Carter based the concept on the theories about the identity of the areas of sociology and ¹³ psychology and, more specifically, on personal, and social identities related to the roles assumed by individuals in society (CARTER, 2012). The personal perspective consists of how

¹³ Cf. CARTER, Michelle. **Information Technology (IT) Identity: A Conceptualization, Proposed Measures, and Research Agenda**. 2012. 291 Dissertation (PhD). Clemson University. p.68

people perceive and distinguish themselves from others, concerning the individual's roles and concepts assigned to different functions within the social structures. Finally, the collective perspective comprises the concepts assigned to a specific social category or a group (CARTER, 2012). Table 4 presents the categories and constructs that Carter used to construct the theoretical model that originated the concept of IT identity in 2012.

Table 4 - Carter's IT Identity Theoretical Model: Categories and Constructs

IT Identity Categories	Broad Constructs	Specific Constructs
IT Characteristics	Functionality	-
	Malleability	
Experience	Bandwidth	-
	Mobility	
	Computer self-efficacy	
Situational Influences	Actualized Rewards	Net Benefits
	Embeddedness	Enjoyment
Behaviors	Perceived behavioral control	Satisfaction
	Opportunities and support	Training Policies
	IT dynamism	Infrastructure
	Feature use behaviors	Interpersonal Ties
Behaviors	Enhanced use	Technological Ties
	Resistance behaviors	-
	Enhanced use	Extended use
Behaviors	Resistance behaviors	Extent of use
	Enhanced use	Breadth of use
	Resistance behaviors	Apathy
Behaviors	Resistance behaviors	Passive resistance
	Enhanced use	Active resistance
	Resistance behaviors	Active resistance

Source: Carter and Grover (2015, p.944)

At the end of her proposition, Carter defined the three reflective dimensions of IT identity. These dimensions and their definitions are exposed in Table 5 (CARTER; GROVER, 2015).

Table 5 - IT Identity Dimensions, Conceptual and Operational Definitions

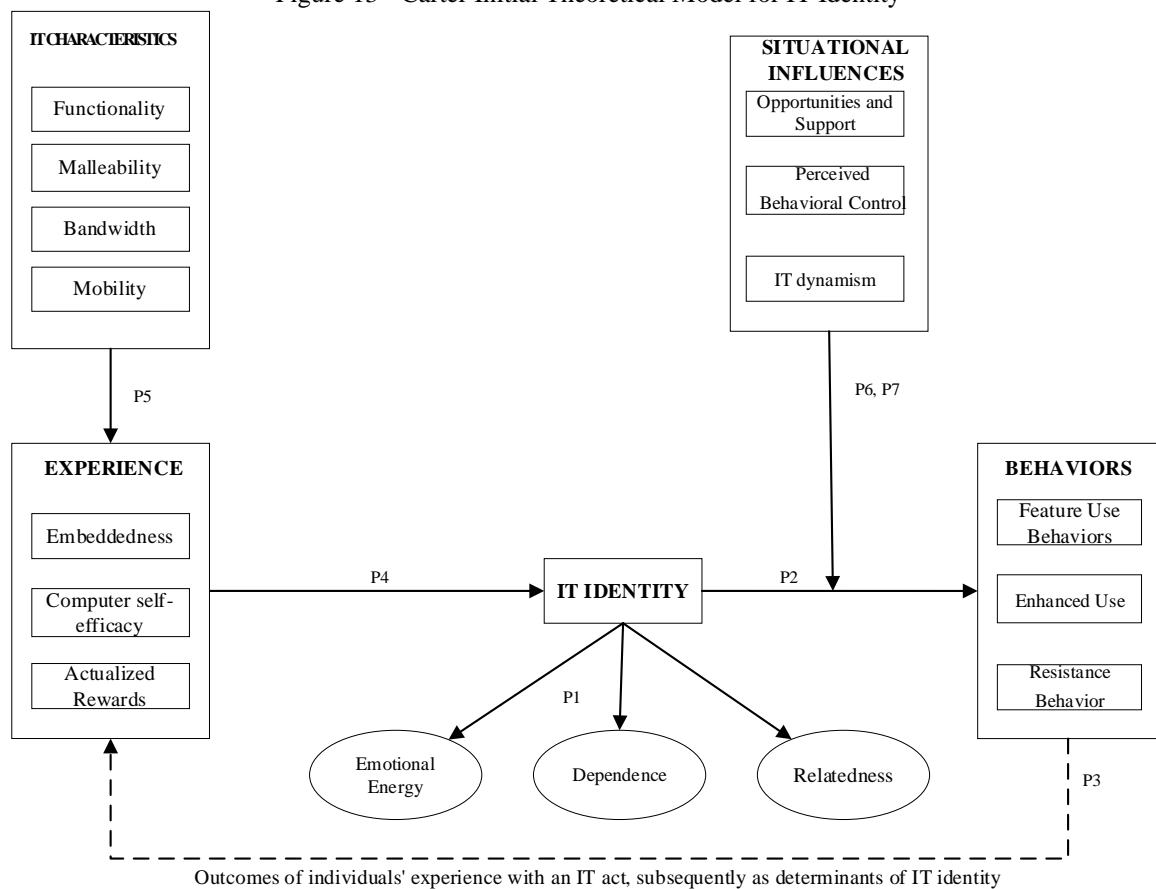
Dimensions	Conceptual Definition	Operational Definition
IT Identity	The extent to which individuals perceives an IT artifact as integral to his or her sense of self	Reflected in three interrelated dimensions: relatedness, emotional energy, and dependence
Relatedness	A blurring of boundaries between notions of the self and an IT experienced as feelings of connectedness with an IT or class of ITs	The extent to which an individual express feeling of connectedness when thinking about her – or himself concerning an IT
Emotional Energy	An individual's enduring feelings of emotional attachment and enthusiasm in relation to an IT or class of ITs	The extent to which an individual express feeling of confidence, enthusiasm, and energy when thinking about her – or himself concerning an IT

Dimensions	Conceptual Definition	Operational Definition
Dependence	An individual's sense of reliance upon an IT	The extent to which an individual express feeling of reliance when thinking about her – or himself in relation to an IT

Source: Carter and Grover (2015, p.946)

Figure 13 shows the initial theoretical model for IT identity presented by Carter in 2012.

Figure 13 - Carter Initial Theoretical Model for IT Identity



Source: Carter and Grover (2015, p.943)

This section summarized Carter's conceptualization of IT identity. Given that social media sites extended social structures from physical to virtual environments (SCHLOSSER, 2020), at the end of this paper, an adaptation and expansion of Carter's theoretical model to address social media peculiarities and their relational nature in the process of IT identity development.

Therefore, this paper follows Carter's theoretical foundations of IT identity conceptualization but proposes the expansion of the theoretical scope to contemplate its development due to the use of social media.

2.4. EFFECTS OF SOCIAL MEDIA USE ON INDIVIDUALS

The Internet popularization allowed people to reach a broader audience rapidly with enhanced interactivity capacity. Moreover, Morris and Ogan (1996) noted that one of the advantages of the Internet (compared to previous communication technologies) was the possibility of quickly changing social roles between the audience and the message producers. More recently, Internet-based technology has evolved and allowed the creation of more sophisticated forms of digital communication - combining the benefits of traditional mass media like television and radio, with more communication-oriented devices, as the telephone (CHOU *et al.*, 2013). Hence, social media platforms may be considered a natural evolution of internet technology, enabled by Web 2.0 platforms and their applications, which drastically expanded User Generated Content (UGC) dissemination (KAPLAN; HAENLEIN, 2010; KAPLAN; MAZUREK, 2018).

2.4.1. Social Media Characteristics

Like any established technology, social media platforms must be continuously updated to maintain communication effectiveness and promote users' engagement (KIM; WANG; OH, 2016). Thus, social media designers must strive to implement new features and affordances to pair the consumers' changeable habits and preferences through the times. Under this context, Social Information Processing (SIP) theory states that, when engaging in Computer-Mediated Communication (CMC), individuals must adapt to the communication channel to keep the desired levels of satisfaction, affinity, affiliation, and interpersonal attraction. Hence, the successful channel's adaptation can promote the development of fruitful social relationships (WALTHER, 2008).

Insofar as social media technology evolves, users experience an enhanced quality of communication, which leads to a higher degree of interpersonal interactivity. This argument's cogency denotes that social presence contributes to effective interactions in online environments (TU, 2000; TSENG *et al.*, 2019). According to the theory proposed by Short, Williams and Christie (1976), the improvement of feelings of intimacy, immediacy, involvement, and connectedness makes individuals perceive how close or "physically" present people within their relationship networks are during social interactions (BIOCCA; HARMS; BURGOON, 2003).

In another vein, the efforts to promote communication effectiveness in social media

must consider the message's effect on the receiver and the propensity that both the message and the corresponding elicited behavior will be disseminated through the relationship networks (DUNN, 2013). For example, when messages are ambiguous and communication occurs in non-routine situations, the transmitter and the receiver need to share a higher volume of information to improve communication efficacy (WU; PINSONNEAULT, 2011). In this regard, the social media communication process benefits from media richness (MCSHANE; GLINOW, 2017).

Lengel and Daft (1988) enlist the three characteristics of media richness, which are: (i) the ability to transmit and receive multiple information signals simultaneously, (ii) the capacity to promptly give messages feedback, and (iii) allow individuals to keep focused on the ongoing task. As an example, in an exploratory study, Tseng *et al.* (2019) investigated the role of media richness in the context of mobile instant messaging (MIM). The authors found that the capacity to give prompt feedback and maintain focus positively influences social presence, relatedness, and loyalty with the IT artifact.

However, social media capabilities (e.g., augmented anonymity capacity and paucity of nonverbal cues), while stimulating platform engagement, also enable individuals to experience what Walther named as "selective self-presentation" (WALTHER, 2007). Social media platforms are continuously being enhanced with new features, increasing users' capacity to engage in selective self-presentation (GONZALES; HANCOCK, 2011). Nonetheless, the more they engage in selective self-presentation, the more they will be prone to show, in social media, a separate self from their physical world version (HONGLADAROM, 2011). Ultimately, demanding that the receiver needs warrants for trusting that transmitter's information is legitimate (WARKENTIN *et al.*, 2010).

DeAndrea (2014, p.187) defines warrant as "a cue that authenticates online self-presentation". According to the Warranting theory tenets, individuals tend to show a distinct self when interacting online (WALTHER; PARKS, 2002; DEANDREA; CARPENTER, 2016). For this reason, DeAndrea and Carpenter (2016) note that users' ability to modify their impressions in these virtual social structures reflects on the audience's appraisal of their presentations' legitimacy (i.e., if they are congruent with the physical world presentations). Thus, insofar as detected traces of obfuscation, modification, and dissemination, the less audience believes that the transmitter's presentations online are close to their physical world presentations.

Table 6 summarizes the main communication theories related to social media use, its definitions, and implications.

Table 6 - Communication Theories: Definitions and Implications for Social Media Users^[14]

Theories	Definitions	Implications for Social Media Users	Author(s)/Year
Social Presence Theory	It consists of how users are perceived as “physically” present during a communication session.	The higher the social presence, the greater the social influence that the communication partners have about the other's behavior and, therefore, the higher the level of interpersonal involvement	Biocca, Harms and Burgoon (2003); Chung, Han and Koo (2015); Tseng <i>et al.</i> (2019)
Media Richness Theory	The volume of information capable of being transmitted by a media in a given time-length	The ability to transmit a higher volume and variety of information on social media platforms reduces ambiguity and uncertainty.	Lengel and Daft (1988); Tseng <i>et al.</i> (2019)
Warranting Theory	When individuals evaluate information in the online environment, they need warrants to ensure that the transmitter's information is legitimate	The warrants influence how receivers perceive the transmitter's information in social media. Consequently, it affects how identity is perceived in online environments as social media platforms	Walther and Parks (2002); Warkentin <i>et al.</i> (2010); Deandra and Carpenter (2016)
Computer-mediated communication (CMC)	It encompasses all the communication that occurs through the electronic medium	In social media, the anonymity afforded by CMC stimulates individuals to disclose more frequently personal information	Joinson (2001); Walther and Parks (2002); Kashian <i>et al.</i> (2017)
Social Information Processing (SIP) Theory	During CMC, individuals must adapt how they express themselves to the medium to develop impressions and achieve more productive interpersonal relationships	The development of interpersonal relationships through electronic ways occurs more slowly. However, in the long-term, it enables the establishment of stronger interpersonal ties	Walther (2008)
Defleur's Model of Communication	Defleur's circular communication model implies that noise will be present in all instances, the transmitter, receiver, and the channel. In this process, the meaning of the message will change continuously	Considering social media as a channel, the noise generated depends on its characteristics, occurs in every communication instance, and can influence the whole communication process	Defleur and Ball-Rokeach (1990)

Source: The Author (2021)

Carter's (2012) IT identity theoretical model positioned perceived behavioral control (PBC) among the situational influences. According to Ajzen (1991), PBC consists of people's

¹⁴ This paper's conceptualization focus on how social media platforms' characteristics and their communication process affect individuals' experiences (and correspondingly, their presentations and IT identity development), irrespective of the order in which the message exchange occurs between communication agents.

perception of the ease or difficulty of performing the behavior of interest (in the context of IT identity, the extent of how IT will allow them to perform the desired behavior). In this study, it is argued that since social media involves the individuals' judgment about how they will perform and the audiences' appraisal ¹⁵about the individuals' presentation, the situational influences also have to address this distinction.

Given that, Warrant theory offers an adequate framework to allow the audience to assess transmitter's presentations and evaluate if they can adequately control their desired behavior (i.e., present themselves in a meaningful way in social media, accordingly their physical world selves). First, the perception by the receiver that the transmitter has hidden the actual source of the transmitted information. Second, the perception by the receiver that the transmitter has restricted access to information (data that can lead them to be identified, personal information). Finally, the perception by the receiver that the transmitter has modified their information.

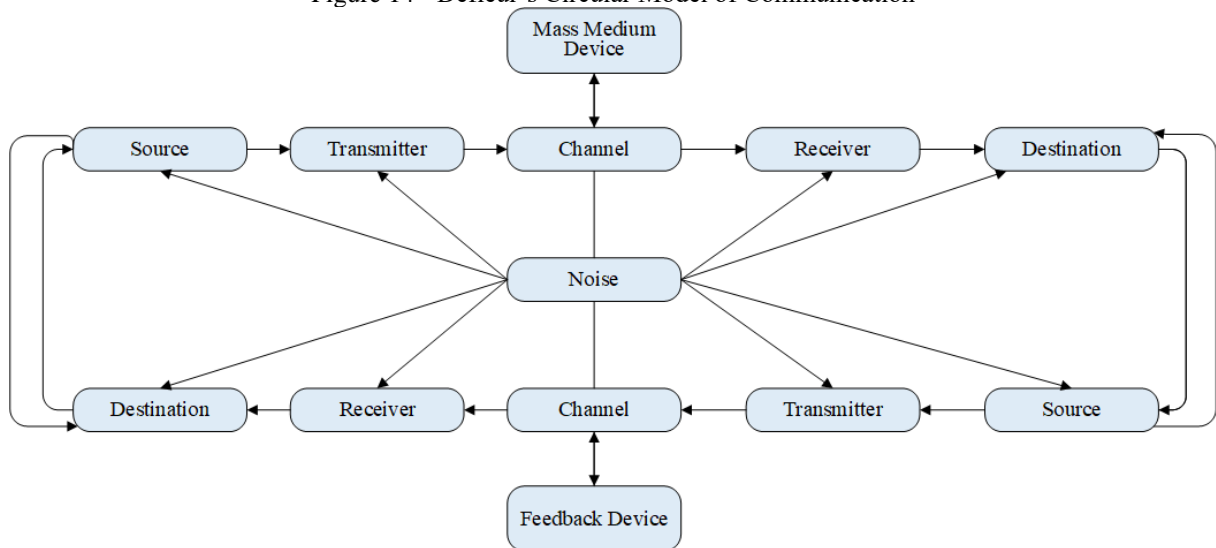
2.4.2. Social Media Communication Structure

Social media characteristics allow unprecedented interaction compared with prior mass media and communication artifacts. Thus, understanding their effects on identity development also demands investigating its communication process (DUNN, 2013) since its communication structure also reflects individuals' self-presentation (SCHLOSSER, 2020). In this regard, Defleur's model (DEFLEUR; BALL-ROKEACH, 1990) combines the previous linear models of Shannon (1948) and Westley and Maclean Jr (1957). However, it takes a further step ahead as it emphasizes how noise distresses the communication process (NARULA, 2006).

Furthermore, Defleur's model shows that noise is always present in every communication instance, which is also true for the social media communication process (BAJRACHARYA, 2018). In social media, noise may appear in several forms and affect every communication instance - channel, transmitter, and receiver. For example, a change in a platform's policy (a social media characteristic) may elicit rumors about a new threat to users' privacy, which may change their presentations during online interactions (CAVUSOGLU; PHAN; CAVUSOGLU, 2013). Figure 14 shows Defleur's circular model of communication.

¹⁵ Cf. section 2.4.2 Social Media Communication Structure

Figure 14 - Defleur's Circular Model of Communication



Source: Narula (2006, p.34)

Likewise, social media platforms are considered a form of digital mass media that allows two-way communication and feedback (MIRANDA; YOUNG; YETGIN, 2016). Similarly, as foreseen in the Defleur model's structure, they may act interchangeably as mass media or feedback devices, depending on which role the transmitter and receiver assume during the communication process (BAJRACHARYA, 2018).

Years before the Internet popularization, Ball-Rokeach and Defleur (1976) proposed the media dependence theory, which warned about the effects of mass media communication on the audiences, like (i) creation and resolution of ambiguity, (ii) attitude formation, and (iii) fostering agenda-setting. Nowadays, as internet technology is essential to people's communication, Internet has been used as a bridge to elicit feelings of social connectedness - an ability to construct fruitful relationships and perceive themselves as part of it (LUPINACCI, 2020).

2.4.3. Social Connectedness and Sense of Belonging in Social Media Platforms

Social connectedness is one of the primary motivators for using social media platforms (SAVCI; AYSAN, 2017; RAHMAN *et al.*, 2018). Individuals experience it in short periods when interacting in social networks and organizations, and it manifests in feelings of belongingness and relatedness (VAN BEL *et al.*, 2009; CRISP, 2010). In contrast, the sense of belonging reinforced by social connectedness implies a more substantial emotional commitment (CRISP, 2010).

Sense of belonging influences various cognitive and motivational processes

(BAUMEISTER; LEARY, 1995). When people engage in self-express activities, one central self need is belongingness (LEE; ROBBINS, 1995). The sense of belonging - developed during social media interactions - proved to be an essential factor influencing information sharing, adoption, and continued usage (LIU; GUO, 2015). Social connectedness encompasses the whole process of social media communication (ALLEN *et al.*, 2014), has a positive effect on self-esteem (LEE; ROBBINS, 1998), boosts emotional attachment and individuals' sense of belonging (CRISP, 2010).

The ability to process vast and diverse volumes of information supports the dynamic and effective communication in social media (OH; KWON; RAO, 2010; AGRAWAL *et al.*, 2015; PAN *et al.*, 2017), expanding optimistic users' experience through feelings of social connectedness and fostering a continued sense of belonging. Social connectedness is one of the leading motivators for using social media platforms (SAVCI; AYSAN, 2017; RAHMAN *et al.*, 2018). Individuals experience it in short periods when interacting in social networks and organizations, and it manifests in feelings of belongingness and relatedness (VAN BEL *et al.*, 2009; CRISP, 2010). In contrast, the sense of belonging, reinforced by social connectedness, implies a more substantial emotional commitment (CRISP, 2010).

Ryan *et al.* (2017) note that prolonged experience of social connectedness is contingent on how social media users perceive their experiences in the platforms, which is in line with Crisp's research in the milieu of social exclusion as he concludes that social connectedness may arise in the absence of a sense of belonging and vice versa (CRISP, 2010). In other words, at first, individuals may be attracted by social media platforms' explicit characteristics (e.g., fast feedback, responsive design, easiness to use, the capacity to present social media cues, and others). Nevertheless, the sole experience of social connectedness is scanty to arouse a continued sense of belonging - and make social media users feel inserted into groups and communities. Table 7 lists the definitions of social connectedness and sense of belonging and their implications for users' perceptions.

Table 7 - The Influence of Social Media Characteristics on Users Perceptions

	Conceptual Definition	Implications for Users Perceptions	Author(s)/Year
Sense of Belonging	The individuals' need to feel inserted and accepted in a particular social group	Influences cognitive processes and acts as a motivator of behaviors when using social media	Baumeister and Leary (1995); Leary and Cox (2008); Nadkarni and Hofmann (2012); Dorum, Bartle and Pennington (2013)
Social Connectedness	The ability to construct rich relationships and perceive himself or herself as part of it	Reinforces the sense of belonging and self-esteem through the use of social media platforms	Lee and Robbins (1998); Crisp (2010); Savci and Aysan (2017)

Source: The Author (2021)

The evidence for Crisp's (2010) rationale can be noticed even when online relationships involve strangers or acquaintances. For instance, on Instagram, one of the leading social media platforms (HONG *et al.*, 2020), users begin to bond emotionally with social influencers and celebrities (DOBIAS, 2017), as the prompt access to their lives events fosters improved feelings of intimacy and closeness (COURBET; FOURQUET-COURBET, 2014; CHUNG; CHO, 2017).

The evolution of social media platforms is constantly improving the capacity to stimulate users' feelings of connectedness (SCHULTZE; BROOKS, 2019). To illustrate this point, when comparing one of the fathers of massively multiplayer online role-playing games (MMORPGs), Multi-user Dungeon (MUD), with modern MMORPGs like World of Warcraft (WoW) and League of Legends (LoL), the transition from an essentially text-based technology to modern platforms, with support to video, audio, and real-time communication, amplified by far the potential to induce in the players, feelings of connectedness and belongingness (KAUFMAN; SAUVE, 2019). All in all, social media characteristics may stimulate how users engage in online presentations. Insofar as they improve individuals' perception of social connectedness, they also enhance their sense of belongingness and stimulate platforms' loyalty (LIU; GUO, 2015). Therefore, given the arguments above, the first proposition is stated:

***PI:** Social media characteristics (to provide an improved ability to rapidly handle a large and varied volume of information and preserve anonymity online) positively influence users' feelings of social connectedness, belongingness, and the perception of online privacy.*

As social media capabilities get more appealing to the users, they also encourage them to exchange privacy for a more personalized experience (KRASNOVA; VELTRI; GÜNTHER, 2012; DEANDREA, 2014). At this point, users are often confronted with the "privacy calculus" to decide which strategy to adopt during self-presentations (KRÄMER; HAFERKAMP, 2011; KRASNOVA; VELTRI; GÜNTHER, 2012).

Social media characteristics like those previously discussed in this section and others, such as augmented anonymity capacity and the possibility to let users express themselves by nonverbal cues while stimulating platforms engagement, also stimulate to engage in selective self-presentation (WALTHER, 2007). The social media self-presentation is discussed in the following section.

2.5. SOCIAL MEDIA SELF-PRESENTATION

Nadkarni and Hofmann (2012) remark that self-presentation and the need for belonging are two primary motivations for using social media platforms. Self-presentation - embracing a self-disclosure perspective - may lead individuals to show legitimate information about themselves to please others and make their public self more similar to the ideal self (JOHNSON, 1981; BAUMEISTER, 1982). On the other hand, self-presentation also involves projecting what Johnson (1981, p.761) termed “a desired public self-image”. Although internet communication technology allows users to opt for both ways, people tend to have a more positive perception of individuals who present high self-disclosure levels (KASHIAN et al., 2017) since reciprocity is one of the interpersonal effects of self-disclosure (DERLEGA; BERG, 2013).

In view of that, Hongladarom (2016) observes that when using social media, individuals tend to construct an alternative identity or, in his words, an “online self”. As a result, it may influence how they engage in self-presentation to change groups and communities' perceptions about their identity (HE *et al.*, 2014).

2.5.1. Impression Manifestation in Social Media

Self-presentation varies among individuals due to differences in personality traits and cognitive styles (TYLER; KEARNS; MCINTYRE, 2016). While certain traits stimulate self-disclosure, others are more related to self-enhancement behavior. Both cognitive processes are essential to understand online self-presentation (CRAMER; SONG; DRENT, 2016) as social media characteristics motivate users to construct an objectified self-concept (VANDENBOSCH; EGGERMONT, 2016). When people engage in impression management in social media, they need to adjust their presentations to establish the desired intimacy (SCHLOSSER, 2020). One way to achieve that is to engage in self-disclosure, whereby individuals communicate spontaneous thoughts and private information about themselves (JOHNSON, 1981; KRÄMER, HAFERKAMP, 2011). Hence, self-disclosure in social media is intimately linked to privacy and depends on factors such as anonymity and closeness with the audience. Suppose, on one side, social media platforms' capabilities motivate users to engage in self-disclosure and, therefore, present an identity closer to their self-concept (SCHLOSSER, 2020).

In that case, it also encourages them to experience a distinct aspect of themselves

(WHITLEY; GAL; KJAERGAARD, 2014). Consequently, in social media, the form in which users are perceived within groups or communities stimulates them to reevaluate their presentations after every interaction (WANG; SKOVIRA, 2017).

2.5.2. Impression Internalization in Social Media

Social media characteristics stimulate the engagement in self-enhancement behavior, as it allows one to emphasize the chosen personality traits (SEDIKIDES; ALICKE, 2018). However, due to the constant social comparison, individuals who excessively enhance their online selves may be perceived negatively by others in their personal networks (CRAMER; SONG; DRENT, 2016). One of the cognitive processes that contribute to avoiding excessive presentation enhancement is self-awareness. It allows individuals to be attentive to their behaviors and understand emotions, feelings, and other people's behaviors. This may be explained because high aware individuals tend to have an improved capacity to detach themselves from others' views (DOAS, 2017).

While self-awareness refers to the extent to which individuals watch their self-concept closely, self-monitoring consists of observing and controlling self-presentations (SNYDER, 1974). Webb *et al.* (1989) noted that the relationship between self-awareness and self-monitoring is context-dependent (i.e., individuals with higher self-monitoring traits are also more concerned with their self-presentation). As a result, self-monitoring aids in adjusting behaviors in social structures and improving the cognitive capacity to process information during self-presentation (TYLER; KEARNS; MCINTYRE, 2016). Regarding social media, Maghrabi, Oakley and Nemati (2014) argue that individuals' self-monitoring skills also may influence the social capital they gather during online interactions. At length, high levels of self-awareness, combined with constant self-monitoring behavior, may contribute to restraining the overuse of self-enhancement during social media self-presentation.

Social media platforms are social structures where users repeatedly engage in social comparison (YANG; HOLDEN; CARTER, 2018). In the search for cognitive symmetry, they want to be known according to how they view themselves. To do so, they engage in self-verification when using third-party impressions to confirm or reject which characteristics will attach to their self-concept (BURKE; STETS, 1999; KRAUS; CHEN, 2012; SCHMALZ; CARTER; LEE, 2018). When navigating online environments, they can engage in self-verification by looking for external cues that confirm their conceptions and, in the process, demonstrate a more similar identity (according to how they perceive themselves) (KRAUS;

CHEN, 2012; SCHMALZ; CARTER; LEE, 2018). This paper argues that, in the long run, the combined action of self-awareness, self-verification, and self-monitoring processes will be responsible for retaining or rejecting the characteristics and impressions that social media users think to belong to their sense of self (KRAUS; CHEN, 2012; TYLER; KEARNS; MCINTYRE, 2016). Table 8 summarizes the concepts discussed in this section and their implications in the context of social media use.

Table 8 - Social Media Self-Presentation Related Self-Process and their Implications for Individuals

Concepts	Definition	Implications for Social Media Self-presentation	Author(s)/Year
Self-concept	The set of meanings people attribute to their selves by questioning who they are and how others perceive them	Identity affirmation. Influence self-esteem and confidence when using social media	Shavelson, Hubner e Stanton (1976); Markus (1977); Rogers, Smith e Coleman (1978); Harter (1999); Stets e Burke (2003); Marsh, Xu e Martin (2012); Yang, Holden e Carter (2018)
Self-presentation	The individual's effort to control the impressions that others assign to him or her during social interactions	It provides the ability to expand attractiveness and credibility	Swann (1990a); Leary (1995); Ellison, Heino and Gibbs (2006); Nadkarni and Hofmann (2012); Seidman (2013); Hong <i>et al.</i> (2020)
Self-disclosure	The act of revealing thoughts or intimate experiences to the others	It provides the ability to control what others know about us and establish the desired level of intimacy	Gibbs, Ellison and Heino (2006); Jiang, Bazarova and Hancock (2011); Derlega and Berg (2013); Kashian <i>et al.</i> (2017); Kim, Seely and Jung (2017); Schlosser (2020)
Self-monitoring	The individuals' ability to control their self-expression and understand the consequences of their actions	It provides the ability to adjust the behavior in different social situations and consequently fit into social groups	Snyder (1974); He <i>et al.</i> (2014); Tyler, Kearns and McIntyre (2016)
Self-awareness	The ability of individuals to fix attention on their self-concept and understand behaviors, emotions, and feelings	Increases the capacity to avoid inserting into social stereotypes.	Geller and Shaver (1976); Gonzales and Hancock (2011); Doas (2017)
Self-enhancement	The effort of individuals to be perceived by their positive traits and maintain high levels of self-esteem	It improves the capacity to change a specific situation or achieve objectives	Swann (1990a); Paulhus (1998); Hoorens (2011); Cramer, Song and Drent (2016); Krueger, Heck and Asendorpf (2017); Sedikides and Alicke (2018)
Self-verification	The need for individuals to be perceived by their self-concept	Strengths relationships. Promote positive emotional connections and group orientation	Swann and Read (1981); Swann (1990a); Burke and Stets (1999); Thatcher and Zhu (2006); Kraus and Chen (2012)

Source: The Author (2021)

When compared to static IT artifacts, social media usage more often revolves around interpersonal relationships. Which, in turn, demands increased use of cognitive self-processes. As a result, self (or personal) identity relates closely to social identity when individuals interact online (CHENG; GUO, 2015). Social media use is also motivated by psychological rewards — in the form of feelings of social support and enhanced social capital (TREPTE; DIENLIN; REINECKE, 2014). The perception that its use will revert in resources and information also stimulates individuals to continue exploring and using social media platforms (BRIGHT; KLEISER; GRAU, 2015). For example, features like a friendly user interface and a clean and functional design may stimulate users' perceptions of self-efficacy (HOCEVAR; FLANAGIN; METZGER, 2014). As a result, these features also improve users' confidence and foster continued usage intention (HU; GU; ZHANG, 2017).

Sinclair and Grieve (2017), in a study involving the use of Facebook by an older adult sample, concluded that its use was associated positively with social connectedness and improvements in social capital. Coupled with the conclusions of Sinclair and Grieve (2017), in an experiment carried out during the COVID-19 pandemic, Onderdijk *et al.* (2021) compared three distinct experiences involving the interaction of the audience and artist during an online musical concert. They found that the capacity of the media characteristics to elicit social presence (e.g., the use of virtual reality headsets, the interaction between the artist and the audience via chat) could predict a greater social connectedness.

Despite the extensive use of social cues to enhance the presentations in social media, its overuse may negatively affect the audience's perception (HONG *et al.*, 2020). When individuals engage in self-verification behavior, they look for external cues to confirm their self-concepts. In searching for these cues, the self-verification behavior aids them to show a more authentic personality during self-presentations (KRAUS; CHEN, 2012; SCHMALZ; CARTER; LEE, 2018). Self-verification positively influences the commitment and trust in the relationships (BURKE; STETS, 1999). Likewise, identity verification assists in keeping the meanings that self links to a specific identity (STRYKER; SERPE; POWELL, 2020).

Wang and Skovira (2017) remarked that if the technology is built within an authentic context, it can mediate the relationship between the ideal self and its use. Social media motivates users to construct an objectified self-concept (VANDENBOSCH; EGGERMONT, 2016). For this reason, in online environments, individuals with higher levels of self-awareness tend to be more attentive about discrepancies during self-presentation (SEIDMAN, 2013). For example, they also tend to make fewer posts and present more regret when sharing something that (in a second moment) judge to be inadequate compared to users with low self-

awareness levels (MOORE; MCELROY, 2012). Intrinsically related to self-awareness, self-monitoring is a paramount cognitive process when engaging in interpersonal interactions. Individuals with high self-monitoring levels have an improved capacity to seek social information to guide their presentations (TYLER; KEARNS; MCINTYRE, 2016). From the arguments exposed, three propositions are presented:

***P2:** Positive feelings of connectedness, belongingness, and privacy, influence how social media users manifest impressions online (through the processes of self-disclosure and self-enhancement).*

***P3:** Positive feelings of connectedness, belongingness, and privacy, influence how social media users internalize impressions online (through the processes of self-awareness, self-monitoring, and self-verification).*

***P4:** The relationship between the perceptions about feelings of connectedness, belongingness, and privacy with how social media users manifest impressions online (through self-disclosure and self-enhancement processes) is mediated by self-awareness, self-monitoring, and self-verification processes.*

External and internal aspects influence how social media users construct their online presentations. For instance, audience proximity is one of the critical factors when people assess whether they will engage in impression management¹⁶ - restraining the factual information to disclose - or will show a more authentic version of themselves (SCHLOSSER, 2020). Therefore, the following section discusses the effects of the audience's evaluation in view of the way how individuals engage in impression management.

2.6. SOCIAL MEDIA AUDIENCE'S EVALUATION

Impression management depends primarily on individuals, allowing them to control

¹⁶ Although the terms "self-presentation" and "impression management" are commonly used interchangeably, this paper refers to social media self-presentation as the underlying effect of the impression management on individuals' online presentations. Impression management may extend through virtual and physical social structures (e.g., when online friends meet on the physical world and vice versa). Hence, in the scope of this study, self-presentation in social media results from the combination of cognitive processes that individuals use to internalize and expose their impressions online.

how they want to be perceived by their audiences (BAUMEISTER, 1982; PAULHUS, 1998). Despite the remarkable capacity to engage in impression management in computer-mediated environments, individuals' evaluation in these settings is highly influenced by information that cannot be manipulated (WALTHER *et al.*, 2009). Social media characteristics allow individuals to engage in self-presentations asynchronously, enhancing the capacity to develop desired impressions (KRÄMER; WINTER, 2008; KIM, 2018; PROUDFOOT *et al.*, 2018). With this in mind, Hogan (2010), drawing on Goffman's theatrical metaphor (GOFFMAN, 1959), noted that presentations in social media platforms occur in two temporal instances. First, during "performances," individuals present themselves in real-time, thus relying more on self-monitoring to proceed with impression management. While the second instance, "artifacts," depends on social media features.

Hogan (2010) considers social media platforms "virtual curators" since they allow presentations to occur asynchronously. This extended temporal capacity to engage in impression management provided by social media results in two possible consequences. If on one side, will enable the development of a more refined presentation (DAVIS, 2014; PROUDFOOT *et al.*, 2018), on the other, the audience also acquires an improved capacity to influence how users present themselves (BUI, 2016), which will reflect on the whole impression management process.

2.6.1. Impression Verification in Social Media

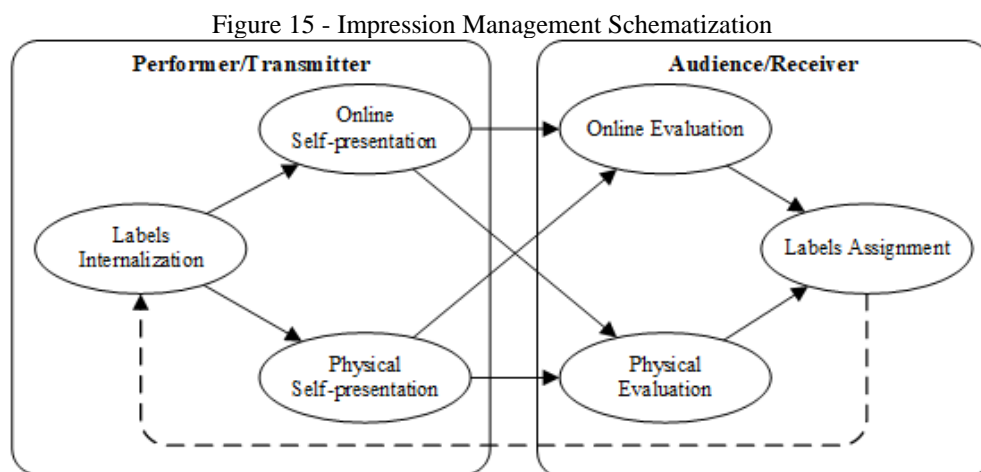
Goffman (1959) observes that the amount of previous information retained about the performer reduces the chances that perceived inconsistencies about their presentations radically influence the audience's evaluation. When presenting themselves on social media, people can achieve a more favorable assessment by assuming roles according to the audience's social expectations (PROUDFOOT *et al.*, 2018). As a result, this "enhanced" online self (HONGLADAROM, 2016) may be subjected to constant audience evaluation and, correspondingly, individuals will also be subjected to be labeled by the audiences (BUI, 2016). To illustrate this point, in the case of social media platforms, like Instagram - which revolves mainly around visual exhibitions -, users can enhance their self-presentation using social cues (e.g., photo filters and geolocation tags). However, the excessive use of these features may negatively affect the achievement of the expected social outcomes (HONG *et al.*, 2020).

Sociology provides a theoretical framework to understand the social labeling on social media platforms. In the 1960s, the labeling theory was proposed as a new approach to

understanding why engagement in criminal activities may lead to continuous deviant behavior. Becker (1963) observed that when individuals engage in activities considered inadequate — or even illegals — and are inserted in social groups that encourage this behavior, they tend to go through a combined learning and reinforcement process. Over time, labels associated with the corresponding behaviors will be retained as new traits of individuals' self-concepts. Bernburg (2019) emphasizes that labels carry their particular significance both for individuals and others, influencing individuals' behavior and, in a looping effect, reinforcing the retaining of associated characteristics during identity development (ROTENBERG, 1974). From this perspective, labeling theory offers an additional perspective to understand the development of individuals' identity by how they perceive and internalize the audience's labels (DUNN, 1997; BERNBURG, 2019).

Within virtual environments, labels carry a fair amount of external expectations. For example, in the games industry, they represent an essential strategy to stimulate user engagement. Being aware of players' motivations, system developers implement “badges” to reward their game progress achievements - ultimately encouraging social comparison (ANTIN; CHURCHILL, 2011).

Consequently, this achievement system fosters improved game immersion and richer social interactions while reinforcing players' engagement (HENRY; THORSEN, 2019). Figure 15 shows the schematization of Impression Management, encompassing the interrelated effects of performer/transmitter and audiences/receivers on their presentations, evaluations, and labels assignment.



Source: The Author (2021)

Individuals influence society through their actions, resulting in the formation of

groups, networks, organizations, and institutions. Reciprocally, society influences the self through their shared language and meanings that enable individuals to assume various roles during social interactions, in the fullness of time, that makes them think about themselves as social objects (STETS; BURKE, 2003). The development of identities in the social structures relies on individuals' presentations and, correspondingly, on the audiences' perceptions (KIETZMANN *et al.*, 2012). Through impression management, individuals can control how to present themselves by communicating personal and intimate information (SCHLOSSER, 2020).

Rather than that, willing to reinforce self-esteem and trust, individuals engage in self-enhancement behavior which often may lead them to overestimate self characteristics (CRAMER; SONG; DRENT, 2016). Therefore, when interacting in computer-mediated environments, the audience in personal networks searches for warrants about individuals' presentations (WALTHER *et al.*, 2009). Walther and Parks (2002) define warrants as perceived signs that the digital identity matches individuals' actual physical world identity. They proposed the Warranting Theory that emphasizes that impression development in computer-mediated communication (CMC) depends on the receivers' perceptions.

Likewise, identity construction heavily depends on information that cannot be manipulated (STETS; BURKE, 2000; HONGLADAROM, 2011). Anonymity can enable individuals to experience assorted aspects of their personality (WARKENTIN *et al.*, 2010). However, it is also a stimulus for distancing the online self from their physical world selves (JOINSON, 2001). The warrants discourage individuals from modifying or manipulating information (WARKENTIN *et al.*, 2010). Accordingly, the more distrustful individuals' online presentations, the less reliable their warrants will be perceived by the audience (DEANDREA; CARPENTER, 2016).

In social media, users' presentations are subject to the three processes proposed by Deandrea and Carpenter (2016), which are: (i) modification control, (ii) dissemination control, and (iii) source obfuscation. Insofar as it increases the credibility of the transmitter's information, it also increases the audience's perception that their presentation is authentic (i.e., congruent with their physical world identity). Considering the arguments above, it is presented the following propositions:

P5: The form of how individuals manifest impressions in social media (swaying between disclosing or enhancing their presentations) influences the audience's perception about traces of modification, controlling, or shaping.

P6: The audience's perception of traces of modification, controlling, or shaping of individuals' presentations in social media influences how individuals engage in self-awareness, self-monitoring, and self-verification to internalize their impressions.

Effective interpersonal interactions depend on impression management (SNYDER, 1974). During identity development, the audience (receivers) assign impressions to individuals, who, in turn, internalize them (BRENNER; SERPE; STRYKER, 2014). In other words, society determines individuals (termed as social objects), positions, assignments, and expectations). In its turn, individuals internalize these assignments and expectations (HOGAN, 2010; DAVIS, 2014).

2.6.2. The Influence of Interpersonal Ties (Strong and Weak Ties) in Social Media Interactions

In the social media context, the interrelation between the individual and collective instances can be perceived in how interpersonal ties are constructed (BECKER *et al.*, 2015). According to Serpe and Stryker (2011), identity construction occurs in internal and external instances. Spitzer (1972) points out that social actors are distinguished by extension and intensity concerning external instances. The extension corresponds to the number of people who know a particular individual and assigns him/her labels or impressions. The intensity corresponds to the degree of closeness with the audience - either a single person or a group (BECKER *et al.*, 2015).

Social media capabilities facilitate communication and proximity with strong ties (e.g., friends and relatives) and weak ties (e.g., acquaintances, work colleagues, and business partners (ELLISON; STEINFELD; LAMPE, 2007). The weak ties provide non-redundant information and exposure to various points of view, facilitate information and content sharing, and improve social media interaction (PARK *et al.*, 2014). In its turn, strong ties provide emotional support (UTZ; MUSCANELL, 2015). To illustrate this point, Lin and Utz (2015) verified that tie strength positively affects happiness and benign envy. In social media platforms, individuals may also develop emotional bonding through parasocial relationships (PSRs) when interacting with social influencers and celebrities (BOND, 2016). The prompt access to their life events creates an improved feeling of intimacy and closeness with these people (COURBET; FOURQUET-COURBET, 2014; CHUNG; CHO, 2017).

In social media platforms, individuals interact with strong and weak ties within the

called echo chambers - networks formed by exposing individuals to selected information chosen by algorithmic curation (PEDERSEN; SMETS; ÅGOTNES, 2019). Lopez-Chau *et al.* (2019) investigated the social media polarization towards the Mexican candidates in the 2018 race regarding weak ties. The authors verified that candidates with a higher number of followers also elicited stronger (positive and negative) sentiments amongst Twitter's audience. Choi *et al.* (2020) investigated how social media echo chambers amplify rumors among Twitter users concerning strong ties. Moreover, 10% of rumors initiated within echo chambers could produce 36% or retweets, resulting in 24% of rumors propagation.

Becker, Porter and Centola (2019) carried out an experiment to test the effects of the interaction between two groups of like-minded people in stimulating polarized behavior. They found that it is in the influencers' activity that resides the blame for inducing polarization. In other words, highly influential individuals can easily spread biased information through social media networks. Conclusively, social media allows individuals to be perceived by the groups and communities view, react according to this external perception, and consequently develop their identity as users of this media. This information denotes that the effects of audiences' labeling on individuals will depend both on the tie's strength and the audience extension between both communication instances.

In view of the arguments mentioned above, it is presented propositions 7a and 7b:

***P7a:** The audience reaching extension moderates the effects of the individuals' impression verification (i.e., perception of traces of modification, controlling, or shaping of their social media presentations) on impression internalization.*

***P7b:** The audience proximity intensity moderates the effects of the individuals' impression verification (i.e., perception of traces of modification, controlling, or shaping of their social media presentations) on impression internalization.*

This section showed that self-presentation and social labeling are essential to understanding social media users' motivation to use the platforms. Social media is a relatively recent technology in which the communication process underlies the whole experience of platforms' use and individual presentations. On one side, individuals' internal aspects are responsible for self-construction (MAZUR; LI, 2016). On the other hand, relational aspects can mold their perceptions about the environment and the others (HOGAN; QUAN-HAASE, 2010).

Therefore, this conceptual model proposition considers both internal and external

aspects of identity development¹⁷ to propose an adaptation of Carter's (2012) original IT identity model to the context of social media. This proposition is presented in the next section.

3. A CONCEPTUAL MODEL OF THE ANTECEDENTS OF IT IDENTITY DEVELOPMENT DUE TO THE USE OF SOCIAL MEDIA:

As Carter and Grover (2015, p.940) noted, "IT Identity is primarily a personal construction" but also depends on "social and cultural contexts". Within this frame of reference, communication through digital media has dramatically influenced cultural and social forces dynamics, changing how individuals, groups, and organizations perceive themselves — ultimately reflecting in their identities (LECLERCQ-VANDELANNOITTE, 2014; WHITLEY; GAL; KJAERGAARD, 2014).

IT artifacts have been used to execute job functions or leisure activities at an ever-accelerating rate (ZHAO *et al.*, 2020). For instance, in their longitudinal case study, Boudreau, Serrano and Larson (2014) investigated how the deployment of a new library information system influences the process of librarian's identity construction. During eight years of investigation, the authors observed a slow changing of IT's role within the library's structure. At first, IT was a mere tool to support patrons' and librarians' demands (e.g., to give access to databases and research tools). Next, IT promoted connectivity among co-workers through web 2.0 features and its chat capabilities. Finally, librarians incorporated technology as part of their identity within the library structure.

Social media platforms are substantially more complex IT artifacts than the library's information system of Boudreau, Serrano, and Larson's (2014) study as they allow extended connectivity and interactiveness with a higher degree of expressiveness capacity (KRÄMER; HAFERKAMP, 2011). IT identity is one of the diverse identities people assume daily to play distinct roles within and across social environments. This specific technology-based identity is constituted by the set of meanings individuals attach to their sense of self regarding one IT artifact (CARTER; GROVER, 2015). Table 9 outlines the categories, definitions, concepts, and theories related to social media IT identity development discussed in the previous sections.

¹⁷ Cf. discussed in section 2.2

Table 9 - IT Identity due to Social Media Use Schematization

Communication Structure	Categories	Definition	Related Concepts	Related Theories	Author(s)/Year
Transmitter	Impression Manifestation	During social media self-presentation, individuals develop their online selves as close as possible about how they perceive their ideal self.	Self-disclosure Self-enhancement	Personal Identity Social Identity	Leary and Kowalski (1990); Paulhus (1998); Derlega and Berg (2013)
	Impression Internalization	During social media self-presentation, individuals select the impressions that they want to attach to themselves.	Self-awareness Self-monitoring Self-verification	Personal Identity Social Identity	Geller and Shaver (1976); Swann and Read (1981); Burke and Stets (1999); Tyler, Kearns and McIntyre (2016)
Receiver	Impression Verification	In social media, the individuals' presentation is continuously evaluated. Correspondingly, labels are attached to their "online identity".	Modification Control Dissemination Control Source Obfuscation	Warranting Theory Labeling Theory	Seidman (2013); Deandrea and Carpenter (2016); Kashian <i>et al.</i> (2017)
	Interpersonal Ties	The intensity and extension of network ties may influence the impressions' internalization process	Intensity Extension	Strength of Weak Ties Theory	Spitzer (1972); Granovetter (1983)
Channel	Social Media Characteristics	The characteristics of social media may influence individuals' experience during its use	Variety Volume Mobility Anonymity Feedback Speed	Media Richness Communication Privacy Management Social Information Processing	Lengel and Daft (1988); Joinson (2001); Walther (2008)
	Experienced Feelings	The feelings experienced during social media use reflects on individuals' presentations and in the development of Social Media IT identity	Sense of belonging Social Connectedness Privacy	Social Presence Computer-Mediated Communication (CMC) Social Information Processing (SIP)	Ellison, Steinfield and Lampe (2007); Krämer and Winter (2008); Walther (2008); Liu and Guo (2015); Proudfoot <i>et al.</i> (2018)

Communication Structure	Categories	Definition	Related Concepts	Related Theories	Author(s)/Year
Structure	Communication Process	The communication process influences the way how the message is transmitted, interpreted, and shared	Transmitter Receiver Channel	The Media Dependence Theory Circular Communication Model	Shannon (1948); Defleur and Ball-Rokeach (1990); McLuhan (1994); Mcquail and Deuze (2020)

Source: Designed by the Author (2021)

Note. The term “Personal Identity” is used to differentiate it from identity categories like role identity, social identity, and organizational identity.

In this paper, it is proposed an expansion of Carter`s IT identity model to embrace (i) social media relational nature, (ii) characteristics, and (iii) the influence of audiences` view on IT identity development. Furthermore, in the microlevel, research in the field should also consider the corresponding cognitive effort of users to adjust their online presentations according to the audience`s feedback since it influences which self-processes and to what extent users will access to internalize and manifest the online impressions (COSTA NETTO; MAÇADA, 2019A).

Table 10 shows the relationship between the elements of the proposed model and Carter`s original IT identity model elements

Table 10 - Relationship between the Elements of the Proposed Model and Carter's Original IT identity Model Elements

Categories	Maps to... Carter's original model Categories	Related Concepts	Maps to... Carter's original model Broad Constructs	Or/And Maps to... Carter's original model Specific Constructs
Social Media Characteristics	IT Characteristics	Variety of Information	Malleability Bandwidth	N/A
		Volume of Information	Bandwidth Mobility	
		Anonymity	Functionality	
		Feedback speed	Functionality Mobility	
Experienced Feelings*	Experience	Social Connectedness	Actualized Rewards	Net Benefits Enjoyment
		Sense of Belonging		Enjoyment Satisfaction
		Privacy	Embeddedness	Net Benefits
Social Media Audience's Evaluation	Situational Influences	Source obfuscation	Perceived Behavior Control	N/A
		Dissemination Control		
		Modification Control	Opportunities and support	Interpersonal Ties Technological Ties
		Intensity		
Extension	Feature use behaviors	Extent of use		
Self-disclosure		Breadth of use		
Social Media Self-Presentation	Behaviors	Self-enhancement	Enhanced use	N/A
		Self-awareness		
		Self-monitoring		
		Self-verification		

Note. This table shows the relationship between the categories and concepts presented in this adapted model and the correspondent categories, broad and specific constructs of Carter's original IT identity theoretical model.

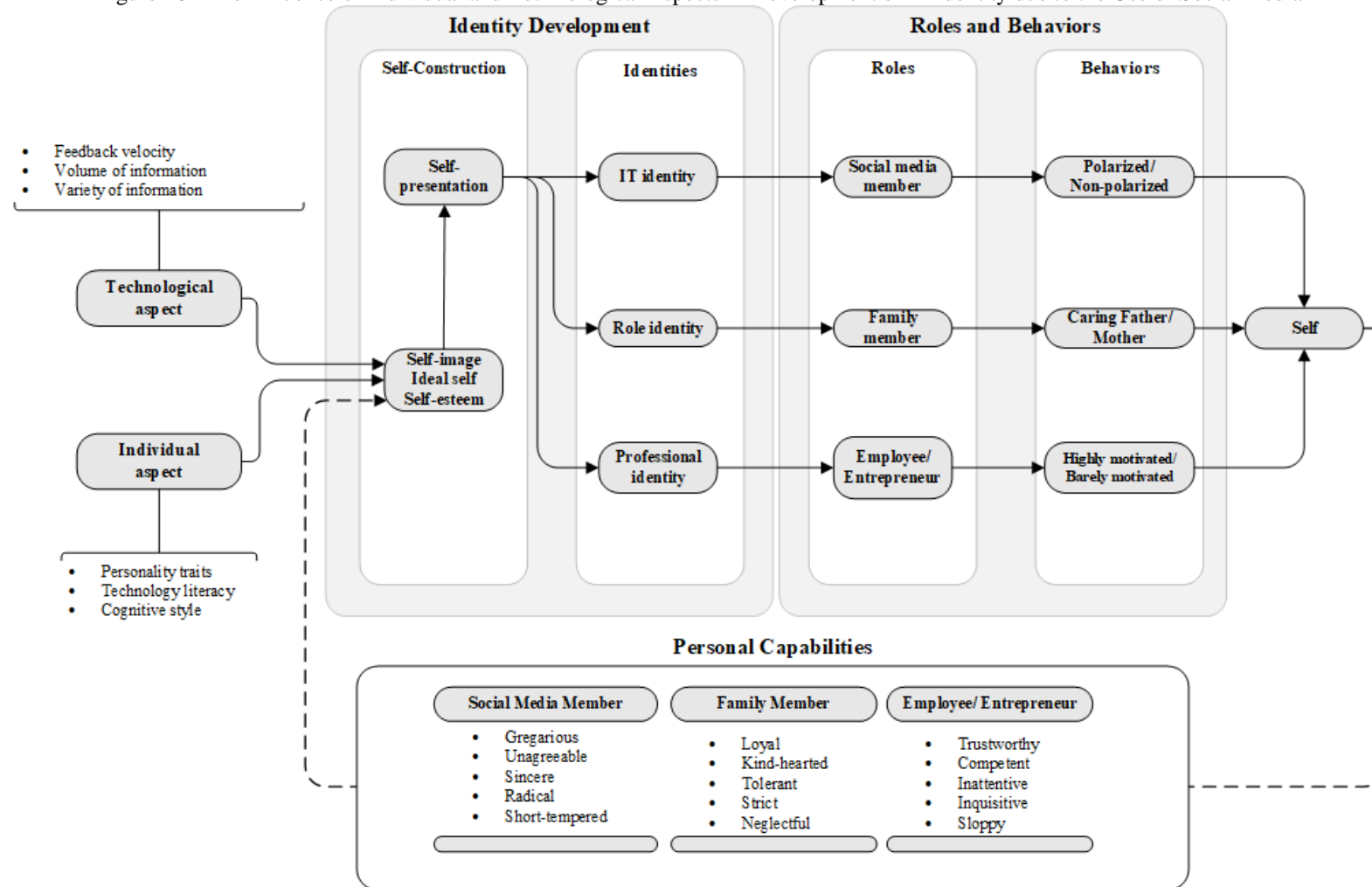
*This category was named "experienced feelings" to avoid misunderstanding the concept of user experience (UX).

Individuals must choose specific roles to represent themselves in different groups on social media. Reciprocally, the effects of each assumed role on audiences' views can stimulate them to continuously adjust how they will engage in impression management (HOGAN, 2010).

Figure 16 shows the relationship between technological and individual aspects illustrated through three different identities, roles, and behaviors people assume and engage in diverse social structures. Moreover, how they influence individuals' selves and lead them to attach personal capabilities to their self-concept. First, the individual aspect comprises intrinsic characteristics like personality traits, cognitive style (WINTER; MASLOWSKA; VOS, 2021), and technology literacy (VORVOREANU *et al.*, 2011).

Second, the social aspect corresponds to the whole experience of using social media. It includes the interactional context in which the communication occurs, group processes, and intergroup interaction. Besides, the outcomes of the experience in using social media eliciting in users enhanced feelings of social connectedness and sense of belonging. Finally, the technological aspect encompasses social media characteristics like feedback velocity, volume, and variety of information.

Figure 16 - The Influence of Individual and Technological Aspects in Development of IT Identity due to the Use of Social Media



Source: The Author (2021)

Note. Professional Identity and Role Identity are demonstrated in the scheme to contrast with the IT identity development in social media and emphasize the weight of the technological aspect's influence on the three self-concept's structures and, consequently, on self-presentation in social media platforms

Dunn (2013), quoting Turkle (1995), remarks that identity formation in the contemporary world draws extensively on the communication process. This paper argues that, in social media, the communication process continuously influences the development of IT identity. For example, if on one side when interacting in social media, users benefit from the ability to process securely, rapidly, and simultaneously a vast and varied volume of information (LENGEL; DAFT, 1988; PAN *et al.*, 2017) on the other, it grows the concerns about privacy (CHEN, 2018; CRIDDLE, 2020; LOMAS, 2021). In this regard, the capacity to be anonymous online assumes two-fold importance to stimulate social media use. Firstly, it enhances individuals' sense of privacy (JOINSON, 2001; SARDÁ *et al.*, 2019). Secondly, allow them to experience diverse aspects of their personalities (WARKENTIN *et al.*, 2010; HONGLADAROM, 2016) .

As Carter and Grover (2015, p.949) state, “the influence of IT Identity on behavior in a given situation depends on the dynamism of the features set of IT”. Individuals can verify and confirm their concepts throughout social interactions (SWANN; READ, 1981). As a result, with the computer-mediated communication (CMC) advancement, the study on identity has also considered the digital medium's interpersonal processes to modify how others are perceived within those environments (DUNN, 2013; KASHIAN *et al.*, 2017). However, individuals' manipulation of positive aspects and obfuscation of negative traits reflect their behavior and how others behave about them (HOORENS, 2011). According to Carter and Grover (2015), IT identity will be reflected in individuals' feelings of relatedness, emotional energy, and dependence when thinking of themselves concerning a particular IT artifact.

The IT Identity construction through the use of social media occurs in the present time (when individuals are using the IT artifact) and in asynchronous instances - when they think about themselves as social objects (HOGAN, 2010; DAVIS, 2014). The continued use of static technologies affects self-concept maintenance and personal identity (CARTER; GROVER, 2015). In contrast, dynamic technologies like social media carry consequences for additional classes of identities hierarchy, namely: social identity - stimulated by the search for variety during its use; and relational identity - influenced by the strengthening of interpersonal relationships (PAN *et al.*, 2017). Thus, it is argued that the three identity classes are interdependent and influence social media IT identity construction, which leads to the last two propositions:

P8: During social media self-presentation, the processes of self-disclosure and self-

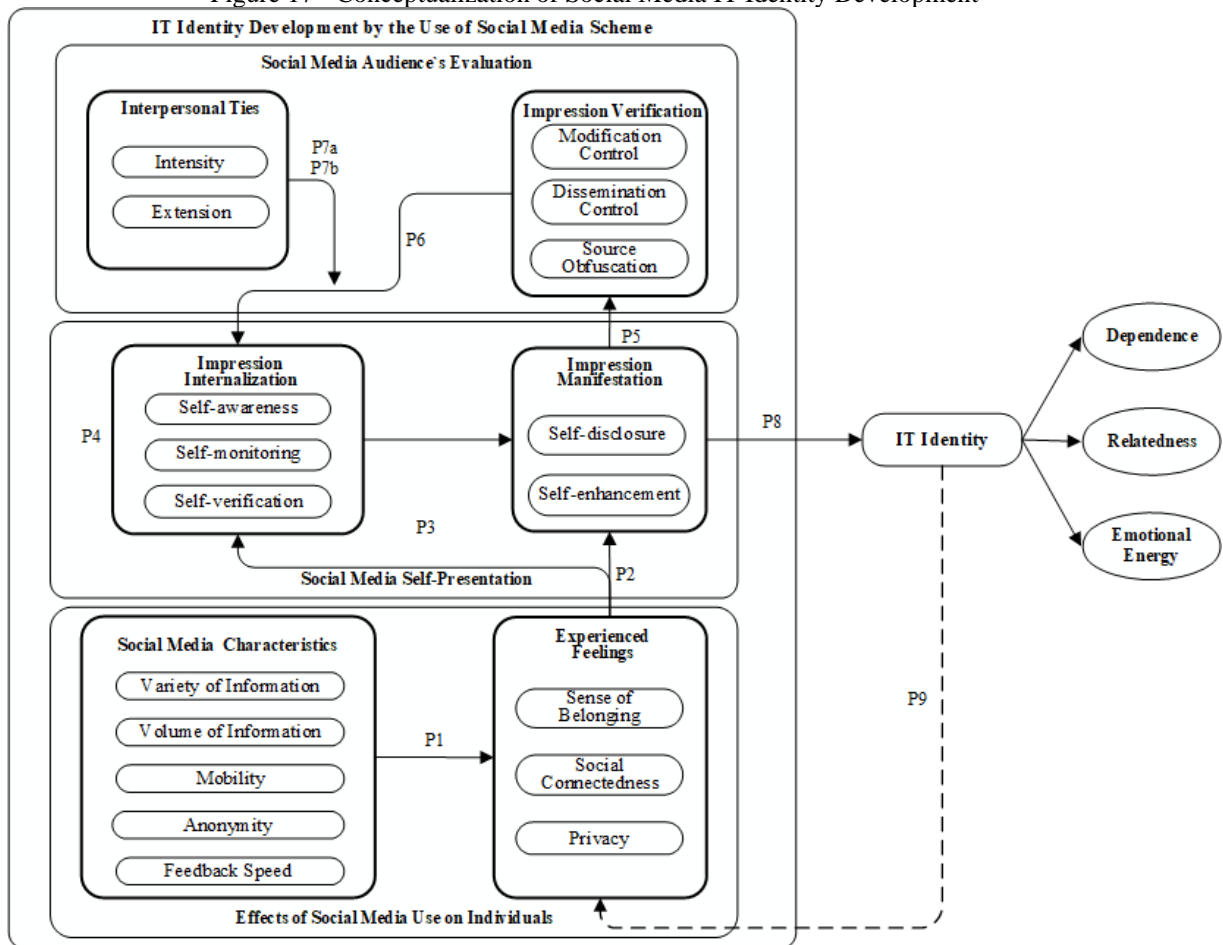
enhancement influence the development of IT Identity (reflecting on individuals' feelings of emotional energy, dependence, and relatedness about a specific social media platform).

P9: *The development of IT Identity by the continued use of social media (i.e., resulting in increased levels of users' relatedness, emotional energy, and dependence concerning a particular social media platform) will continually modify users' perception about this IT artifact (through enhanced feelings of connectedness, belongingness, and privacy).*

As discussed in section 2.2, the social media communication process primarily involves users' engagement in self-presentation, which, in its turn, can harness an improved sense of belonging [e.g., Ryan *et al.* (2017); Liu and Guo (2015)]. In 2010, when Kaplan and Haenlein (2010) proposed social media platforms classification, self-presentation behavior was positioned in the same level of self-disclosure. This paper argues that social media is evolving in an ever-growing sophisticated tool that allows individuals to engage in accurate self-presentations.

Self-presentation is one of the main motivations for individuals to engage in social media platform usage (SEIDMAN, 2013). During its use, individuals' characteristics, coupled with the history of interactions within their personal networks' structures, will continuously mold how they present themselves online (CHOI *et al.*, 2020; YIN; ZHANG; LIU, 2020). Additionally, individuals' characteristics will also influence which self-processes they use during self-presentation and with what intensity (YIN; ZHANG; LIU, 2020). The link between self and identity relating to social media depends on users' self-processes when interacting in the platforms, which are accessed to support users' online self-presentation (DAVIS, 2014; ETTER *et al.*, 2018).

Identity development in social media also involves its structure and the communication process (DUNN, 2013). The transmitter and the receiver frequently alter their role as social media embraces both capabilities as a mass media and feedback device. Moreover, its characteristics (variety, volume, mobility, anonymity, and feedback speed) amplify the chances of communication noise occurring at any stage. Figure 17 shows the conceptual model, its relations, and propositions.

Figure 17 - Conceptualization of Social Media IT Identity Development ^[18]

Source: The Author (2021)

This paper's main argument is that the difference between the development of IT identity in social media and other IT artifacts that enable communication, such as smartphones, PCs, and tablets, lies in the fact that identification with social media goes beyond the unitary aspect. For instance, a smartphone can access social media, but it will always be a tool to use it, but not the identification object with the platforms.

This proposition follows Carter's (2015) conclusions, where she states that IT identity is both personally and socially constructed¹⁹. As a result, the relationship between the internal and the social aspect should be understood to conceptualize IT identity due to the use of social media.

¹⁸ In Defleur's model, the concepts of mass medium and feedback devices imply that the transmitter and receiver roles will be interchangeable. Following Defleur's rationale, it is considered that the transmitter and receiver engage alternately in the processes of impression manifestation, impression verification, and impression internalization. In other words, transmitters and receivers continuously engage, sometimes in presentation, sometimes in evaluation.

¹⁹ Cf. CARTER, Michelle; GROVER, Varun. Me. My Self, and I (T): Conceptualizing Information Technology Identity and Its Implications. *Management Information Systems Quarterly*, v. 39, n. 4, p. 931-957, Dec 2015.

4. CONCLUSION

In 1996, Morris and Ogan noted that research on mass communications could not afford to ignore the Internet's research potential within the communication theory. It is about time to adapt and extend this warning to identity theorists and information system researchers in the social media age. Carter and Grover (2015) remark that while static IT artifacts are being used, the self expands and returns to its normal state when not being used. However, they also noted that IT identity's influence on behavior depends on an IT features dynamism.

Answering one of their recommendations, this paper intends to present a further contribution towards the understanding of how the self expands due to the continuous interaction with a dynamic and relational-based IT artifact. Social media technologies are dynamic IT artifacts - inserted in a complex entanglement with other static and dynamic IT artifacts. Therefore, it is argued that IT identity is developed continuously due to the intense use of cognitive self-processes when engaging in impression management in social media. Thus, the levels of IT Identity reflected on relatedness, emotional energy, and dependence, affect users' perceptions about themselves, the audience, and the platforms stimulating the expansion of individuals' selves (ARON; ARON, 1997; CARTER, 2012).

Understanding how social media influences the self - and correspondingly identity - can potentially contribute to the Management Information Systems (MIS) area as it extends IT Identity research to a dynamic and ubiquitous IT artifact in everyday life. The history of social media usage results in an ever-changing (IT) Identity construction. This process reflects how individuals recognize themselves in the organizational context and behave when executing job functions.

For example, elicited by motivations as the Fear of Missing Out (FoMO)²⁰, [e.g., Anwar, Fauziah and Furyt (2019)], the seek for information and search for status improvement, [e.g., Lin Lee and Gilbreath (2017)], the intensity of using social media is constantly being associated with negative outcomes like information overload and exhaustion [e.g., Yu *et al.* (2018); Fu *et al.* (2020)], addiction [e.g., Brooks, Longstreet and Califf (2017); Moqbel and Kock (2018); Longstreet, Brooks and Gonzalez (2019)] and polarized behavior [e.g., Gupta, Jain and Tiwari. (2021)]. Understanding IT identity development due to the use of social media can provide a more thorough comprehension of the underlying mechanisms that motivate the use of the platforms and their respective outcomes (both positive and adverse). To illustrate this point, how are social media usage habits related to individuals' IT identity? Furthermore, what

²⁰ FoMO in the context of social media is the need to keep constantly connected and check others' activities.

is the weight of the dimensions of IT identity in fostering positive and negative consequences for individuals?

Ultimately, IT Identity research may furnish a theoretical bridge to understand how social media influences individuals' behavior. It can contribute to the top-level management of organizations implementing successful strategies and taking advantage of workers' familiarity with social media platforms to stimulate employees' engagement and increase organizational performance.

REFERENCES

- AGRAWAL, Narendra *et al.* Enabling Organizational Ideation with Cognitive Dexterity Using Social Media: An Exploratory Study. AMCIS, 2015, Puerto Rico. AIS eLibrary, August 13-15.
- ALLCOTT, Hunt; GENTZKOW, Matthew. Social Media and Fake News in the 2016 Election. **Journal of Economic Perspectives**, v. 31, n. 2, p. 211-235, 2017.
- ALLEN, Kelly A *et al.* Social Media Use and Social Connectedness in Adolescents: The Positives and the Potential Pitfalls. **The Educational and Developmental Psychologist**, v. 31, n. 1, p. 18-31, 2014.
- ANTIN, Judd; CHURCHILL, Elizabeth F. Badges in Social Media: A Social Psychological Perspective. CHI 2011, 2011, Vancouver, BC, Canada. ACM. p.1-4.
- ANWAR, Zainul; FURY, Erlin Dias; FAUZIAH, Santhia Roya. The fear of missing out and usage intensity of social media. In: **Advances in Social Science, Education and Humanities Research: 5th ASEAN Conference on Psychology, Counselling, and Humanities (ACPCH 2019)**. 2020. p. 183-187.
- ARON, Arthur; ARON, Elaine N. Self-Expansion Motivation and Including Other in the Self. In: (Ed.). **Handbook of Personal Relationships: Theory, Research and Interventions, 2nd Ed.** Hoboken, NJ, US: John Wiley & Sons Inc, 1997. p.251-270.
- ASHFORTH, Blake E; MAEL, Fred. Social Identity Theory and the Organization. **Academy of Management Review**, v. 14, n. 1, p. 20-39, Jan 1989.
- BACCARELLA, Christian V. *et al.* Social Media? It's Serious! Understanding the Dark Side of Social Media. **European Management Journal**, v. 36, n. 4, p. 431-438, 2018.
- BAJRACHARYA, SHRADDHA. **Defleur Model of Communication**. 2018. Available in: <https://www.businessstopia.net/communication/de-fleur-model-communication>. Accessed on: 20 Dec. 2021
- BALL-ROKEACH, Sandra .J.; DEFLEUR, Melvin .L. A Dependency Model of Mass-Media Effects. **Communication Research**, v. 3, n. 1, p. 3-21, 1976.
- BAUMEISTER, Roy F. A Self-Presentational View of Social Phenomena. **Psychological Bulletin**, v. 91, n. 1, p. 3-26, 1982.
- _____. The Self. In: BAUMEISTER, R. F. e FINKEL, E. J. (Ed.). **Advanced Social Psychology: The State of the Science**. New York, NY, USA: Oxford University Press, Inc., 2010. cap. 5, p.139-175.
- BAUMEISTER, Roy F.; LEARY, Mark R. The Need to Belong - Desire for Interpersonal Attachments as a Fundamental Human-Motivation. **Psychological Bulletin**, v. 117, n. 3, p. 497-529, May 1995.
- BECKER, Howard S. **Outsiders: Studies in the Sociology of Deviance**. Oxford, England: Free Press Glencoe, 1963. x, 179-x, 179.

- BECKER, Joshua; PORTER, Ethan; CENTOLA, Damon. The Wisdom of Partisan Crowds. *Proceedings of the National Academy of Sciences*, v. 116, n. 22, p. 10717-10722, 2019.
- BERMAN, Ron; KATONA, Zsolt. Curation Algorithms and Filter Bubbles in Social Networks. **Marketing Science**, v. 39, n. 2, p. 296-316, Mar-Apr 2020.
- BERNBURG, Jón Gunnar. Labeling Theory. *In*: KROHN, M. D.; HENDRIX, N., *et al.* (Ed.). **Handbook on Crime and Deviance**. Cham: Springer International Publishing, 2019. p.179-196.
- BIOCCA, Frank; HARMS, Chad; BURGOON, Judee K. Toward a More Robust Theory and Measure of Social Presence: Review and Suggested Criteria. **Presence Teleoperators and Virtual Environments**, v. 12, n. 5, p. 456-480, Oct 2003.
- BOND, Bradley. J. Following Your "Friend": Social Media and the Strength of Adolescents' Parasocial Relationships with Media Personae. **Cyberpsychol Behav Soc Netw**, v. 19, n. 11, p. 656-660, Nov 2016.
- BOUDREAU, Marie Claude; SERRANO, Christina.; LARSON, Keri. IT-Driven Identity Work: Creating a Group Identity in a Digital Environment. **Information and Organization**, v. 24, n. 1, p. 1-24, Jan 2014.
- BRENNER, Philip S.; SERPE, Richard T.; STRYKER, Sheldon. The Causal Ordering of Prominence and Salience in Identity Theory: An Empirical Examination. **Social Psychology Quarterly**, v. 77, n. 3, p. 231-252, 2014.
- BRIGHT, Laura F.; KLEISER, Susan Bardi; GRAU, Stacy Landreth. Too Much Facebook? An Exploratory Examination of Social Media Fatigue. **Computers in Human Behavior**, v. 44, p. 148-155, 2015.
- BROOKS, Stoney; LONGSTREET, Phil; CALIFF, Christopher. Social Media Induced Technostress and Its Impact on Internet Addiction: A Distraction-Conflict Theory Perspective. **AIS Transactions on Human-Computer Interaction**, v. 9, n. 2, p. 99-122, 2017.
- BUI, Ngot Phu. **Labeling Actors and Uncovering Causal Accounts of Their States in Social Networks and Social Media**. 2016. 125p. Dissertation (PhD). College of Information Sciences and Technology, Pennsylvania State University, Pennsylvania, PA, USA.
- BURKE, Peter J.; STETS, Jan E. Trust and Commitment through Self-Verification. **Social Psychology Quarterly**, v. 62, n. 4, p. 347-366, 1999.
- CARTER, Michelle. **Information Technology (IT) Identity: A Conceptualization, Proposed Measures, and Research Agenda**. 2012. 291 Dissertation (PhD). Clemson University
- CARTER, Michelle; GROVER, Varun. Me. My Self, and I (T): Conceptualizing Information Technology Identity and Its Implications. **Management Information Systems Quarterly**, v. 39, n. 4, p. 931-957, Dec 2015.
- CARVALHO, Virgínia ; BORGES, Livia; RÊGO, Denise. Interacionismo Simbólico: Origens, Pressupostos E Contribuições Aos Estudos Em Psicologia Social. **Psicologia: ciência e profissão**, v. 30, n. 1, p. 146-161, 2010.
- CAVUSOGLU, Huseyin; PHAN, Tuan Quang; CAVUSOGLU, Hasan. Privacy Controls and Content Sharing Patterns of Online Social Network Users: A Natural Experiment. ICIS 2013 2013, Milano, Italy. December 16
- CHEN, Hsuan-Ting. Revisiting the Privacy Paradox on Social Media with an Extended Privacy Calculus Model: The Effect of Privacy Concerns, Privacy Self-Efficacy, and Social Capital on Privacy Management. **American Behavioral Scientist**, v. 62, n. 10, p. 1392-1412, 2018.
- CHENG, Tan *et al.* Social Media Use and Employee Innovative Performance: Work Engagement as a Mediator. **Social Behavior & Personality**, v. 48, n. 1, 2020.

- CHENG, Zhi-Chao; GUO, Tian-Chao. The Formation of Social Identity and Self-Identity Based on Knowledge Contribution in Virtual Communities: An Inductive Route Model. **Computers in Human Behavior**, v. 43, p. 229-241, 2015.
- CHOI, Daejin *et al.* Rumor Propagation Is Amplified by Echo Chambers in Social Media. **Scientific Reports**, v. 10, n. 1, p. 310, 2020.
- CHOU, Weng-Ying. *et al.* Web 2.0 for Health Promotion: Reviewing the Current Evidence. **American Journal of Public Health**, v. 103, n. 1, p. 9-18, Jan 2013.
- CHUNG, Namho; HAN, Heejeong; KOO, Chulmo. Adoption of Travel Information in User-Generated Content on Social Media: The Moderating Effect of Social Presence. **Behaviour & Information Technology**, v. 34, n. 9, p. 902-919, 2015.
- CHUNG, Siyoung. Y.; CHO, Hichang. C. Fostering Parasocial Relationships with Celebrities on Social Media: Implications for Celebrity Endorsement. **Psychology & Marketing**, v. 34, n. 4, p. 481-495, 2017.
- COURBET, Didier; FOURQUET-COURBET, Marie-Pierre. When a Celebrity Dies ... Social Identity, Uses of Social Media, and the Mourning Process among Fans: The Case of Michael Jackson. **Celebrity Studies**, v. 5, n. 3, p. 275-290, 2014.
- CRAIG, KEVIN; THATCHER, JASON BENNETT; GROVER, VARUN. The It Identity Threat: A Conceptual Definition and Operational Measure. **Journal of Management Information Systems**, v. 36, n. 1, p. 259-288, Jan 2, 2019.
- CRAMER, Emily M.; SONG, Hayeon; DRENT, Adam M. Social Comparison on Facebook: Motivation, Affective Consequences, Self-Esteem, and Facebook Fatigue. **Computers in Human Behavior**, v. 64, p. 739-746, 2016.
- CRISP, Beth R. Belonging, Connectedness and Social Exclusion. **Journal of Social Inclusion**, v. 1, n. 2, p. 123-132, 2010.
- CURLEY, Eric; POLITES, Greta. The Optimal Experience: Social Identity and IT Identity as Antecedents of Group Flow in Social Media Use. 53rd Hawaii International Conference on System Sciences, 2020, Hawaii. aisel.aisnet.org.
- DAVIS, Jenny. L. Triangulating the Self: Identity Processes in a Connected Era. **Symbolic Interaction**, v. 37, n. 4, p. 500-523, 2014.
- DEANDREA, David C. Advancing Warranting Theory. **Communication Theory**, v. 24, n. 2, p. 186-204, 2014.
- DEANDREA, David C.; CARPENTER, Christopher J. Measuring the Construct of Warranting Value and Testing Warranting Theory. **Communication Research**, v. 45, n. 8, p. 1193-1215, 2016.
- DEFLEUR, Melvin L.; BALL-ROKEACH, Sandra .J. **Theories of Mass Communication**. 5th. Boston, Massachusetts, USA: Allyn & Bacon, Inc, 1990. 368p.
- DERLEGA, Valerian J; BERG, John H. **Self-Disclosure: Theory, Research, and Therapy**. New York, NY, USA: Springer Science & Business Media, 2013.
- DOAS, Michelle Dellaria. Increasing Self-Awareness When Posting on Social Media Sites. **Journal of Nursing Education and Practice**, v. 7, n. 8, p. 101, 2017.
- DOBIAS, Amanda Nicole. **I've Got 99 Friends, but Is Taylor Swift One? An Examination of Effects of Social Media Interactions on Parasocial Relationships**. 2017. 55 (Master of Arts). Department of Communication, Colorado Springs, Colorado Springs.
- DORUM, Kine; BARTLE, Craig; PENNINGTON, Martin. Social Media Encourages Sense of Belonging among Off-Campus University Students. *In:* (Ed.). **Cases on Formal and Informal E-Learning Environments: Opportunities and Practices**: IGI Global, 2013. cap. 4, p.68-80.
- DUNN, Robert Andrew. Identity Theories and Technology. *In:* LUPPICINI, R. (Ed.). **Handbook of Research on Technoself: Identity in a Technological Society**. Hershey, PA, USA: IGI Global, 2013. chap. 2, p.26-44.

- DUNN, Robert. G. Self, Identity, and Difference: Mead and the Poststructuralists. **Sociological Quarterly**, v. 38, n. 4, p. 687-705, 1997.
- ELLISON, Nicole; HEINO, Rebecca; GIBBS, Jennifer. Managing Impressions Online: Self-Presentation Processes in the Online Dating Environment. **Journal of Computer-Mediated Communication**, v. 11, n. 2, p. 415-441, Jan 2006.
- ELLISON, Nicole; STEINFELD, Charles; LAMPE, Cliff. The Benefits of Facebook “Friends:” Social Capital and College Students’ Use of Online Social Network Sites. **Journal of computer-mediated communication**, v. 12, n. 4, p. 1143-1168, Jul 2007.
- ETTER, Michael *et al.* Measuring Organizational Legitimacy in Social Media: Assessing Citizens’ Judgments with Sentiment Analysis. **Business & Society**, v. 57, n. 1, p. 60-97, Jan 2018.
- FRENZEL, Lena Viktoria. Media Richness and Message Complexity as Influencers of Social Media Engagement. 2017. (Masters). Faculty of Communications, California State University, Fullerton.
- FU, Shaoxiong *et al.* Social Media Overload, Exhaustion, and Use Discontinuance: Examining the Effects of Information Overload, System Feature Overload, and Social Overload. **Information Processing & Management**, v. 57, n. 6, p. 102307, Nov 2020.
- GELLER, Valerie; SHAVER, Phillip. Cognitive Consequences of Self-Awareness. **Journal of Experimental Social Psychology**, v. 12, n. 1, p. 99-108, 1976.
- GIBBS, Jennifer; ELLISON, Nicole; HEINO, Rebecca. Self-Presentation in Online Personals: The Role of Anticipated Future Interaction, Self-Disclosure, and Perceived Success in Internet Dating. **Communication Research**, v. 33, n. 2, p. 152-177, 2006.
- GOFFMAN, Erving. **The Presentation of Self in Everyday Life**. Garden City, New York: Doubleday, 1959. 255p.
- GONZALES, A. L.; HANCOCK, J. T. Mirror, Mirror on My Facebook Wall: Effects of Exposure to Facebook on Self-Esteem. **Cyberpsychol Behav Soc Netw**, v. 14, n. 1-2, p. 79-83, 2011.
- GRANOVETTER, Mark. The Strength of Weak Ties: A Network Theory Revisited. **Sociological theory**, v. 1, p. 201-233, 1983.
- GUNNAR, Megan R; SROUFE, L Alan. **Self Processes and Development**. J, USA: L. Erlbaum Associates, 1991. 268.
- GUPTA, Samrat; JAIN, Gaurav; Tiwari, Amit Anand. Investigating the Dynamics of Polarization in Online Discourse During Covid-19 Pandemic. Conference on e-Business, e-Services and e-Society, 2021, Springer. p.704-709.
- HE, Qiwei *et al.* Predicting Self-Monitoring Skills Using Textual Posts on Facebook. **Computers in Human Behavior**, v. 33, p. 69-78, 2014.
- HENRY, Alastair; THORSEN, Cecilia. Engagement with Technology: Gaming, Immersion and Sub-Optimal Experiences. **Technology in Language Teaching & Learning**, v. 1, n. 2, p. 52-67, 2019.
- HOCEVAR, Kristin Page; FLANAGIN, Andrew J; METZGER, Miriam J. Social Media Self-Efficacy and Information Evaluation Online. **Computers in Human Behavior**, v. 39, p. 254-262, 2014.
- HOGAN, Bernie. The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online. **Bulletin of Science, Technology & Society**, v. 30, n. 6, p. 377-386, 2010.
- HOGAN, Bernie; QUAN-HAASE, Anabel. Persistence and Change in Social Media. **Bulletin of Science, Technology & Society**, v. 30, n. 5, p. 309-315, 2010.
- HOGG, Michael. A.; TERRY, Deborah. J.; WHITE, Katherine. M. A Tale of Two Theories: A Critical Comparison of Identity Theory with Social Identity Theory. **Social Psychology Quarterly**, v. 58, n. 4, p. 255-269, 1995.

- HOGG, Michael A; ABRAMS, Dominic; BREWER, Marilyn B. Social Identity: The Role of Self in Group Processes and Intergroup Relations. **Group Processes & Intergroup Relations**, v. 20, n. 5, p. 570-581, 2017.
- HONG, Seoyeon *et al.* Do You Filter Who You Are?: Excessive Self-Presentation, Social Cues, and User Evaluations of Instagram Selfies. **Computers in Human Behavior**, v. 104, p. 106159, 2020.
- HONGLADAROM, Soraj. Personal Identity and the Self in the Online and Offline World. **Minds and Machines**, v. 21, n. 4, p. 533-548, Nov 2011.
- _____. **Online Self: Externalism, Friendship and Games**. 1. Switzerland: Springer International Publishing, 2016. 171p.
- HOORENS, Vera. The Social Consequences of Self-Enhancement and Self-Protection. *In*: M., A. e C, S. (Ed.). **The Handbook of Self-Enhancement and Self-Protection**. New York, US: Guilford Publications, 2011. p.235-257.
- HU, Shangui; GU, Jibao; ZHANG, Shulin. Social Media Usage, Self-Efficacy and Cultural Intelligence: A Longitudinal Empirical Research in China. WHICEB 2017, Wuhan, China. p.261-271.
- HUBER, Joan. Symbolic Interaction as a Pragmatic Perspective: The Bias of Emergent Theory. **American Sociological Review**, v. 38, n. 2, p. 274-284, 1973.
- JOHNSON, John. The 'Self-Disclosure' and 'Self-Presentation' Views of Item Response Dynamics and Personality Scale Validity. **Journal of Personality and Social Psychology**, v. 40, p. 761-769, 04/01 1981.
- JOINSON, Adam N. Self-Disclosure in Computer-Mediated Communication: The Role of Self-Awareness and Visual Anonymity. **European Journal of Social Psychology**, v. 31, n. 2, p. 177-192, Mar-Apr 2001.
- KAPLAN, Andreas M.; MAZUREK, Grzegorz. Social Media: State of the Art and Research Agenda. *In*: MIERZEJEWSKA, Bozena; JUNG, Jaemim, ALBARRAN, Alan B. (Ed.). **Handbook of Media Management and Economics**. London, United Kingdom: Routledge, 2018. p.272-286.
- KAPLAN, Andreas. M.; HAENLEIN, Michael. Users of the World, Unite! The Challenges and Opportunities of Social Media. **Business Horizons**, v. 53, n. 1, p. 59-68, Jan-Feb 2010.
- KASHIAN, Nicole *et al.* Self-Disclosure and Liking in Computer-Mediated Communication. **Computers in Human Behavior**, v. 71, p. 275-283, 2017.
- KASPERIUNIENE, Judita.; ZYDZIUNAITE, Vilma. A Systematic Literature Review on Professional Identity Construction in Social Media. **Sage Open**, v. 9, n. 1, 2019.
- KERPEN, Carrie. **How Has Social Media Changed Us?** , April 21 2016. Available in: <https://www.forbes.com/sites/carriekerpen/2016/04/21/how-has-social-media-changed-us/#742434fe5dfc>. Accessed on: Mar. 18, 2021.
- KIETZMANN, Jan H. *et al.* Unpacking the Social Media Phenomenon: Towards a Research Agenda. **Journal of public affairs**, v. 12, n. 2, p. 109-119, 2012.
- KIM, Jin-Young. A Study of Social Media Users' Perceptual Typologies and Relationships to Self-Identity and Personality. **Internet Research**, v. 28, n. 3, p. 767-784, 2018.
- KIM, Yonghwan; WANG, Yuan; OH, Jeyoung. Digital Media Use and Social Engagement: How Social Media and Smartphone Use Influence Social Activities of College Students. **Cyberpsychology, Behavior, and Social Networking**, v. 19, n. 4, p. 264-269, Apr 1 2016.
- KRÄMER, Nicole C; HAFERKAMP, Nina. Online Self-Presentation: Balancing Privacy Concerns and Impression Construction on Social Networking Sites. *In*: (Ed.). **Privacy Online**: Springer, 2011. p.127-141.
- KRÄMER, Nicole C.; WINTER, Stephan. Impression Management 2.0: The Relationship of

- Self-Esteem, Extraversion, Self-Efficacy, and Self-Presentation within Social Networking Sites. **Journal of Media Psychology: Theories, Methods, and Applications**, v. 20, n. 3, p. 106-116, 2008.
- KRASNOVA, Hanna; VELTRI, Natasha F.; GÜNTHER, Oliver. Self-Disclosure and Privacy Calculus on Social Networking Sites: The Role of Culture. **Business & Information Systems Engineering**, v. 4, n. 3, p. 127-135, 2012.
- KRAUS, Michael W.; CHEN, Serena. Relational Self-Verification through Self-Presentation: Implications for Perceptions of One's Honesty and Authenticity. **Self and Identity**, v. 13, n. 1, p. 45-57, 2012.
- KRUEGER, Joachim; HECK, Patrick; ASENDORPF, Jens. Self-Enhancement: Conceptualization and Assessment. **Collabra Psychology**, v. 3, n. 1, p. 1-11, 2017.
- LEARY, Mark R.; KOWALSKI, Robin M. Impression Management: A Literature Review and Two-Component Model. **Psychological Bulletin**, v. 107, n. 1, p. 34, 1990.
- LEARY, Mark R. **Self-Presentation: Impression Management and Interpersonal Behavior**. Madison, WI, USA: Brown & Benchmark Publishers, 1995. 264p.
- LEARY, Mark R.; COX, Cody B. Belongingness Motivation: A Mainspring of Social Action. *In: (Ed.). Handbook of Motivation Science*. New York, NY, US: Guilford Press, 2008. p.27-40.
- LECLERCQ-VANDELANNOITTE, Aurélie. Interrelationships of Identity and Technology in IT Assimilation. **European Journal of Information Systems**, v. 23, n. 1, p. 51-68, Jan 2014.
- LEE, Richard M.; ROBBINS, Steven B. The Relationship between Social Connectedness and Anxiety, Self-Esteem, and Social Identity. **Journal of Counseling Psychology**, v. 45, n. 3, p. 338-345, 1998.
- LEE, Richard; ROBBINS, Steven B. Measuring Belongingness - the Social Connectedness and the Social Assurance Scales. **Journal of Counseling Psychology**, v. 42, n. 2, p. 232-241, Apr 1995.
- LEE, Danielle Ka Lai; BORAH, Porismita. Self-Presentation on Instagram and Friendship Development among Young Adults: A Moderated Mediation Model of Media Richness, Perceived Functionality, and Openness. **Computers in Human Behavior**, v. 103, p. 57-66, 2020.
- LENGEL, Robert H.; DAFT, Richard L. The Selection of Communication Media as an Executive Skill. **Academy of Management Perspectives**, v. 2, n. 3, p. 225-232, 1988.
- LIN, Jhih-Syuan et al. Personality traits, motivations, and emotional consequences of social media usage. **Cyberpsychology, Behavior, and Social Networking**, v. 20, n. 10, p. 615-623, 2017.
- LIN, Ruoyun; UTZ, Sonja. The Emotional Responses of Browsing Facebook: Happiness, Envy, and the Role of Tie Strength. **Computers in Human Behavior**, v. 52, p. 29-38, 2015.
- LIU, Chung-Tzer; GUO, Yi Maggie. The Role of Sense of Belonging in Social Media Usage: A Tale of Two Types of Users. **Asia Pacific Journal of Information Systems**, v. 25, n. 2, p. 403-422, 2015.
- LONGSTREET, PHIL; BROOKS, STONEY; GONZALEZ, ESTER S. Internet Addiction: When the Positive Emotions Are Not So Positive. **Technology in Society**, v. 57, p. 76-85, 2019.
- LOPEZ-CHAU, Asdrúbal *et al.* Analyzing Polarization through Social Media with Artificial Intelligence: The Mexican Presidential Election in 2018. 20th Annual International Conference on Digital Government Research, 2019, Dubai, United Arab Emirates. June 18–20, 2019.
- LUPINACCI, Ludmila. 'Absentmindedly Scrolling through Nothing': Liveness and

- Compulsory Continuous Connectedness in Social Media. **Media, Culture & Society**, v. 0, n. 0, p. 1-18, 2020.
- MACQUEEN, K. M.; MCLELLAN, E.; KAY, K.; MILSTEIN, B. Codebook development for team-based qualitative analysis. In K. Krippendorff & M. A. Bock (Eds.), **The content analysis reader**. Thousand Oaks, CA: Sage, p. 211–19. 2009.
- MAGHRABI, Rozan O.; OAKLEY, Richelle L.; NEMATI, Hamid R. The Impact of Self-Selected Identity on Productive or Perverse Social Capital in Social Network Sites. **Computers in Human Behavior**, v. 33, p. 367-371, Apr 2014.
- MAZUR, Elizabeth; LI, Yidi. Identity and Self-Presentation on Social Networking Web Sites: A Comparison of Online Profiles of Chinese and American Emerging Adults. **Psychology of Popular Media Culture**, v. 5, n. 2, p. 101-118, Apr 2016.
- MCLUHAN, Marshall. **Understanding Media: The Extension of Man**. Cambridge, Massachusetts, USA: The MIT Press, 1994. 365p.
- MCQUAIL, Denis; DEUZE, Mark. **McQuail's Mass Communication Theory**. 17th. London: SAGE Publications, 2020. 688p.
- MCSHANE, Steven; GLINOW, Mary Ann Von. **Organizational Behavior**. McGraw-Hill Education, 2017.
- MERUNKOVA, Lucie; SLERKA, Josef. Goffman's Theory as a Framework for Analysis of Self Presentation on Online Social Networks. **Masaryk UJL & Tech.**, v. 13, p. 243, 2019.
- MIRANDA, Shaila M.; YOUNG, Amber; YETGIN, Emre. Are Social Media Emancipatory or Hegemonic? Societal Effects of Mass Media Digitization in the Case of the Sopa Discourse. **Management Information Systems Quarterly**, v. 40, n. 2, p. 303-329, June 1, 2016.
- MOGHAVVEMI, Sedigheh. Media Richness Theory for Social Media: Research, Opportunities and Challenges. *In*: SULAIMAN, A. e NAGSHBANDI, M. M. (Ed.). **Social Media, Dynamism, Issues, and Challenges**. Singapore: Partridge, 2014. cap. 7, p.122-149.
- MOORE, Kelly; MCELROY, James C. The Influence of Personality on Facebook Usage, Wall Postings, and Regret. **Computers in Human Behavior**, v. 28, n. 1, p. 267-274, Jan 2012.
- MOQBEL, Murad A.; AFTAB, Fizza. Employees' Social Networking Site Use Impact on Job Performance: Evidence from Pakistan. **AIS Transactions on Replication Research**, v. 1, n. 1, p. 1-11, December 8, 2015.
- MOQBEL, Murad; KOCK, Ned. Unveiling the Dark Side of Social Networking Sites: Personal and Work-Related Consequences of Social Networking Site Addiction. **Information & Management**, v. 55, n. 1, p. 109-119, 2018.
- MORGAN, David L. Pragmatism as a Paradigm for Social Research. **Qualitative Inquiry**, v. 20, n. 8, p. 1045-1053, 2014.
- MORRIS, Merrill; OGAN, Christine. The Internet as Mass Medium. **Journal of Computer-Mediated Communication**, v. 1, n. 4, p. 39-50, 1996.
- NADKARNI, Ashwini.; HOFMANN, Stefan. Why Do People Use Facebook? **Personality and Individual Differences**, v. 52, n. 3, p. 243-249, 2012.
- NKWE, Nugi; COHEN, Jason. Impact of Social Network Sites on Psychological and Behavioural Outcomes in the Work-Place: A Systematic Literature Review. ECIS, 2017, Guimarães, Portugal. AIS eLibrary, June 10. p.2051-2068.
- OH, Onook; KWON, Kyounghee Hazel; RAO, H. Raghav. An Exploration of Social Media in Extreme Events: Rumor Theory and Twitter During the Haiti Earthquake 2010. ICIS, 2010, St. Louis, MO, USA. January 1.
- ORSATTI, Jo; RIEMER, Kai. Identity-Making: A Multimodal Approach for Researching

- Identity in Social Media. European Conference on Information Systems, 2015, Münster, Germany. AIS eLibrary, May 29.
- PAN, Zhao *et al.* Who Do You Think You Are? Common and Differential Effects of Social Self-Identity on Social Media Usage. **Journal of Management Information Systems**, v. 34, n. 1, p. 71-101, 2017.
- PARK, Chala *et al.* Formation of Weak Ties in Social Media. **The Journal of the Korea Contents Association**, v. 14, n. 4, p. 97-109, 2014.
- PAULHUS, Delroy. L. Interpersonal and Intrapsychic Adaptiveness of Trait Self-Enhancement: A Mixed Blessing? **Journal of personality and social psychology**, v. 74, n. 5, p. 1197-208, May 1998.
- PEDERSEN, Mina Young; SMETS, Sonja; ÅGOTNES, Thomas. Analyzing Echo Chambers: A Logic of Strong and Weak Ties. *In*: BLACKBURN, Patrick.;LORINI, Emiliano; GUO, Meyiun. 7th International Workshop, LORI, 2019, Chongqing, China. October 18–21, 2019. p.183-198.
- PROUDFOOT, Jeffrey G *et al.* Saving Face on Facebook: Privacy Concerns, Social Benefits, and Impression Management. **Behaviour & Information Technology**, v. 37, n. 1, p. 16-37, 2018.
- RAHMAN, Zoha *et al.* Mediating Impact of Fan-Page Engagement on Social Media Connectedness and Followers Purchase Intention. **Online Information Review**, v. 42, n. 7, p. 1082-1105, 2018.
- RHODES, Samuel Callahan. **Echo Chambers and Misinformation: How Social Media Use Conditions Individuals to Believe Fake News**. 2019. Dissertation (Doctor of Philosophy). Washington State.
- ROTENBERG, Mordechai. Self-Labeling: A Missing Link in the ‘Societal Reaction’ theory of Deviance. **The Sociological Review**, v. 22, n. 3, p. 335-354, 1974.
- RYAN, Tracii *et al.* How Social Are Social Media? A Review of Online Social Behaviour and Connectedness. **Journal of Relationships Research**, v. 8, p. 1-8, 2017.
- SAEZ-MATEU, Ferran. Democracy, Screens, Identity, and Social Networks: The Case of Donald Trump's Election. **American Behavioral Scientist**, v. 62, n. 3, p. 320-334, Mar 2018.
- SAPUTRA, Meidi; SIDDIQ, Imamul Huda Al. Social Media and Digital Citizenship: The Urgency of Digital Literacy in the Middle of a Disrupted Society Era. **International Journal of Emerging Technologies in Learning (iJET)**, v. 15, n. 7, p. 156-161, 2020.
- SARDÁ, Thais *et al.* Understanding Online Anonymity. **Media, Culture & Society**, v. 41, n. 4, p. 557-564, May 2019.
- SAVCI, Mustafa; AYSAN, Ferda. Technological Addictions and Social Connectedness: Predictor Effect of Internet Addiction, Social Media Addiction, Digital Game Addiction and Smartphone Addiction on Social Connectedness. **Düşünen Adam: Journal of Psychiatry & Neurological Sciences**, v. 30, n. 3, p. 202-216, Sep 2017.
- SCHLOSSER, Ann E. Self-Disclosure Versus Self-Presentation on Social Media. **Current Opinion in Psychology**, v. 31, p. 1-6, 2020.
- SCHMALZ, Marc; CARTER, Michelle; LEE, Jin Ha. It's Not You, It's Me: Identity, Self-Verification, and Amazon Reviews. **ACM SIGMIS Database: the DATABASE for Advances in Information Systems**, v. 49, n. 1, p. 79-92, 2018.
- SCHULTZ, P. Wesley; TABANICO, Jennifer. Self, Identity, and the Natural Environment: Exploring Implicit Connections with Nature. **Journal of Applied Social Psychology**, v. 37, n. 6, p. 1219-1247, Jun 2007.
- SEDIKIDES, Constantine; ALICKE, Mark. The Five Pillars of Self-Enhancement and Self-Protection. *In*: RYAN, R. M. (Ed.). **Handbook of Motivation**. 2nd. New York, NY: Oxford University Press, 2018.

- SEIDMAN, Gwendolyn. Self-Presentation and Belonging on Facebook: How Personality Influences Social Media Use and Motivations. **Personality and Individual Differences**, v. 54, n. 3, p. 402-407, Feb 2013.
- SERPE, Richard T; STRYKER, Sheldon. The Symbolic Interactionist Perspective and Identity Theory. *In*: SCHWARTZ, Seth J; LUYCKX, Koen; VIGNOLES, Vivian L. (Ed.). **Handbook of Identity Theory and Research**. New York, NY, USA: Springer, 2011. p.225-248.
- SHANNON, Claude E. The Mathematical Theory of Communication. **The Bell System technical journal**, v. 27, n. 3, p. 379-423, 1948.
- SHORT, John; WILLIAMS, Ederyn; CHRISTIE, Bruce. **The Social Psychology of Telecommunications**. New York, NY: Wiley, 1976.
- SLATTERY, Martin. **Labelling Theory**. Spain: Nelson Thornes Ltd, 2003. 134-9.
- SNYDER, Mark. Self-Monitoring of Expressive Behavior. **Journal of Personality and Social Psychology**, v. 30, n. 4, p. 526-537, 1974.
- SPITZER, Steven. Labeling the Deviant Act: Toward a General Theory of Deviant Behavior. Annual meeting of the American Sociological Association, 1972, New Orleans, LA, US.
- SPONCIL, Megan; GITIMU, Priscilla. Use of Social Media by College Students: Relationship to Communication and Self-Concept. **Journal of Technology Research**, v. 4, p. 1-13, 2013.
- STEIN, Mari-Klara *et al.* Coping with Information Technology: Mixed Emotions, Vacillation and Non-Conforming Use Patterns. **Management Information Systems Quarterly**, v. 39, n. 2, 2015.
- STETS, Jan. E.; BURKE, Peter. J. Identity Theory and Social Identity Theory. **Social Psychology Quarterly**, v. 63, n. 3, p. 224-237, Sep 2000.
- _____. A Sociological Approach to Self and Identity. *In*: LEARY, Mark. e TANGNEY, June P. (Ed.). **Handbook of Self and Identity**. New York, USA.: Guilford Press, 2003. p.128-152.
- STOKES, Jennifer.; PRICE, Bianca. Social Media, Visual Culture and Contemporary Identity. IMSCI 2017 - 11th International Multi-Conference on Society, Cybernetics and Informatics, Proceedings, 2017. p.159-163.
- STRYKER, Robin; SERPE, Richard; POWELL, Brian. Structural Symbolic Interaction and Identity Theory: Current Achievements and Challenges for the Future. *In*: SERPE, Richard. T.; STRYKER, Robin, POWELL, Brian. (Ed.). **Identity and Symbolic Interaction**. Cham, Switzerland: Springer, 2020. p.365-385.
- STRYKER, Sheldon. Identity Salience and Role Performance: The Relevance of Symbolic Interaction Theory for Family Research. **Journal of Marriage and the Family**, p. 558-564, 1968.
- _____. From Mead to a Structural Symbolic Interactionism and Beyond. **Annual Review of Sociology**, v. 34, p. 15-31, 2008.
- SWANN, William B. To Be Adored or to Be Known? The Interplay of Self-Enhancement and Self-Verification. *In*: SORRENTINO, Richard. M; HIGGINS, E. Tory (Ed.). **Handbook of Motivation and Cognition: Foundations of Social Behavior**, Vol. 2. 1. New York, NY, USA: Guilford Press, 1990. p.408-448.
- SWANN, William B.; READ, Stephen J. Self-Verification Processes: How We Sustain Our Self-Conceptions. **Journal of Experimental Social Psychology**, v. 17, n. 4, p. 351-372, 1981.
- THATCHER, Sherry. M. B.; ZHU, Xiumei. Changing Identities in a Changing Workplace: Identification, Identity Enactment, Self-Verification, and Telecommuting. **Academy of Management Review**, v. 31, n. 4, p. 1076-1088, Oct 2006.
- THE ECONOMIST. *The Facebook Scandal Could Change Politics as Well as the Internet*.

- Mar. 22, 2018. Available in: <https://www.economist.com/united-states/2018/03/22/the-facebook-scandal-could-change-politics-as-well-as-the-internet>. Accessed on: Jun.25, 2021.
- TREPTE, Sabine; DIENLIN, Tobias; REINECKE, Leonard. Risky Behaviors: How Online Experiences Influence Privacy Behaviors. *In: STARK, Birgit; QUIRING, Oliver; JACKOB, Nikolaus (Ed.). Von Der Gutenberg-Galaxis Zur Google-Galaxis. From the Gutenberg Galaxy to the Google Galaxy*. Berlin, Germany: UVK Verlag, 2014.
- TSENG, Fan-Chen *et al.* Media Richness, Social Presence and Loyalty to Mobile Instant Messaging. **Industrial Management & Data Systems**, v. 119, n. 6, p. 1357-1373, 2019.
- TU, Chih-Hsiung. On-Line Learning Migration: From Social Learning Theory to Social Presence Theory in a CMC Environment. **Journal of Network and Computer Applications**, v. 23, n. 1, p. 27-37, 2000.
- TURKLE, Sherry. **Life on the Screen: Identity in the Age of the Internet**. New York, NY: Simon & Schuster, 1995.
- _____. **Evocative Objects: Things We Think With**. Cambridge, MA: MIT Press, 2011.
- TYLER, James M.; KEARNS, Peter O.; MCINTYRE, Miranda M. Effects of Self-Monitoring on Processing of Self-Presentation Information. **Social Psychology**, v. 47, n. 3, p. 174-178, May 2016.
- UTZ, Sonja; MUSCANELL, Nicole. Social Media and Social Capital: Introduction to the Special Issue. **Societies**, v. 5, n. 2, p. 420-424, Jun 2015.
- VAN BEL, Daniel T. *et al.* Social Connectedness: Concept and Measurement. **Intelligent Environments**, v. 2, p. 67-74, 2009.
- VANDENBOSCH, Laura; EGGERMONT, Steven. The Interrelated Roles of Mass Media and Social Media in Adolescents' Development of an Objectified Self-Concept: A Longitudinal Study. **Communication Research**, v. 43, n. 8, p. 1116-1140, Dec 2016.
- VORVOREANU, Mihaela *et al.* Social Media Literacy: Integrating Online Identity Management into Engineering and Technology Education. 2011 ASEE Annual Conference & Exposition, 2011, Vancouver, BC. peer.asee.org, June 26-29.
- WALTHER, Joseph B. Social Information Processing Theory. *In: BRAITHWAITE, Dawn O.; SCHRODT, Paul (Ed.). Engaging Theories in Interpersonal Communication: Multiple Perspectives*. Thousand Oaks, CA, US: Sage Publications, Inc, 2008. p.391-404.
- _____. Selective Self-Presentation in Computer-Mediated Communication: Hyperpersonal Dimensions of Technology, Language, and Cognition. **Computers in Human Behavior**, v. 23, n. 5, p. 2538-2557, 2007.
- WALTHER, Joseph B.; PARKS, Malcolm. Cues Filtered out, Cues Filtered In: Computer Mediated Communication and Relationships. *In: MILLER, Gerald R. (Ed.). The Handbook of Interpersonal Communication*. Thousand Oaks, CA, USA: Sage, v.3, 2002. p.529-563.
- WALTHER, Joseph B. *et al.* Self-Generated Versus Other-Generated Statements and Impressions in Computer-Mediated Communication a Test of Warranting Theory Using Facebook. **Communication Research**, v. 36, n. 2, p. 229-253, Apr 2009.
- WANG, Wenli; SKOVIRA, Robert J. Authenticity and Social Media. Twenty-third Americas Conference on Information Systems, 2017, Boston, Massachusetts, USA. AIS eLibrary Publications, August 10.
- WARKENTIN, Darcy *et al.* Warrants and Deception in Computer-Mediated Communication. ACM Conference on Computer Supported Cooperative Work, 2010, Savannah, Georgia, USA. ACM. p.9-12.
- WEBB, William M. *et al.* Interaction between Self-Monitoring and Manipulated States of Self-Awareness. **Journal of Personality and Social Psychology**, v. 56, n. 1, p. 70-80,

- Jan 1989.
- WEHRLE, Katja; FASBENDER, Ulrike. Self-Concept. *In*: ZEIGLER-HILL, Virgil; SHACKELFORD, Todd K. (Ed.). **Encyclopedia of Personality and Individual Differences**. Cham, Switzerland: Springer, 2018. p.1-5.
- WESTLEY, Bruce H.; MACLEAN JR, Malcolm S. A Conceptual-Model for Communications-Research. **Journalism Quarterly**, v. 34, n. 1, p. 31-38, 1957.
- WHITLEY, Edgar A.; GAL, Uri; KJAERGAARD, Annemette. Who Do You Think You Are? A Review of the Complex Interplay between Information Systems, Identification and Identity. **European Journal of Information Systems**, v. 23, n. 1, p. 17-35, 2014.
- WU, Jing; PINSONNEAULT, Alain. Enhancing Peripheral Vision through Social Media Use: A Social Network Perspective. Seventeenth Americas Conference on Information Systems, 2011, Detroit, Michigan, USA. August 7.
- ZHAO, Yuxiang Chris *et al.* Affordances for Information Practices: Theorizing Engagement among People, Technology, and Sociocultural Environments. **Journal of Documentation**, v. 77, n. 1, p. 229-250, 2021.
- YANG, Chia-Chen; HOLDEN, Sean M.; CARTER, Mollie D. K. Social Media Social Comparison of Ability (but Not Opinion) Predicts Lower Identity Clarity: Identity Processing Style as a Mediator. **Journal of Youth and Adolescence**, v. 47, n. 10, p. 2114-2128, 2018.
- YAU, Amy; MARDER, Ben; O'DONOHUE, Stephanie. The Role of Social Media in Negotiating Identity During the Process of Acculturation. **Information Technology & People**, v. 33, n. 2, p. 554-575, 2019.
- YIN, Chunxiao; ZHANG, Xiaofei; LIU, Libo. Reposting Negative Information on Microblogs: Do Personality Traits Matter? **Information Processing & Management**, v. 57, n. 1, p. 102106, 2020.
- YU, Lingling *et al.* Excessive Social Media Use at Work: Exploring the Effects of Social Media Overload on Job Performance. **Information Technology & People**, v. 31, n. 6, p. 1091-1112, 2018.

4 PAPER 2: DOES WHATSAPP'S IT IDENTITY ENCOURAGE ONLINE POLARIZATION? A NETNOGRAPHIC STUDY ON USERS' INTERACTIONS

Abstract

Every year, social media platforms become the leading way of communicating for millions of people worldwide. Its unique characteristics as velocity, anonymity, and variety, provide users an enhanced experience during the communication process. In this respect, social media algorithms intensify how individuals get emotionally involved during their use, improving the engagement with these technologies, possibly leading to dissonant behaviors, like political and ideological polarization and the spreading of misinformation. In this netnography, a multimethod research design was adopted to investigate 29 school friends, all in their 40's, who have been interacting in a WhatsApp group for over five years. The first phase took place in 2019. For 158 days, their conversations were observed, and field notes were taken to guide the subsequent analysis of the chat log. Utterances (i.e., participant statements) from transcribed data were coded *a priori* and analyzed via five dimensions of the IT Identity antecedents²¹: self-disclosure, self-enhancement, self-awareness, self-monitoring, and self-verification. Also, in this phase, a previously validated questionnaire was submitted to assess the IT identity dimensions of the nine most active participants in the group. In the second phase, interviews were conducted with 12 participants to explore (i) their perceptions about the influence of WhatsApp characteristics on their presentations when interacting in the group and (ii) their perceptions about feelings of relatedness, emotional energy, and dependence elicited by the use of this application. The results indicate that WhatsApp's higher relatedness and emotional energy may be associated with a greater tendency to engage in polarized behaviors when interacting through this technology. Moreover, individuals higher in these IT identity dimensions tend to adopt self-enhancement as one of the main strategies when discussing political themes. Diversely, low dependence and relatedness about WhatsApp may be associated with reduced polarized behavior when interacting in the platform. Furthermore, when engaging in political discussions, individuals with lower dependence and relatedness about WhatsApp tend to use self-verification, self-disclosure, and self-awareness as the main self-processes when constructing their presentations' strategies. By and by, these findings may contribute to the understanding of how individuals' polarization occurs in social media and why

²¹ Cf. section 2.5 of paper 1.

certain people demonstrate more extreme behaviors than others within these virtual social structures.

Keywords: IT Identity, Social Media, Online Polarization, Cognitive Self-Processes, Netnography.

1. INTRODUCTION

I lingered but a moment at the mirror: the second and conclusive experiment had yet to be attempted; it yet remained to be seen if I had lost my identity beyond redemption and must flee before daylight from a house that was no longer mine; and hurrying back to my cabinet, I once more prepared and drank the cup, once more suffered the pangs of dissolution, and came to myself once more with the character, the stature, and the face of Henry Jekyll.

— *Robert Louis Stevenson* (1886, p. 78).

During the Victorian age, Scottish writer Robert Louis Stevenson presented the tale of Dr. Jekyll, a scientist who invented a serum capable of unleashing his monstrous alter ego, Mr. Hyde (STEVENSON, 1886). Since then, the world has changed considerably, and the ongoing industrial revolution at that moment gave way to its modern "paradigmatic break" version, steamed by digital technology. This unique combination inaugurated the so-called information age when the internet changed how individuals communicate, relate, and form opinions (GAZZALEY; ROSEN, 2016).

Till the middle of this century's first decade, Internet communication was heavily based on text format. These days, the audience was mainly of early adopters, and mobile communication was still in its infancy. All in all, at that moment, these factors kept this technology from embedding in people's daily lives (COSTELLO; MCDERMOTT; WALLACE, 2017). With this in mind, since the popularization of the Internet, communication theory strives to investigate the mass media device's effects on individuals (BOND *et al.*, 2012; DUNN, 2013).

Later, with the advent of Web 2.0, social media platforms became the standard way of communication on the internet (PAN *et al.*, 2017; LEVINSON; COGBURN; VODANOVICH, 2018; YU; SUN *et al.*, 2018), expanding the geographic barriers and allowing individuals to reach multiple audiences (SCHLOSSER, 2020). Despite contributing to gather people around essential contemporary themes (BRUNS; HIGHFIELD; BURGESS, 2013; WOLFSFELD; SEGEV; SHEAFER, 2013; ESCHMANN *et al.*, 2021), the intense interactions in social media also yielded a rising ideological and political polarization (DUTTON *et al.*, 2019;

MESSINGSCHLAGER; HOLTZ, 2019). Over time, stimulating individuals' behaviors in the physical world and leading to the surge of violent riots, government shutdowns, and governability disturbance on situational elected representatives (DE WIT; BRICK; VAN DER LINDEN, 2019).

When individuals relate strongly to an IT artifact (like social media), they tend to view it as part of their personalities (ESMAEILZADEH, 2020; GONG; CHEN; LEE, 2020). In the case of social media, Wang *et al.* (2016) note that the degree of emotional attachment when interacting in the platforms makes individuals absorb it as a part of their self-concept. In this respect, Carter (2012) theorized about the existence of a specific identity that rises by the use of IT and reflects in three dimensions, relatedness, emotional energy, and dependence (CARTER; GROVER, 2015).

Stevenson's Victorian days are history now, but modern technology has brought new artifacts capable of influencing identity and behaviors (WANG; PANG; PAVLOU, 2018; CRAIG; THATCHER; GROVER, 2019) - for better, but also, in many times, for worse. As a result, social scientists increasingly defend that the internet and computer-mediated communications (CMC) are essential elements for understanding culture and social life (WALTHER, 2016; KASHIAN *et al.*, 2017). On this subject, boundaries between the online and physical world are continually being blurred, demanding innovative methods and approaches to performing social studies within these new settings (KOZINETTS, 2006; 2010).

Morais, Santos, and Gonçalves (2020, p. 441) remark that “netnography preserves the basis of traditional ethnography but adapts it to the new contingencies mediated by the internet”. In view of this, it was chosen a specific group at which the polarized behaviors were constantly rising, and during 158 days, 29 school friends were observed when interacting on WhatsApp. Adopting as theoretical foundations the cognitive self-processes related to social media self-presentation (COSTA NETTO; MAÇADA, 2019A) and the IT Identity dimensions - relatedness, emotional energy, and dependence (CARTER; GROVER, 2015), this netnographic research intends to answer the following research question: Is IT identity developed due to the use of WhatsApp related to the polarized behavior during online interactions? To answer this question, at first, the theoretical background is presented.

2. THEORETICAL BACKGROUND

2.1. IT IDENTITY DIMENSIONS: RELATEDNESS, EMOTIONAL ENERGY AND DEPENDENCE

IT Identity theorization is grounded in structural symbolic interactionism (CARTER; GROVER, 2015). Burke (1980) considers identities and roles as self subunits, or, in other words, the meanings individuals attribute to their sense of self. At first, IT identity theorization covered static IT artifacts (e.g., spreadsheets and similar lesser complex applications). Recently, many other studies have delved into IT identity to understand its consequences to human behavior in different contexts [e.g., Craig, Thatcher and Grover (2019); Alahmad and Robert (2020); Esmaeilzadeh (2020); Gong, Chen and Lee (2020)].

Carter (2012, p.188) conceptualized IT identity as a higher-order construct reflecting three intertwined dimensions. The first one, relatedness, consists of how individuals express feelings of connectedness when thinking about themselves concerning an IT artifact. The second, emotional energy, is the extent to which they manifest feelings of confidence, enthusiasm, and energy when reflecting about themselves concerning a specific IT. Finally, the third one, dependence, is the extent to which they manifest feelings of reliance when thinking about themselves in relation to an IT (CARTER; GROVER, 2015).

IT identity development is related to individuals' histories of interacting with IT, the social and cultural contexts they navigate (CARTER; GROVER, 2015; CARTER *et al.*, 2020). As a result, it positively influences individuals' attitudes when interacting with IT and stimulates continued IT use. The first empirical study involving IT identity sought to understand how the users' identification with the Excel spreadsheet editor and the smartphones (coupled with their perceived usefulness) influenced the continued IT use (CARTER, 2012). Since then, researchers have been adopting the concept to study a variety of IT artifacts and assorted themes such as online gaming addiction (GONG; CHEN; LEE, 2020), the behavior elicited by the use of personal health devices (ESMAEILZADEH, 2020), and even to assess workers' identification with Artificial Intelligence (AI) systems (ALAHMAD; ROBERT, 2020).

2.2. SOCIAL MEDIA AND ONLINE POLARIZATION

Ball-Rokeach and Defleur (1976), back in the 70s, defended that when audiences depend intensively on media information resources to accompany the changes in society, one of the cognitive effects is attitude formation. Many years before the creation of social media platforms, Defleur proposed a communication model which can be used to understand in these days the communication process on social media platforms as it correctly predicted (i) how the message flows through these modern digital structures (ii) the role of the noise in every element

of the communication process (in this case, the extent at which social media platforms' features can bear with it) and, (iii) the dynamic switch of the transmitter and receiver's roles during the communication process (BAJRACHARYA, 2018).

The media's architecture can impact the whole communication process (HOLMES, 2005; NARULA, 2006). Before the proposition of circular models of communication, there was a significant criticism regarding the linear models' limitations (KINCAID, 1979), such as their proclivity to focus mainly on the communication's psychological effects on isolated individuals - withdrawing the influence of the social context and communication agents' relationships (NARULA, 2006).

One of the circular model's main advantages is the higher capacity to convey complexity and ambiguity (HOLMES, 2005), which turns it into a fundamental factor in promoting the communication process's effectiveness since the faster the ambiguity is resolved, the chances to occur modifications in the messages are mitigated (BALL-ROKEACH; DEFLEUR, 1976).

Shannon (1948, p. 2) pointed out that communication involves different procedures, "which one mind may affect another". Defleur and Ball-Rokeach (1990) remark that messages elicit individuals' behaviors, and mass media resonate beyond immediate effects on audiences. Defleur's circular mass media communication model expanded the notion of linear communication - presented in the earlier models - to the two-way feedback process and introduced the concept of the mass media device. As a result, these two additions imply that the feedback occurs in both directions, and the communication process conclusion is contingent on the feedback reception (NARULA, 2006).

Since Web 2.0 technologies' advent, social media platforms have been crucial to the political discussion as they allow politically like-minded people to intensify efforts to impose their political views. As an example, on Facebook, there are communities as "Politically Like-minded Friends," in which the group's owner remarks that "*I have formed this group called "Politically Like-minded Friends" to avoid annoying my Facebook friends that don't want to see my political posts*" (FACEBOOK, 2019). Marks *et al.* (2019) define politically like-minded people as individuals who tend to present their political views and discuss intensively political themes. Notwithstanding, if they share similar or opposite political preferences, these specific individuals tend to get frequently involved in heated debates when they are confronted (KIM, 2018).

With this in mind, in recent times, the combination of social media features with individuals' personalities has been accounted to increase the levels of partisanship and fosters

political and ideologically polarized behaviors (DEL VICARIO *et al.*, 2016; QUATTROCIOCCHI; SCALA; SUNSTEIN, 2016; HELBING *et al.*, 2019; PEDERSEN, 2019). One of the common lines of investigation of this phenomenon is related to algorithmic analysis in social media. Researchers as Jaakonmäki, Müller and vom Brocke (2017) defend that these algorithms interpret the communication process between the transmitter and receiver as if it was isolated and taken away from the communication context

This and other reasons lead many researchers of this phenomenon to defend that individuals engage intensively in partisanship when facing opposite ideas on social media [(e.g., Del Vicario *et al.*, (2016); Bail *et al.*, (2018); Prasetya and Murata, (2020)]. On the other hand, a diverse group of scholars claims that users tend to open themselves to new ideas when faced with conflicting points of view [e.g., Flaxman, Goel and Rao, (2016); Dutton *et al.*, (2019)].

Controversy aside, social media interactions have been critically influenced individuals' opinions and behaviors in diverse social structures (WOLLEBÆK *et al.*, 2019). For example, Marks *et al.* (2019) demonstrated that individuals tend to believe and rely more on politically like-minded others, even with no evidence that these people should be more trustable in unrelated political issues (DE-WIT; BRICK; VAN DER LINDER, 2019). Nevertheless, studies like the one of Eschmann *et al.* (2021) have been showing diverse results. For example, the authors analyzed the reactions of Twitter users through graph theory concerning the episode in which the American football player Colin Kaepernick knelt during the national anthem to protest against racism. Despite the commonsense belief that such discussions are innocuous in moving antagonistic positions (KIM, 2018), the analysis of the interaction between users of the poles for and against the player's gesture demonstrated that the intensity of interaction on the platform contributed to the flexibilization or even to change the position of more radical users.

Individuals' self-processes play an essential role in molding identity (MORIN, RACY, 2018). In this regard, Carter and Grover (2015) remarked that the objective of defining IT identity was to enhance the capacity to understand a variety of phenomena. People hold unique self-concepts constructed over time by the influence of intrinsic and extrinsic elements (WINTER *et al.*, 2014; BESSI, 2016; SAPUTRA; SIDDIQ, 2020), impacting their behavior and how they present themselves in social environments (BERNBURG, 2019).

2.3. SELF-PRESENTATION THEORY

One of the most prominent group behaviors theories in social media studies is the self-presentation theory, which is motivated by internal and situational elements. Self-presentation

is (BAUMEISTER; HUTTON, 1987). According to Walther (2007), social media characteristics provide a greater capacity to engage in impression management, improving the user experience and stimulating them to construct their online self-presentation. The use of nonverbal cues like eye contact, touch, and body language is essential to affirming impressions during the construction of dyadic relationships (LIDEN *et al.*, 2016). Nevertheless, since when interacting in the online environment, users cannot count with more subtle nonverbal cues — current in physical settings — they need to rely more on the combination of self-processes to engage in online self-presentation (HOGAN, 2010; HONG *et al.*, 2020; SCHULTZE; BROOKS, 2019).

2.4. SELF-PRESENTATION IN SOCIAL MEDIA AND ITS RELATED SELF-PROCESSES

Self-concept aids people in defining themselves via specific roles, focusing their attention on the given context, and allowing the navigation in and adaptation to environments (WEHRLE; FASBENDER, 2018). It comprises three elements: self-image, self-esteem, and ideal self (ROGERS, 1959). Self-image encompasses physical aspects, social roles, and personality traits. However, it does not always match their “physical” selves because individuals usually hold an inflated perception of one or more of their character's traits (ZYWICA; DANOWSKI, 2008; CRAMER; SONG; DRENT, 2016; VINNEY, 2018).

Self-presentation allows individuals to control impressions about themselves during social interactions. This process can expand attractiveness, credibility and influence others' behaviors (JOHNSON, 1981; BAUMEISTER, 1982; BAUMEISTER; HUTTON; TICE, 1989). When interacting in social media, individuals continually adjust how to present themselves (ETTER *et al.*, 2018). To do that, they need to continually evaluate their self-concept through cognitive and motivational self-processes (MORIN; RACY, 2018).

Cognitive activity plays a critical part in human motivation (BANDURA, 1989), positioning self-processes at the forefront of identity research (MORIN; RACY, 2018). In social media, the self-processes assist individuals when constructing their presentations (HOGAN; QUAN-HAASE, 2010) and when they evaluate the audience's view about these presentations (COSTA NETTO; MAÇADA, 2019A). By discussing the processes behind the mechanisms of self-awareness, Fleming (2021) synthesizes (even if unintentionally) in two related questions the steps of constructing and evaluating individuals' presentations in social media: “How will this seem to someone else?” and “How does this seem to me?”. Table 11 shows the definitions of the self-processes related to social media self-presentation and their respective implications.

Table 11 - Summary of Self-Processes Involved in Social Media Self-presentation, and their Implications

Self-Processes	Conceptual Definition	Implications for Social Media Self-Presentation	Author(s)/Year
Self-disclosure	The act of revealing thoughts, personal information, and experiences to others	It provides the ability to control what others know and to establish the desired level of intimacy when using social media	Davis and Franzoi (1987); Gibbs, Ellison and Heino (2006); Jiang, Bazarova and Hancock (2011); Schlosser (2020)
Self-monitoring	Self-observation and self-control oriented by situational cues in order to achieve social appropriateness	It provides the ability to adjust individuals' behavior in different social situations, as interacting in online groups and communities	Snyder (1974; 1987); He <i>et al.</i> (2014); Tyler, Kearns and McIntyre (2016)
Self-awareness	The ability to be attentive and understand behaviors, emotions, and feelings	Increase the ability not to let be inserted into social stereotypes. It gives individuals the capacity to change their self-image in social media	Duval and Wicklund (1973); Fenigstein, Scheier and Buss (1975); Geller and Shaver (1976); Doas (2017)
Self-enhancement	The effort that individuals make to control their self-presentation and while maintaining high levels of self-esteem	It improves the ability to change a particular situation or achieve the desired goals, such as influencing others in social media	Swann (1990b); Paulhus (1998); Hoorens (2011); Cramer, Song and Drent (2016)
Self-verification	Individuals' efforts to be perceived according to their self-concept	It helps to reduce impairment in relationships, leads to positive emotional connections and group orientation when using social media	Swann Jr, Stein-Seroussi and Giesler (1992); Seyle and Swann (2007); Kraus and Chen (2012)

Source: The Author (2021)

Life experiences impact the balance of how self-processes will be used during self-presentations (ROGERS, 1959). Today, many of these experiences occur in digital environments like social media. Depending on the media's characteristics, they may encourage users to adopt more actively a self-disclosure behavior - revealing spontaneous thoughts and sensitive information to the audiences (KASHIAN *et al.*, 2017; SCHLOSSER, 2020). Defined by Krämer and Haferkamp (2011) as “the act of presenting private information”, self-disclosure is continuously stimulated by the social media reward systems (CHAMBERS, 2017).

Putting this in perspective, in 2010, when Kaplan and Haenlein (2010) proposed the most well-known classification of social media platforms, self-presentation was positioned alongside self-disclosure. Since then, these technologies have evolved significantly, allowing individuals to communicate and present themselves with an enhanced personalization level (LIN; SPENCE, 2018; HONG *et al.*, 2020).

In the field of social psychology, gathered momentum the idea that individuals tend to modify their self-concept according to the most treasured social behaviors (COVINGTON,

1985). Back from the beginning of the century, Hogg and Terry (2000) pointed out that studies about groups were beginning to investigate how their influence on self - and the social cognitive processes associated with them - led to "group behavior".

Contemporarily, there is a growing effort to understand the relationship between individuals' intrinsic aspects and online behaviors when interacting in social media. For example, Whitley, Gal, and Kjaergaard (2014) argued that the use of social media is motivated by individuals' need to experience different aspects of their identities - which would not have been possible in the physical world. In this regard, IT Identity theorization provided social media researchers a new theoretical bridge to investigate why and how individuals' online behaviors (on several occasions) do not seem to correspond with their physical world's behaviors (COSTA NETTO; MAÇADA, 2019B).

3. RESEARCH DESIGN: STRATEGY AND METHOD JUSTIFICATION

Netnographies always focus on social media and technoculture. They usually rely on data from social media, and often extend them. And netnographies always feature researcher immersion: an ethnographic— nay, a netnographic— sensibility. They draw from human impressions, from the central conception of the netnographic-researcher- as- instrument, to form cultural understandings about language, power, identity, and desire in the worlds where technology and the social intersect. (KOZINETS; GAMBETTI, 2021, p.7)

Netnography has been grounded on anthropological participant observation techniques and axiologies of cultural understanding. It builds on the practices of traditional anthropology. However, it adds specific practices that include locating sites and topics using search engines, handling large digital datasets with a combination of automated and manual techniques, analyzing digital data through recontextualization, and providing specific guidelines for handling online ethics questions and research procedures (KOZINETS, 2015).

The first justification for adopting netnography is due to the virtual setting chosen to carry out this study. Since WhatsApp's popularization, this application has been accounted for keeping and joining people from diverse network ties. Morais, Santos and Gonçalves (2020) remark that participant observation is the main data collection method in a netnography²². One of the main advantages of netnography is to observe a specific group's participants and their interactions within the social structures (KULAVUZ-ONAL, 2015). According to Kozinets (2015), netnography encompasses traditional ethnographic practices – such as field entrance, taking field notes, conducting interviews, interpreting data to show an authentic cultural

²² Cf. section 3.2 to a more detailed justification of the researcher's role in this study.

representation, and adapting them to these new, internet-mediated relationships. In this study, it was employed a blended netnography. Kozinets (2010) notes that a blended netnography involves analyzing data generated online and obtained in physical interactions. A second justification for adopting netnography was because it was the most appropriate research strategy to investigate the stated research question²³.

The research was carried out on the social media platform WhatsApp. Therefore, adopting an abductive research approach (KOZINETS, 2019) and following Kozinets (2010) guidelines, during over five months of interaction (from April to September of 2019), it was observed a group of 29 school friends (all of them in their 40's) who have known each other for over 25 years. In doing so, it was expected to acknowledge a deeper understanding of their political tendencies and WhatsApp usage habits to investigate why some presented dissonant behaviors online compared with their physical world interactions.

Participant-observational netnography relies on three primary data sources, which are: (i) researcher's field notes, (ii) record of events or logs of online interactions, and (iii) direct communication with the group's participants (KOZINETS, 2019). Kozinets emphasizes that the data collection and analysis in a netnography should not be restricted to any specific method (KOZINETS, 2006).

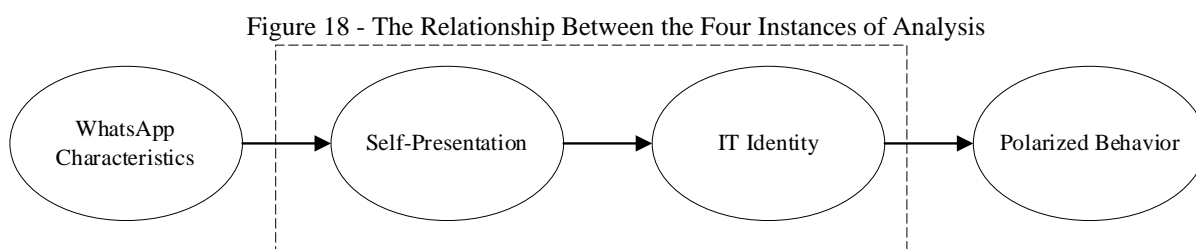
Goertz (2017) observes that multimethod research can take many possible forms, although, in practice, scholars commonly utilize only a few. In the same vein, even if netnography is eminently a qualitative methodology, Kozinets (2006, p.132) remarks that "I view netnography as necessarily multi-method. The methods that should be chosen depending on the research questions considered and the researcher's strengths". Therefore, in the first phase of data collection, nine of the most active group' participants were selected to collect additional data, which were: (i) WhatsApp use habits, (ii) WhatsApp primary use motivation, and (iii) IT identity dimensions. Concerning the latter, this additional data collection allowed to assess individuals' IT Identity dimensions means. In the second phase, interviews were conducted with 15 group participants to explore the effects of the media characteristics on self-presentation ²⁴during the group's interactions and their perceptions about IT identity dimensions (relatedness, emotional energy, and dependence). According to Saldaña (2013, p.60), "Depending on the nature and goals of your study, you may find that one coding method alone will suffice, or that two or more are needed to capture the complex processes or

²³ The research question: Is IT identity developed due to the use of WhatsApp related to the polarized behavior during online interactions?

²⁴ Cf. section 2.2

phenomena in your data”. In this study, two types of codification were used: emotion coding and in vivo. In section 4 it will be presented the justification for this decision.

The formulated research question was answered by analyzing the relationship between self-presentation and the IT identity of individuals who presented the highest numbers of interactions related to the political debate. In this study, WhatsApp characteristics correspond to the group participants’ self-presentation antecedents. Therefore, the participants' self-presentation strategies ²⁵ (i.e., the balance between choosing the related self-processes) with more interactions within the proposed context will be analyzed according to the three dimensions of IT identity. Figure 18 shows the four elements involved in this study's analysis. The dotted rectangle aims to emphasize the main relationship analyzed in this study²⁶.



Source: The Author (2021)

Additionally, a graphical abstract was designed to facilitate understanding the research design and the study's assumptions (Appendix C).

3.1. SOCIAL MEDIA CHARACTERIZATION, RESEARCH CONTEXT, AND SAMPLING STRATEGY

WhatsApp combines features such as the friend's list and text chat with mobile phone capabilities so that users hardly distinguish the differences between these two forms of communication (HANSEN; SHNEIDERMAN; SMITH, 2010). In 2019, the social media app surpassed Facebook (which currently owns the company) as the leading social media platform worldwide. According to Statista (2019) estimates, WhatsApp has 1.6 billion users (in October 2019), becoming the most used app in Brazil in 2019 (REPORT, 2019) and the third social media platform in active users. About 89 % of internet users installed WhatsApp on their

²⁵ The definition of self-presentation strategy in this study corresponds to the percentage of each self-process adopted during self-presentation in social media. Such processes are gathered in the two instances of self-presentation, internalization and manifestation of impressions. For more details, cf. Section 3 of the first article of the thesis

²⁶ Cf. section 2.5.2 of thesis general theoretical background

devices in the country. Moreover, 91% of smartphone owners answered that they use WhatsApp during all day (STATISTA, 2020).

Polarization is a worldwide phenomenon (THECONVERSATION, 2018), and social media features' evolution coupled with the changes in the external political landscape, tend to push individuals to more extreme political and ideological positions when interacting online (BAIL *et al.*, 2018; DE WIT; BRICK; VAN DER LINDEN, 2019). For example, in the case of the Brazilian population, a 2018 inquiry of the Ipsos Institute surveyed over 20000 individuals in 27 countries. It concluded that 32% of Brazilians agree that it is not worth talking with someone who does not share the same political views (IPSOS, 2018).

Since 2013, a growing polarization in Brazilian society is being observed. In 2016, Ortellado, Solano and Ribeiro (2016) surveyed individuals in the manifestations of both sides of polarized groups. Notwithstanding the ideological position, most respondents were in their 40s and had higher education degrees. Considering that social media platforms like Twitter, Facebook (and especially WhatsApp) have been essential debate arenas for these groups (MACHADO; MISKOLCI, 2019), the research was carried out on WhatsApp, the most used smartphone application in Brazil (STATISTA, 2020). Table 12 shows the Comparison of quantitative and qualitative methods.

Table 12 - Comparison of Quantitative and Qualitative Methods

	Quantitative	Qualitative
Philosophical foundation	Deductive, reductionist	Inductive, holistic
Aim	To test pre-set hypothesis	To explore complex human issues
Study plan	Step-wise, predetermined	Iterative, flexible
Position of researcher	Aims to be detached and objective	Integral part of research process
Assessing the quality of outcomes	Direct tests of validity and reliability using statistics	Indirect quality assurance methods of trustworthiness
Measures of the utility of results	Generalizability	Transferability

Source: Marshall (1996, p. 524)

This study adopted a purposeful sampling strategy. According to Creswell and Plano Clark (2018), when adopting this sample strategy, the researcher identifies and chooses individuals (or groups of individuals) who are remarkably familiar or skilled with a specific phenomenon of interest. In the words of Elo *et al.* (2014, p.4), “in qualitative research, the sample must be appropriate and comprise participants who best represent or have knowledge of the research topic”. With this in mind, the purposive sampling strategy focused on two criteria. First, participants’ socio-demographic profiles should be similar to Ortellado, Solano and Ribeiro’s study.

Patton (2014, p. 606) notes that “for small samples, a great deal of heterogeneity can be a problem because individual cases are so different from each other”. Homogeneous sampling is used when the research goal is to understand and describe a particular group in depth. It is a type of purposive sampling when a researcher wants to study a phenomenon or movement as it relates to what is considered "typical" or "average" members of the affected population²⁷. A data set is homogeneous if it comprises similar things or persons — for example, a group of 50-year-old golf players. Therefore, the second criterion was to keep the sample homogeneity as it also reduced sampling error (GLEN, 2021).

Therefore, it was searched for a WhatsApp group that participants' ages, educational background, and social class ranged around the threshold found by Ortellado, Solano and Ribeiro's (2016) survey results (of age and social class). In view of that, this group of people had approximately the same age range and similar educational and cultural backgrounds. In addition, the fact that they already knew each other previously in the physical world and were continuously presenting polarizing tendencies online contributed to keeping the sample's homogeneity. That being said, the unit of analysis is the individual inside the group. Therefore, their interactions and behaviors were analyzed inside this particular WhatsApp group.

This WhatsApp group was created in 2015 when this messenger application became popular in Brazil, and it comprises 29 high-school friends, all with higher education degrees, with ages ranging from 42 to 45. In 2016, Dilma Rousseff's impeachment intensified the group's debate around political themes and increased individuals' polarized behavior, which at that moment was only beginning to get steam. Since then, the focus of the conversations revolved around more and more on political preferences.

3.2. RESEARCHER'S ROLE

In this netnography, the author is part of the study's group (BREEN, 2007). According to Bonner and Tolhurst (2002), assuming the role of an insider-researcher can be helpful in many ways for qualitative research of this nature. For example, the researcher can better understand the culture being studied; (b) his/her participation does not change the flow of social interaction unnaturally, and (c) he/she has an established closeness that contributes to both the telling and the judging of truth.

Given this, the author was a member of this WhatsApp group, and his participation

²⁷ Cf. Chapter 3 of PATTON, Michael Quinn. **Qualitative research & evaluation methods**: Integrating theory and practice. Thousand Oaks, CA: Sage publications, 2014.

was one of the factors that motivated and drove his decision to carry out this study. However, regarding the drawbacks, assuming a participant role in research may lead to bias during the data analysis and even ethical questions (UNLUER, 2012). Nevertheless, it was taken two measures to reduce the risks mentioned above. The first, a Ph.D. in the area of business administration (who were not part of the WhatsApp group), assisted in the validation and confirmation of the data analysis of both phases²⁸.

3.3. DATA SOURCES

The gathering of multiple data sources is an inherent and integral component in a robust qualitative case study (YIN, 2018). Flick (2008, p.32) noted the need to articulate qualitative and quantitative methods to demonstrate data triangulation correctly. According to the author, triangulation overcomes the limitation of single methods as it combines diverse methods and emphasizes their importance equally. Similarly, Patton (2015) notes that the researcher triangulates data sources and analytical perspectives to increase the accuracy and credibility of findings.

As such, in this study, the data sources were defined as follows: (i) group's chat log, (ii) field notes, (iii) a survey questionnaire, and (iv) semi-structured interviews. Additionally, there were meetings with the individuals in the physical world, which contributed to observing their interactions and their presentations' differences (compared to the ones on WhatsApp). In the sequence, it is presented the data collection and its respective steps.

3.4. DATA COLLECTION

In the first phase, the data collection began on Apr. 26, 2019, and covered 158 days of interactions with the group's participants. The data collection began almost four months after Brazilian president Jair Bolsonaro took office. In this period, individuals for and against Bolsonaro were still very active in their heated online discussions. Thus, the political debate triggered code manifestations adherence to the cognitive-motivational processes involved in their online presentations.

First, the whole number of manifestations was analyzed to cover all the subjects discussed. Therefore, it could be assessed which individuals more frequently used cognitive

²⁸ Cf. section 3.7

self-processes to present themselves and develop their online impressions. Choosing a group of individuals with similar age, educational, and cultural backgrounds was intended to maintain homogeneity. Additionally, the assessment of IT Identity dimensions (relatedness, emotional energy, and dependence) through a survey questionnaire allowed the comparison between individuals with higher and lower IT Identity and behaviors reflected in more polarized behavior during WhatsApp use and outside the application. Table 13 shows the data collection methods and their expected outcomes

Table 13 – Data Collect Methods and Expected Outcomes

Data Collect Method	Expected Outcomes
Chat Log	Assessment of Participants presentations
Field Notes	Observations about specific discussions to be coded later
Individual Semi-structured Interviews	Assessment of Participants' perceptions about WhatsApp characteristics and polarized behavior and IT identity dimensions
Survey Questionnaire	Assessment of Participants IT Identity

Source: The Author (2021)

Between November and December 2021, a new data collection was carried out with the group's participants. This time through semi-structured interviews that aimed to capture participants' perceptions of the (i) WhatsApp characteristics that elicit the political discussions, (ii) their self-presentations on this specific WhatsApp group²⁹, and (iii) their feelings of relatedness, dependence, and emotional energy about WhatsApp. The interview script is found in Appendix G. The consent agreement was presented to the participants is shown in Appendix H. 15 interviews were conducted in this phase, allowing data triangulation (FLICK, 2008). Thus, it was possible to deepen the findings on the research issue presented.

Following research ethics precepts, the group's participants were previously informed of the study's intention, and their authorization was requested to publish the study's results in the future. The interview consent agreement is shown in Appendix H. None of them were identified during any research phase. As seen in the sequence, they were differentiated by a single capital letter to preserve their privacy.

3.5. CONTENT ANALYSIS

In the first phase, the chat log was split to separate each group's participants to conduct the content analysis. Next, the entire data was analyzed through categorical content analysis

²⁹ The unit of analysis in this research is the individual in this specific WhatsApp group

(BARDIN, 2011). A priori coding establishes categories before data collection based on literature review and /or a theoretical framework (SALDAÑA, 2013). In this phase, the categories were previously defined and derived from the cognitive self-processes involved in social media self-presentation, one of the instances of the development of IT identity development due to the use of social media (COSTA NETTO; MAÇADA, 2019A).

Finally, participants' manifestations were categorized according to the pre-defined categories, and evidence was counted using the RQDA software. RQDA is an R package used to perform qualitative data analysis (HUANG, 2018). In this phase, the codification was carried out according to the relationship: Self-presentation and IT identity due to WhatsApp Use

In the second phase, which took place between November and December of 2021, interviews were carried out with 12 participants to assist data triangulation and enrich the inferences. In this phase, the codification (In Vivo) was carried out according to the two relationships: (i) WhatsApp Characteristics and self-presentation, and (ii) IT identity due to WhatsApp Use and Polarized Behavior.

3.6. IT IDENTITY QUESTIONNAIRE

A questionnaire composed of 11 items covering the three IT identity dimensions was developed and validated³⁰. The complete questionnaire consists of three blocks, which are: (i) Participants' demographics characteristics, (ii) WhatsApp use frequency habits, and (iii) WhatsApp IT Identity dimensions. It was submitted through the Qualtrics platform to the nine most active group participants. In doing so, it was evaluated their feelings of relatedness, dependence, and emotional energy about the use of WhatsApp. The instrument was developed from Carter's conceptual and operational definitions of IT identity dimensions (CARTER; GROVER, 2015).

3.7. TRUSTWORTHINESS

Rodgers and Cowles (1993) enlisted a set of steps to guide researchers on keeping proper audit trails in qualitative studies, which are: (i) maintaining accurate and inclusive notes associated with the contextual background of data, (ii) elucidating the motivation and rationale

³⁰ Cf. section 3.1 of paper 3 and Appendix D

for all methodological decisions, (iii) report the progress of the findings, and (iv) researcher's particular orientation to the data.

In this regard, Nowell *et al.* (2007) recommend that qualitative researchers detail how the data analysis was conducted by demonstrating precision, consistency, and effortlessness in recording and systematizing the complete process. In doing so, the readers will be able to evaluate if the study's findings are credible. According to Lincoln and Guba (1985), when performing qualitative research, four stages are needed to achieve trustworthiness (i.e., to show the readers that what it is exposed to is believable).

First, data triangulation methods supported the consistency of findings to address credibility. Therefore, in the second phase, in addition to the chat log and the survey questionnaire, this research conducted interviews with 12 participants. Second, the study has been grounded on a well-established theory³¹. In this regard, self-presentation theory has been continually used in the studies involving social media among different knowledge areas [e.g., Hogan (2010); Lee and Borah (2020); Yang, Holden and Carter (2017); Seidman (2013)] which denotes concurrent validity.

The second measure to achieve trustworthiness, transferability, was taken by describing in detail the virtual setting in which the study was carried out. By describing the sample's characteristics and the research context, future researchers may have a correct perspective if the method, the research design, and strategy adopted in this study would fit their inquiries.

The third measure, dependability, was taken by presenting the data and the methodological procedures to three researchers who were not part of this study and were experienced in qualitative research. Then, they read the whole material in one week, verified the data collected, the study's phases, the chosen methodological procedures, and verified the final manuscript (after compiling the interviews with the 15 participants). Finally, the fourth measure, confirmability, was demonstrated through the audit trail.

According to Lincoln and Guba (1985), the audit should be the leading technique to demonstrate trustworthiness. Similarly, Patton (2015) recommends the establishment of an audit trail to demonstrate the rigor of the work and show the confirmability of the data. This study's audit trail is shown in Appendix J. The following section shows the results and explains the rationale for analyzing and making inferences from the three data sources (chat log, interviews, and questionnaire answers).

³¹ Cf. section 2.1

4. RESULTS AND ANALYSIS

The way individuals present themselves on social media strongly signals their partisanship bias (KIM, 2018). Self-presentation is the overarching category that reunites the self-processes in the instances of presentation in social media “impression manifestation and “impression internalization”³². In the first phase of the study, they were chosen as predefined categories because this study aims to understand the relationship of the antecedents of the IT identity due to the use of social media and IT identity dimensions in the context of the interactions in a WhatsApp group`s and its participants' polarized behaviors. Given the nature of the codification in the first phase, the emotion coding technique was employed. According to Saldaña (2013, p. 105),

Emotion codes label the emotions recalled and/or experienced by the participant or inferred by the researcher about the participant. Emotion Coding is appropriate for virtually all qualitative studies, but particularly for those that explore intrapersonal and interpersonal participant experiences and actions.

In the second phase, the participants' interviews were coded according to the In Vivo technique. According to Saldaña (2013), In Vivo coding is useful when the researcher wants to capture an emic perspective (i.e., understand the group's perspective being studied). Manning (2017, p.2) points out that

In vivo coding can be especially helpful for data involving cultural-special episodes such as the arrival of a baby or a wedding; everyday cultural practices; social rules such as being a student or serving in public office; relational interaction; or cultural identities, such as race and sexual identity, among others.

The codes generated in both phases, coupled with the survey questionnaire results, allowed the data triangulation and further inferences to answer the research question. The codebook was developed according to the predetermined theory-driven codes and followed MacQueen *et al.* (2009) and Saldaña (2013, p.24) recommendations. The codebook is shown in Appendix I with the resulting data-driven codes.

In view of this, the three reflective dimensions of IT Identity (thus, the consequences of social media use) were compared to individuals' presentations in the context of political discussions on WhatsApp. Furthermore, it compared the self-presentation strategies of

³² Cf. section 3 of paper 1

participants with the highest and lowest means in the IT Identity dimensions³³. The groups of three participants³⁴ were compared according to the following criteria:

- Participants with the highest and lowest relatedness about WhatsApp³⁵
- Participants with the highest and lowest emotional energy about WhatsApp;
- Participants with the highest and lowest dependence on WhatsApp.

The data is shown through the self-processes related to the presentations of the WhatsApp group's interactions (obtained through categorial content analysis) and the survey results applied to the nine most active participants. The rationale for analyzing each set of groups was to compare the percentage of self-processes used by three participants with the highest and lowest means on each IT identity dimension.

Given that each participant showed a diverse number of manifestations, this measure allowed to compare their utterances on the same basis. Additionally, the graphs show participants' profiles, age, gender, number of manifestations, primary WhatsApp use motivation, and daily usage frequency. Table 14 shows the definitions and examples of self-process coding criteria related to group participants' presentations in the group during political discussions. Appendix I shows the codebook table of the chat logs and interviews.

³³ Cf. sections 2.2. and 2.3

³⁴ The number of manifestations of the participants L., F., and P. was insufficient to provide a consistent analysis

³⁵ The difference was estimated through the comparison of the pooled mean of participants' answers about the items of respective IT identity dimensions

Table 14 - Coding Criteria of Self-Presentations: Related Self-Processes and Examples

Concepts	Contextual Definition	Examples
Self-disclosure	When individuals express spontaneous information, intimate thoughts, or experiences not necessarily related to the context of the ongoing discussion	<i>I woke up at 3:00 AM to study smartphone programming. Now I am leaving for another working day [Q.]</i> <i>I am exhausted. I could not take a vacation yet. My secretary is retiring, and I am struggling to fulfill her position. This year has been really stressful [T.]</i>
Self-monitoring	When individuals previously showed concerns about the effects of their opinions in the group	<i>Good morning! Are you feeling calmer today? I would recommend a musical show, but I changed my mind as you will say that it is lefty propaganda! Anyways, it is terrific! [L.]</i> <i>Maybe I should stop here, or I could be unfairly accused [T.]</i> <i>You are one of the most affable and most generous persons I have ever met. Therefore, to preserve our friendship, I will leave this group [Q.]</i> <i>It's just that our friendship wears if we continue in this way. We can't go further with this! [L.]</i>
Self-awareness	When individuals demonstrated understanding of others' concerns related to the discussions' consequences.	<i>When I see people from extreme political tendencies in our group, both right and left, I realize how much in trouble we are. There is no discourse, only polarization [F.]</i> <i>Ethics has no ideology. There are crooks in all ideological tendencies. And even in every religion [N.]</i> <i>The saddest part of all this is that two beautiful friends argue and leave our group because of these political discussions [P.]</i> <i>In the last months, I have been keeping myself (of emitting sensitive opinions) during discussions because I do not want to hurt your sensitivity [S.]</i> <i>While there are no proofs that link this episode with the government, I don't think there is any relevance in conjecturing about this subject [C.]</i>
Self-enhancement	When individuals manifested in a derogatory manner against other group members aiming to reinforce their self-esteem and or self-presentation.	<i>S. I have a question. Why do the ships not fall after reaching a certain point if the Earth is flat? [B.]</i> <i>T., Why don't you go to North Korea to do your research (T. is a well-success biologist and researcher and presents opposite political positions if compared with Q) [Q.]</i> <i>I can figure out in what kind of groups you share this kind of stupidity [T.]</i>
Self-verification	When individuals used other participants opinions or third-party information to reinforce their opinions and self-presentation	<i>Your recognition is very important to help me to keep in this provocative mood [S.]</i> <i>I agree with R. There will always be good people in every political or ideological branch. [C]</i> <i>You're quite right! I really liked the president's speech. He only defended himself from the cowardly public attack that suffered [Q.]</i>

Source: Research Data (2021)

The secondary data source (interviews) enriched the comparison between IT identity dimensions with individuals' strategies presentations was enriched with the secondary data source (interviews). The following section presents the group participants' profiles and the questionnaire results about the nine most engaged in political discussions during the 158 days of the first data collection.

4.1. GROUP'S PARTICIPANTS PROFILES AND QUESTIONNAIRE RESULTS

Considering that the (i) sample is small to make further statistical assumptions and (ii) that the group's homogeneity is *a priori* condition to carry out the study, the database was split into two groups (intentionally, to carry out Levene's independent sample test and, thus examine sample's homogeneity). The heavy users' group consisted of the five individuals who used to access WhatsApp over ten times daily. The light users' group reunited the remainder of the sample who answered that they accessed WhatsApp less than ten times a day. Descriptive statistics of heavy and light WhatsApp users and independent sample tests are shown in Appendix E and F. The latter was intended to verify the possible differences between the two groups³⁶, and it was carried out to demonstrate the sample's homogeneity. Table 15 shows the demographic characteristics of participants of both groups analyzed in the remainder of this paper (i.e., gender, age, occupation, and WhatsApp daily usage frequency).

Table 15 -Participants' Profiles

Participants	Gender	Age	Occupation	Daily WhatsApp Usage Frequency
B.	M	44	Physician	Six to ten accesses
L.	F	43	Architect	> 10 accesses
N.	M	43	Engineer	Five accesses
T.	M	43	Professor	> 10 accesses
S.	M	44	Lawyer	> 10 accesses
C.	M	42	Physician	> 10 accesses
Q.	M	44	Data Analyst	> 10 accesses
P.	F	45	Nutritionist	Six to ten accesses
F.	F	44	Physician	Six to ten accesses

Source: Research Data (2021)

Table 16 shows the results of the nine participants' scores on the IT Identity

³⁶ The independent sample test evaluated the questionnaire answers of the 10 participants with the highest number of interactions during the 158 days of observation. However, as can be observed in Tables 15, 16, 17 and 18, there are nine participants. It is justified because it was intended to compare groups of three members (therefore an odd number) regarding the content analysis and questionnaire results. This measure facilitated the visualization of possible differences among coded self-presentations with IT identity dimensions means

Dimensions.

Table 16 - Participants' IT Identity Dimensions Results

Participants	Relatedness	Emotional Energy	Dependence
B.	5,40	5,67	3,40
L.	6,40	5,00	4,20
N.	4,80	2,83	3,20
T.	5,20	5,50	2,60
S.	6,40	6,17	4,80
C.	6,20	3,83	4,40
Q.	6,00	4,83	4,80
P.	4,80	2,83	5,20
F.	5,40	4,67	4,60

Source: Research Data (2021)

Table 17 shows the data source of the nine participants analyzed in the first phase.

Table 17 - Data Source of the Nine Group Participants (N=39)

Participants	Chat Log*	Personal	Survey	Interviews**	Fieldnotes
		Communication (physical and virtual)	Questionnaire **		
B.	X		X	X	X
L.	X	x	X	X	X
N.	X	x	X		X
T.	X		X	X	X
S.	X	x	X	X	X
C.	X	x	X	X	X
Q.	X		X		X
P.	X		X	X	X
F.	X	x	X	X	X
N° of sources	9	5	9	7	9

Source: Research Data (2021)

* Primary data source **Data sources used for triangulation

Table 18 shows the Frequency of the nine participants' statements regarding the five self-processes related to their presentations in the WhatsApp Group.

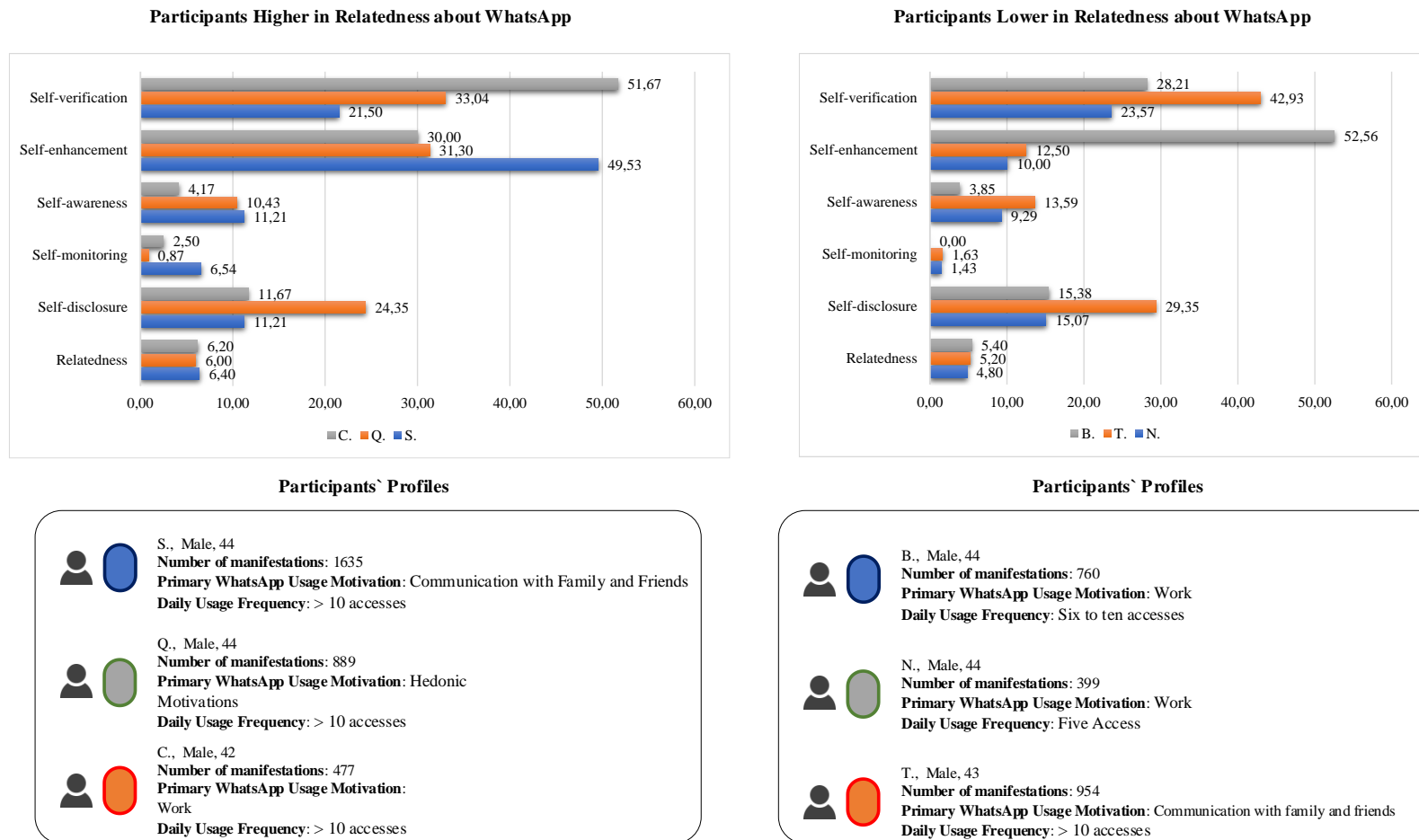
Table 18 - Frequency of *a priori* Codes (N=816) from Primary Data Source

Participants	Self-disclosure	Self-monitoring	Self-awareness	Self-enhancement	Self-verification
B.	12	0	3	41	22
L.	24	18	42	12	44
N.	11	2	13	14	33
T.	54	3	25	23	79
S.	12	7	12	53	23
C.	14	3	5	36	62
Q.	28	1	12	36	38
P.	4	4	4	8	25
F.	7	1	1	5	12
Frequency (total %)	175 (21,4%)	30 (3,67%)	100 (12,25%)	217 (26,59%)	294(36,02%)

Source: Research Data (2021)

Figure 19 shows the comparison of self-presentation strategies among participants with higher and lower relatedness about WhatsApp.

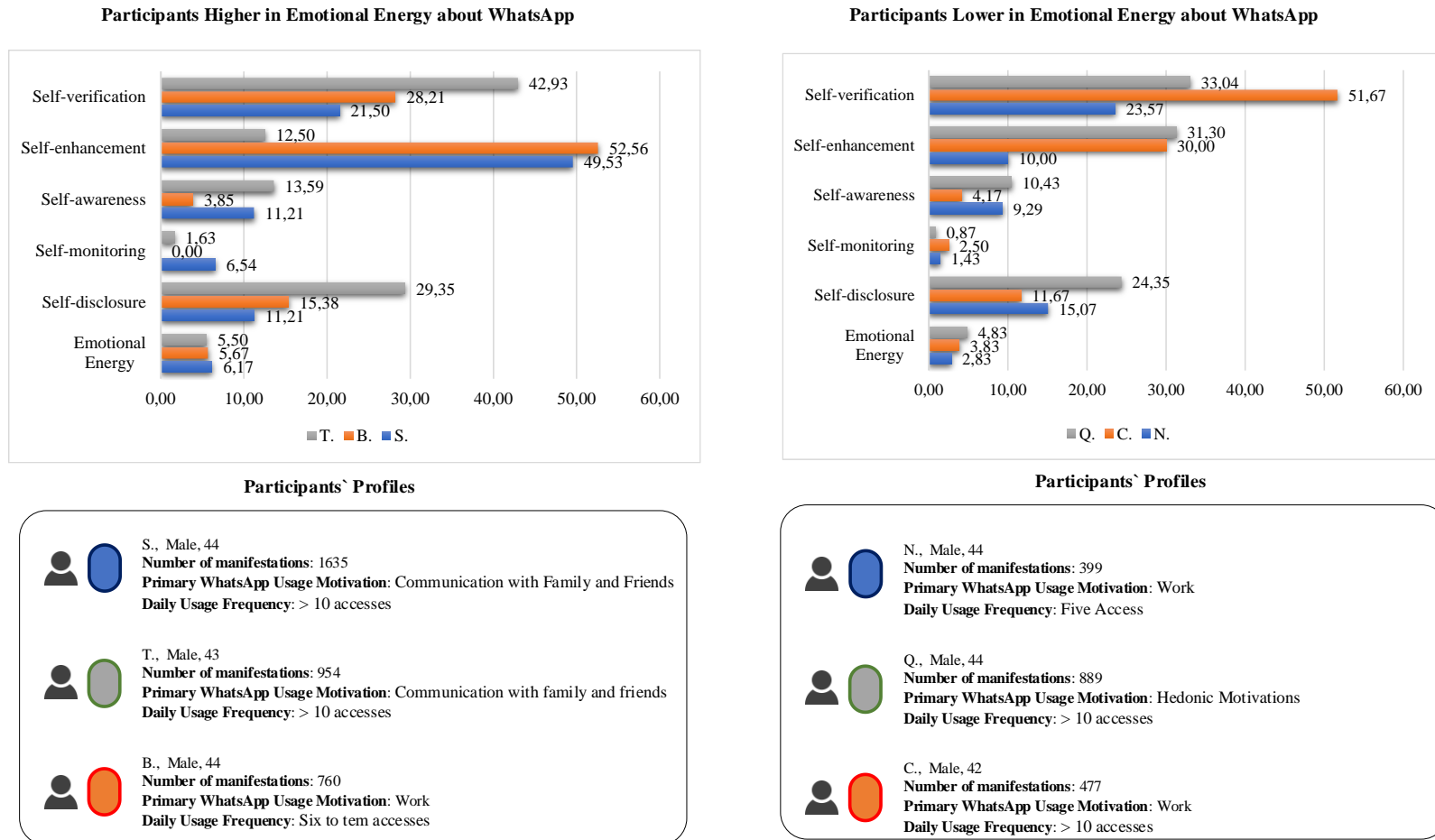
Figure 19 – Comparison of Self-Presentation Strategies among Participants with Higher and Lower Relatedness about WhatsApp



Note. Group's participants S., Q., and C., presented the highest means of relatedness, and dependence on WhatsApp. Participants' manifestations were shown according to the respective percentages of the corresponding self-process used for the coded presentations.

Figure 20 shows the comparison of self-presentation strategies among participants with higher and lower emotional energy about WhatsApp

Figure 20 - Comparison of Self-Presentation Strategies among Participants with Higher and Lower Emotional Energy about WhatsApp

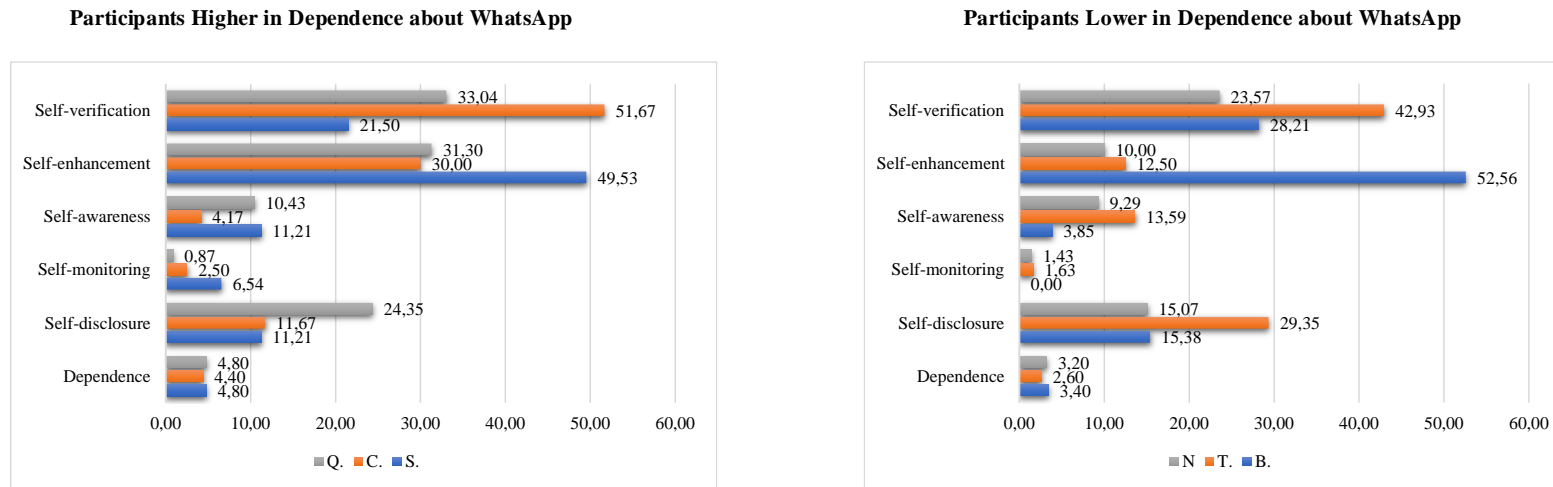


Source: Research Data (2021)

Note: Group's participants C., Q., and N., presented the lowest means of emotional energy about WhatsApp

Figure 21 shows the comparison of self-presentation strategies among participants with higher and lower dependence on WhatsApp

Figure 21 - Comparison of Self-Presentation Strategies among Participants with Higher and Lower Dependence about WhatsApp



Participants` Profiles

Participants` Profiles

S., Male, 44
 Number of manifestations: 1635
 Primary WhatsApp Usage Motivation: Communication with Family and Friends
 Daily Usage Frequency: > 10 accesses

Q., Male, 44
 Number of manifestations: 889
 Primary WhatsApp Usage Motivation: Hedonic Motivations
 Daily Usage Frequency: > 10 accesses

C., Male, 42
 Number of manifestations: 477
 Primary WhatsApp Usage Motivation: Work
 Daily Usage Frequency: > 10 accesses

B., Male, 44
 Number of manifestations: 760
 Primary WhatsApp Usage Motivation: Work
 Daily Usage Frequency: Six to ten accesses

N., Male, 44
 Number of manifestations: 399
 Primary WhatsApp Usage Motivation: Work
 Daily Usage Frequency: Five Access

T., Male, 43
 Number of manifestations: 954
 Primary WhatsApp Usage Motivation: Communication with family and friends
 Daily Usage Frequency: > 10 accesses

Source: Research Data (2021)

Note: Group's participants S., T., and B., presented the highest means of emotional energy about WhatsApp

4.2. ANALYSIS: WHATSAPP CHARACTERISTICS AND SELF PRESENTATION

E. answered that she did not feel that changed much during her interactions because she considers herself an extrovert. Second, because she previously knew the other participants. Therefore, it does not matter if they are behind the screen or face to face. However, she made a curious observation about participants' behaviors when interacting in the group: *“I think that shy people feel more comfortable issuing stronger and even more radical opinions when they are on WhatsApp than when interacting in person. This is clear for me”*.

D. noticed that she is less talkative in the group environment because she cannot handle the volume of daily conversations. Coupled with this, she also said that the conversation asynchrony makes it easier to give opinions. She thinks that this characteristic is an advantage to develop her presentations. F. added a similar point of view regarding shyness, but, curiously, she notes an effect of the media to stimulate her shyness

...I feel shy because I'm afraid of not being fully understood or of generating some discomfort. You can see the person's reaction before writing and answering in the physical world. The way you are talking you can already observe the body emotional response, and you can improve the dialogue (F.)

S. answered that shyness is not one of his characteristics. He added that he knew many people who radically changed when interacting in virtual settings like WhatsApp. However, he believes (again, for personal characteristics, since he is very talkative) that he does not change his presentations when using the application. T. pointed out one reason why he prefers to use WhatsApp in relation to other social media like Facebook: *“In these days, I would rather use WhatsApp than other social media like Facebook because I can reach more accurately people whom I need to talk”*.

E. points out the difference in the effect of communication between individuals who share strong and weak bonds. In fact, with the advancement of the internet and the emergence of social media, the ability to almost instantly reach people with strong ties and weak dramatically increase. C. declared that he perceives a difference between how politics was discussed prior to the popularization of social media, such as WhatsApp: *“at that time there were fewer discussions. Perhaps not only because of the greater difficulty of sharing information but mainly because of the lack of political interest of people in general at that historical moment”*. Similarly, T. agreed partially with C's statement but showed further possible reasons for that:

...Before WhatsApp, I ended up corresponding more with people who had similar opinions to mine That's one of the exciting things. I was more restricted to a bubble of people who thought like me. So, I guess, in a way, WhatsApp brought an advantage, isn't it? When we engage in this type of discussion, we can see other points of view. It makes us think and eventually change our opinions. Over time I've changed my mind a lot. However, also, some opinions that I already had were reinforced. So, I think that there are both sides. I find myself particularly so much influenced in the sense of solidifying previous opinions because I can constantly receive opinions against mine, so you think more about your arguments. Rethink about your opinion better and also open yourself to different opinions, which eventually may change yours (T.)

When asked which WhatsApp characteristics encouraged him to engage in political discussions in the group, C. made the following statement: *"The speed of interaction/response, features of the application like being able to respond both written or voice according to the moment".* In the same line, S. stated: *"the speed and the chance to reach people from diverse places. I do not worry about privacy since anyone can make a print screen and in the future show one of our thoughts that a few years ago would be private and gone with the wind"*. B answered in the same line and stated: *"The speed of communication provided by WhatsApp facilitates and stimulates political discussions. Any kind of discussion and interaction has become very easy and immediate to reach people. C added to his previous statement: "Being able to answer at any time is a great advantage. We can research the subject being discussed, reinterpret what that means, what is the intention of those who said it, or simply take a deep breath and only respond when the mood calms down."*

E. declared, *"If I have to choose a feature, I think it would be easiness to interact with others since it's almost instantly, faster, and more interactive. I think this easiness versus entering a forum and having to log in"*. F. answered that the capacity to reach people and privacy were the two main characteristics that stimulated her to engage in political discussions. Moreover, she said that choosing a proper group (one of WhatsApp characteristics) to express her opinions was another important factor when deciding to whom she would give her opinion.

The interactiveness was the choice of R. as the main feature for stimulating her to discuss politics in the WhatsApp group. In the same vein, D. commented that she believes that the speed in the response provided by WhatsApp encourages her to engage more in the group's political discussions. L. added that the subjects and persons that she can talk in discussions stimulate her to engage in political conversations. When asked, more specifically about which WhatsApp characteristics stimulate her to engage in these discussions, she answered:

...I think it's the speed of interaction at any time and the easiness to access people by the smartphone. As everything happens very fast, today's news soon gets old news. So, you post something today, and tomorrow something new shows up. When using

WhatsApp, you can better handle this situation (L.).

P. reveals that mobility is the central stimulus to make her engage in the discussions: *"the easiness of interacting through mobile devices because when we are in front of the screen, we feel more confident, and it gives us a little more courage"*. Still, she believes that they would be even more heated if it was physical: *"Because you respond on the spot! And while on WhatsApp, you can read the message and reply later"*. When asked why he thought he used to engage in heated discussions about politics on WhatsApp, B. explained that the velocity of communication stimulated him to provoke other participants to engage in political discussions. B noticed that one of his characteristics might stimulate him to engage in heated political discussions and explained: *"To an introspective person, the possibility of interacting without face-to-face contact ends up showing a side of personality that is not usual. So there really is greater ease of interaction with this distancing, this relative distancing, this impersonality that WhatsApp brings"*.

When comparing Q., F. and S' statements in the chat log and in interviews, it may be noticed that personal characteristics may be partially responsible for how they present themselves in WhatsApp. For example, C. is naturally shy, so he stated that the intimacy with the other group's participants helps him be more outspoken when interacting online. He adds that he tends to be more talkative when he interacts with a group of unknown people on WhatsApp. Nevertheless, the opposite also occurs. F. (who is usually an outspoken person in face-to-face meetings) said that the media characteristics make her feel shyer and interfere in her presentation in WhatsApp. Diversely, P. declared that she did not think she changed her presentation in the group. However, she thinks that tends to be more ironic.

The participants were questioned if their intimacy made them feel more comfortable to open themselves when talking in the group. Furthermore, if they would feel closer or far if they talked face-to-face instead of through WhatsApp, and why, F. answered: *"Yes, much closer, as I told you, we can perceive the reaction of the other and have a greater empathy or even disliking since we can feel better each other moods"*.

The use of self-verification was also cited in the interviews. For example, C. pointed out: *"I feel good when someone in the group shares something that has to do with my political views and my opinions in general"*. Also, concerning self-verification, C. believes that the sharing of external information within the group has the power to reinforce further the previously ingrained views: *"The tendency is always to reinforce the similar ideas already presented. You reinforce the same idea of a colleague, and he also reinforces yours. This ends*

up increasing your convictions on that topic". F. answered how did she felt when a colleague shared some information aligned with her convictions: *"I feel that there are other people who think like me, and this encourages me. I feel that I'm not alone. Nowadays, there is a great political and ideological division. Everything is divided, as the world was cut in half after the pandemic"*.

When asked if the group's environment stimulated her to disclose personal information, F. added: *"I'm kinda antisocial when using social media. For me, social media is to keep family-related subjects and share moments."* C. pointed out another reason to be less talkative in the group: *"Specifically in this group, there are people I have known for a long time, so shyness would not be a problem. Shyness is part of my personality, so if it was a group of unknown people, I would be more talkative via WhatsApp than personally."* He also concludes that the group's environment makes him more comfortable talking about personal matters. Still, C. adds: *"In a virtual environment, you speak to everyone at the same time and answer only to whom you want. Also, it does not need to be immediate"*.

4.3. ANALYSIS: IT IDENTITY DUE TO WHATSAPP USE AND POLARIZED BEHAVIOR

Regarding the question about whether the political discussions would be so heated if they were physically present, C. believes that he does not think so and explain why: *"I think they would probably be less intense. This is because we have forms of communication that current technology cannot reproduce and can lead to misinterpretations and completely change the meaning of the conversation. E.g., body language, look, intonation etc. So we can interpret anger, irony, calm, etc"*. In the same line, L. answered: *"When we meet physically, the discussions are way less heated. However, when interacting on WhatsApp, I tend to be more ironic"*. When asked why, she said: *"I think when we are talking face to face, we feel more inhibited and have more filters"*. R. went further and stated: *"perhaps, most of the discussions would not even exist if we were physically present"*. And she explains why:

... I believe, in general, that communication goes far beyond the simple act of writing a message. When you are talking face to face, the tone of voice, facial expressions, gestures, etc. they can change the interpretation of what is being said, and, in this way, the most heated discussions would not happen. (R.)

E. agrees to a certain extent with S. when she says: *"Because of the people involved. If they were in the physical world, the discussions would be more polite. I think radicalism and*

this willingness to speak at any cost would be a little more restrained". B., one of the participants with the highest emotional energy about WhatsApp was also one of the most involved in the political discussions (and mainly adopting self-enhancing to manifest his presentations), declared in the interview the following statement:

I can't opine much about this because I didn't participate in political discussions before these chat apps. My internet access was very restricted and was limited to studies. I was never part of webchats or anything like this. The way I debate, especially in politics, I admit to being very passionate, which is facilitated by not having face-to-face contact. I think that not having face-to-face contact, eye contact causes a certain inhibition of the exaltation of tempers (B.)

E. has a different position about this subject: *"I think the difference was that in those times you posted something and sometimes people would only answer in the next day. Also, it was less personal because the groups usually were composed of acquaintances and unknown individuals. Nowadays, you usually know people in the WhatsApp groups, which gives you greater freedom"*. S. extended Sandra's perception by tracing a parallel with the growth of online partisanship in the last decades: *"the filters we use in the physical world are much more efficient. For example, WhatsApp's features gave voice to many thoughtless people who would not be relevant two decades ago. It makes the way we communicate easy but democratizes ignorance, bad faith, and rudeness"*.

S. stated that he missed the conversations in the "analogic world" (in his words). Then, according to the participant, the discussions were much less heated, and people used to be more polite. Similarly, as C. T. pointed out: *"we knew just by how people were gazing us if we were being aggressive and could apologize right away"*. When asked why does he believe that, he said, *"In the case of our generation, perhaps because we were not raised using technologies such as WhatsApp but also as we lived in times that it was not the rule to confront people with different worldviews aggressively."*

T. declared: *"In these days, we have a much more intense discussion. Prior to WhatsApp, it was much less intense"* P. agrees with Vinicius's statement and draws a parallel with the times before social media advent.

Before social media, like WhatsApp, became popular, we used to be informed by television, radio, and newspaper. And we discussed more during meetings with friends, at the table, or in the classroom, depending on the context. It was not usually the discussion; for example, in family reunions, it was a punctual thing and not like nowadays when everything is so fast and so easy (P.)

Still, about this conversation, L. answered: *"in person, you have the intonation, you*

can see the others' expression, you have, the context. It helps control how people behave during discussions". F. answered: "I think at the end of the day, it gets more impersonal on WhatsApp than the face-to-face because sometimes you don't even come back to check what the other answered, or the discussions wear down among other messages or subjects. Also, sometimes the conversation gets lost due to asynchronicity. For example, E. said that she is precautious about giving her opinion because: "any opinion you write and cannot properly explain it can be misinterpreted by the side that thinks different from you" About the same question, F. answered: "Yes, sometimes I keep myself of issuing an opinion, sometimes even to be in good terms with the colleagues."

When asked about how a hypothetical absence of WhatsApp would entail for group participants routine interactions, C. replied: "WhatsApp is a great work tool because it allows an intense exchange of information which is relevant to that specific environment, dividing specific groups for each sector of work in which they interact. Other similar apps are equally useful. However, they hardly would allow the gathering of many people as WhatsApp does. That's why I think that using other similar apps could lead to loss of information and reduced time of interaction." P. pointed out the progressive connectedness brought by WhatsApp as one of the most perceived feelings about the application:

When I started to use WhatsApp, it was mainly a necessary tool that allowed me to communicate with the mothers of my kid's colleagues and sort out his school-related subjects. It was impersonal to contact the others of my son's classmates. It was a more impersonal thing. Nowadays, I feel that I have developed a relationship of greater dependence since I connect with people, I really like to share ideas and emotions. Even with people that I would never meet in person and that maybe I will never meet in person that I feel much more connected and friendly than maybe people who are in-person physically close to me (P.)

Still, about the adjectives presented during the interviews, C. stated that "there is a connection since there is a great deal of time spent in this media, besides it has a great utility in work and leisure. This is not because of the company or because of WhatsApp brand, but by the technology itself." B. highlighted the connectedness provided by WhatsApp. However, he was among the participants who showed the highest emotional energy about the platform. According to Carter's (2012) definition, it implies an emotional attachment and enthusiasm about IT.

When asked if WhatsApp elicited feelings of connectedness, P. answered: *I agree because it is a relatively simple tool. For example, my parents are almost 80 and manage to access and use it. Moreover, I hardly know people who do not have WhatsApp, so it allows me to connect with many people, family, friends and even with unknown people I share ideas and*

opinions". E. answered in the same line: *"I feel like I have a sense of connection with WhatsApp, I partially agree that there is a connection in relation to this technology"* B., who was among the participants who presented low relatedness about WhatsApp also pointed out connectedness as an essential factor for stimulating him to use this technology:

...Actually, I think I have established a connection (with WhatsApp) even by the course that my life has taken in recent years. With the social restrictions due to my work³⁷, I needed to avoid contact with people I have closer ties with. So I ended up using even more WhatsApp. I think I established a connection with technology; although I am not exactly a technology affectionate, this one, even for its simplicity, ended up gaining the importance gained (B.)

P. answered that using WhatsApp makes her feel energized, confident and excited and explained why:

The speed of information exchange brings me the confidence to engage in conversations as it reduces misinformation. The speed of this tool makes me feel excited, energized, and confident. For example, I used to sleep early, and sometimes I wake up at dawn and want to talk to someone, and when I see a person online, I think it's cool, I will have some laughs before starting the day (P.).

Carter and Grover's (2015, p.946) operational definition of relatedness is: "The extent to which an individual expresses feelings of connectedness when thinking about her- or himself in relation to an IT". It is important to note that the three participants with higher relatedness about WhatsApp declared to access the application ten times or more during the day. On the other hand, in the group of individuals with lower relatedness about WhatsApp, only one participant declared that they use WhatsApp ten times or more a day. L., despite showing higher relatedness about WhatsApp, did not use it very frequently. When asked how does she defines the way how she discusses politics in the group, she answered:

I'm shy, but I think I'm more talkative and ironic in the group because I already know people. Even in smaller groups, I feel better if I have more intimacy with the participants. I believe that whether in person or on WhatsApp, my personality tends to influence me. (L.)

In 2019, during a heated political discussion, L. showing parsimony, claimed to the other colleagues: *"Why don't we meet somewhere, grab a beer, and talk about this face to face? It would be much nicer. Here (in the WhatsApp group), most of the discussions go through a way that would never happen if we were talking face to face"*.

³⁷ B. is a physician and has been working in the COVID-19 forefront since the beginning of the pandemic.

The discussion about personal characteristics and how the individuals present themselves on WhatsApp was constantly mentioned in the interviews with the group's participants.³⁸ Therefore, it must be considered to inform the study's power of inferences correctly. Comparing the individuals' self-presentation strategies, S., who was higher in the three IT Identity dimensions, relies substantially on self-enhancement during group discussions. On the other hand, Q. and C., who were lower in emotional energy, were among the three participants who presented the highest scores in the IT dimensions, relatedness, and dependence. Q and C are more inclined to use self-verification to win the arguments during online interactions. The group with higher emotional energy about WhatsApp tended to use self-enhancement to construct their presentations.

This observation gives a clue about a possible path to understand the connection between the self-processes that individuals use during online self-presentation and the IT Identity dimensions. This relationship may be observed more clearly by analyzing participant N.'s percentage of the self-processes used during his presentation strategy. N, showed a percentage of 23,37% self-verification, 10% on self-enhancement, 9,29% on self-awareness, 1,43% on self-monitoring, and 15,07% on self-disclosure. N. presented the lowest means in the three IT Identity dimensions. For example, when comparing his percentage of manifestations counted as self-enhancement (10%) with the three participants who showed higher dependence and relatedness about WhatsApp, their percentage ranged from 30% to 49,53%.

Equally important, he showed more manifestations of self-awareness to develop his presentations. During a heated discussion, he declared to the other participants: *“If the goal is to reach social welfare, it doesn't matter if it will be achieved through the right or left. In the end, you'll come to the same place”*. N. was the only participant who answered that accessed WhatsApp five times daily.

T. did not show higher polarized online behavior as S. and B. Because of this, his online self-presentation strategy must be analyzed. While S. and B. tend to use self-enhancement during the group's discussions (respectively, 49,56%, 52, 3% of their manifestations), T. relies mainly on self-verification to stand for his arguments (42,93% of his manifestation). Furthermore, T. also demonstrates more evidence of self-disclosure and self-awareness (29,35% and 13, 59%) than S. (11,21% and 11, 21%) and B (15,07% and 9,29%). during group interactions.

To illustrate this rationale, when asked in the interview to think about how WhatsApp

³⁸ Cf. section 4.2

makes him feel related to three adjectives (confident, excited, and enthusiastic), S. answered: *“Yes, I feel confident. I consider myself a confident person. Although when I realize that I’m not always right about a certain theme, I may say that I feel it like a wake-up call. And it undermines my confidence for some time”*. S. showed the highest emotional energy about WhatsApp, which according to Carter and Grover’s (2015, p.246) operational definition is “The extent to which an individual expresses feelings of confidence, enthusiasm, and energy when thinking about her- or himself in relation to an IT”. With the caveat that, as S. declared, confidence is one of his characteristics, emotional energy about WhatsApp may be associated with a greater tendency to use self-enhancement when manifesting impressions. To illustrate this argument, when comparing S. with B., both participants have distinct personal characteristics (B. declared in the interviews that he is naturally shy, while S. declared to be an extrovert). However, they pair in emotional energy and how they tend to manifest impressions when discussing politics on the WhatsApp group. Therefore, notwithstanding their personal characteristics, it may indicate the influence of the high emotional energy about WhatsApp on adopting a more polarized online behavior. This finding opens space to explore in future studies the weight of feelings of emotional energy about WhatsApp on eliciting online polarization

Self-disclosure is a spontaneous cognitive process at which individuals present to others intimate aspects of their selves. In its turn, self-awareness allows individuals to understand and feel others' feelings and concerns (SCHLOSSER., 2020). In particular, when comparing T.'s self-presentation strategy with his colleagues, he avoids inserting into stereotypes by adopting a self-awareness behavior. Individuals with a tendency to present polarized behaviors are keen to repeat the same jargon of their politically-like mind group, follow similar online influencers, and share the same kind of news about their preferred party. Summing up, this is nothing more than inserting themselves into stereotypes.

5. CONCLUSION

This netnography sought to answer the following research question: Is IT identity developed due to the use of WhatsApp related to the polarized behavior during online interactions? The findings indicate that it may be partially correct. IT identity about WhatsApp, especially, a higher relatedness and dependence on this technology may be associated with increased polarized behaviors. In Baker and Chadwick's (2021) view, the myriad of radical movements spread through social media like QAnon, flat-earthers, Anti-Vaxxers, and cases such as Pizzagate, or, more recently, the COVID-19 conspiracy theories, result from individual

and contextual factors. They coined the term post-truth identities to define the personas these groups' members assumed and concluded that social media platforms became a fertile ground to let these individuals' cognitive biases run free. This last note may be partially corroborated by Khazraee and Novak's (2018) remark when they defend that social media platforms' characteristics stimulate collective identity development and groups mobilization around social causes.

Carter, Petter and Compeau (2019) presented a short paper defending the existence of the negative spectrum of IT Identity, named "anti-IT identity" (i.e., when individuals view the use of an IT artifact as the opposite of their "physical world" selves). In the field of social psychology, Stets and Mccaffree (2019) described how individuals use cognitive devices to disentangle their harmful behaviors from their self-identity.

This study's findings showed that the analysis of one of these individuals' factors, the process of IT identity development due to social media use (more specifically, how individuals present themselves during online interactions), can potentially contribute to understanding how online polarization occurs. Kozinets (2010) remarks that individuals perceive the groups and communities as if they were "physically" in the virtual environment. Ultimately, this enhanced perception may influence their behaviors in the virtual and physical worlds.

When people engage in impression management within virtual instances, they rely on intrinsic and extrinsic (technology characteristics) components (HOGAN, 2010). Concerning the latter, it is evidenced by individuals who shared the same side of the polarized discussion used to take information and news shared by their peers to reinforce their views. For example, Q. agreed with a previous statement of D., a colleague who was aligned with the following remark: "*there is no more democracy in Brazil in fact. The Supreme Court judges, censors, and executes without PGR's consent*³⁹. *They are above all the constituted powers in this country, as a theocracy*".

Putting the comment above in perspective with this answer of T. in one of the interviews in which he exposes his perceptions about how the political discussions were conducted before social media platforms as WhatsApp may give a hint about the role of social media on precipitating online polarization: t.

...I remember some discussions on Facebook. It became evident back there as, for example, in the election and reelection of Dilma. During these episodes, there were many discussions, mainly on Facebook. Then I stopped using this type of media for this kind of discussion. Back then, I remember seeing people that I didn't care about,

³⁹ PGR is the acronym for Procuradoria Geral da República and it is the Brazilian Attorney General's Office

who didn't mean so much to me, and wasn't on my list of friends, giving opinions about themes that made me wonder: who is this person? You know, people you do not have so much contact. For this reason, this type of media is no longer so attractive. Before that, I remember some discussions, yes, but were discussions much more face-to-face, much more personal, when we were having a beer or at a barbecue on the weekend. Finally, I think it reached fewer people. It would be more restricted to that circle of people you met, for example, over the weekend (T.)

The following sections present the theoretical and practical contributions, limitations, and future research suggestions.

5.1. THEORETICAL AND PRACTICAL CONTRIBUTIONS

A first theoretical contribution regards understanding the polarization process in social media platforms. Researchers like Dutton *et al.* (2017) defend that the deterministic influence of social media on political polarization and disinformation may be overestimated. Nevertheless, more recent research like Marks *et al.* (2019) found evidence that individuals' tendency to trust more in people's judgment aligned with their political discourse extends even outside the political sphere. This study shows that social media characteristics may be associated with how individuals present themselves on the platforms. Furthermore, how IT identity about WhatsApp indirectly enhances partisanship and polarized behavior.

Barrick and Mount (2000, p.19) observed that "job performance is not only a function of an individual's ability (i.e., what he or she can do); it is also a function of their motivation (i.e., what they will do)". Gupta, Jain and Tiwari (2021) investigated how the changes in peoples' way of life have progressively heightened the levels of online polarization in this particular moment that the world still suffers the consequences of the COVID-19 pandemic. The modern organizational environment combines physical, social, and virtual instances. Therefore, the way how individuals perceive themselves in recurrence of the use of technology can influence their identities (CARTER; PETTER; COMPEAU, 2019), reflecting on their behavior (PAN *et al.*, 2017) and in work performance (ALAHMAD *et al.*, 2018).

One possible path to understanding the influence of social media on these aspects is empirically analyzing individuals' levels of relatedness, emotional energy, and connectedness about their preferred social media platforms. Thus, IT identity dimensions may be "the canary in the coal mine" to detect users' potential to be susceptible to engaging in polarized behaviors. Furthermore, it may raise awareness about the need to reduce individuals' exposure to generic and low-quality content when navigating social media. In this manner, it could also avoid inserting people into toxic echo chambers while promoting a more "organic" engagement,

respecting individuals' inherent characteristics.

5.2. LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS

Given that individuals tend to present their true selves more frequently during virtual interactions than in the physical world (SCHLOSSER, 2020) and put this in perspective with the research findings, it may be inferred that harmful behaviors associated with social media use, such as polarization can be partially accounted by using the platforms. In this regard, IT identity developed due to the use of social media may be a catalyst to enable individuals to unleash their most inner demons, as Dr. Jekyll's serum in Robert Louis Stevenson's novel.

This research has limitations that will be presented to examine the study's power of inferences. First, the difference in the intimacy level with individuals reduced the capacity to extract more sensitive information during online conversations and physical meetings. Second, although the purpose of the present study was to evaluate a specific group that would fit in the sociodemographic profile pointed out by Ortellado, Solano, and Moretto (2016) as the most susceptible to engaging in polarized behaviors in Brazil⁴⁰, these study's findings may not consistent with other sociodemographic groups and cultures. Third, personal characteristics appeared (especially during the interviews) as a driver for stimulating the group's participants to engage in heated discussions and adopt polarized behaviors. Therefore, the relationship between IT identity about social media platforms and individuals' personalities and how it possibly induces polarized behavior may be explored in future research.

Another observation unraveled from triangulation of data (chat log, interviews, questionnaire) is the possible indication that frequency of using WhatsApp could be understood both as a determinant of IT identity as a consequence, for example, participant F. at the end of the interview, when asked if she wanted to declare any further information said: I use WhatsApp for because I need and not to spend time *“For me, it's more related to the work issues and transmission of information between people. So I do not spend much time in groups.”*

Given that this study focused on one specific type of identity (IT identity), it was opted not to include elements of personality in the analysis. It is suggested that future studies explore this gap to investigate the extent to which IT identity about social media platforms may be accounted for the responsibility for inducing polarized behavior in relation to individuals' personalities.

⁴⁰ Up to this point, this was the best estimation of the profile of the demographics of polarization in Brazil.

The XXI century worker is surrounded and embedded in several IT artifacts in their daily life. In this regard, researchers of an organizational research branch named "The New Ways of Working" (GERARDS; DE GRIP; BAUDEWIJNS, 2018) have been putting efforts into understanding how this "new" professional handles the organizational and technological transformations. Therefore, as a second research suggestion, the study of the relationship between the IT Identity about social media platforms and the New Ways of Working facets could provide additional knowledge about the effects of the construction of IT identity due to the use of this IT artifact on fostering working outcomes.

As a third future research suggestion, at this moment that a vast number of working classes are still working from home (WFH) and using more frequently social media, an investigation of how the IT identity developed due to the use of these platforms may be leading to the adoption of more extreme online positions, can also contribute to understanding their effects on the employees' social interaction with colleagues and managers.

REFERENCES

- ABOUZAHRA, Mohamed; YUAN, Yufei; TAN, Joseph PhD. The Role of Perceived Mobile Device Benefits and Emotional Attachment in Enhancing the Use of Mobile-Enabled Social Networks. SIGHCI 2014, 2014, January 1, 2014.
- ABRAMOVA, Olga *et al.* Understanding Self-Disclosure on Social Networking Sites - a Literature Review. AMCIS, 2017, Boston, MA, USA. AIS eLibrary, August 10.
- ALAHMAD, RASHA; ROBERT, LIONEL. Artificial Intelligence (AI) and IT Identity: Antecedents Identifying with AI Applications. AMCIS, 2020, Salt Lake City, Utah. August 12-16. p.13-15.
- ARON, Arthur; ARON, Elaine N; SMOLLAN, Danny. Inclusion of Other in the Self Scale and the Structure of Interpersonal Closeness. **Journal of personality and social psychology**, v. 63, n. 4, p. 596, 1992.
- ARON, Arthur; ARON, Elaine N. Self-Expansion Motivation and Including Other in the Self. *In:* (Ed.). **Handbook of Personal Relationships: Theory, Research and Interventions, 2nd Ed.** Hoboken, NJ, US: John Wiley & Sons Inc, 1997. p.251-270.
- ARON, Arthur *et al.* Including Others in the Self. **European review of social psychology**, v. 15, n. 1, p. 101-132, 2004.
- ARON, Arthur; NORMAN, Christina C.; ARON, Elaine N. The Self-Expansion Model and Motivation. **Representative Research in Social Psychology**, v. 22, p. 1-13, 1998.
- BAIL, Christopher A. *et al.* Exposure to Opposing Views on Social Media Can Increase Political Polarization. Proceedings of the National Academy of Sciences of United States of America, 2018, Washington, D.C., USA. p.9216-9221.
- BAJRACHARYA, SHRADDHA. **Defleur Model of Communication**. 2018. Available in: <https://www.businessstopia.net/communication/de-fleur-model-communication>. Accessed on: 20 Dec. 2021
- BARDIN, Laurence. **Análise de conteúdo**. Lisbon, Portugal: Edições 70, 2011.118p.
- BARRICK, Murray R.; MOUNT, Michael K. Select on Conscientiousness and Emotional Stability. *In:* LOCKE, E. A. (Ed.). **Handbook of Principles of Organizational**

- Behavior: Indispensable Knowledge for Evidence-Based Management.** Chippenham, Wiltshire, UK: Antony Rowe Ltd, v.15, 2000. p.28.
- BAUMEISTER, Roy F. A Self-Presentational View of Social Phenomena. **Psychological Bulletin**, v. 91, n. 1, p. 3-26, 1982.
- BAUMEISTER, ROY F.; HUTTON, DEBRA G. Self-Presentation Theory: Self-Construction and Audience Pleasing. *In*: MULLEN, B. e GOETHALS, G. R. (Ed.). **Theories of Group Behavior**. New York, NY: Springer New York, 1987. p.71-87.
- BAUMEISTER, Roy F.; HUTTON, Debra G.; TICE, Dianne M. Cognitive Processes During Deliberate Self-Presentation: How Self-Presenters Alter and Misinterpret the Behavior of Their Interaction Partners. **Journal of Experimental Social Psychology**, v. 25, n. 1, p. 59-78, 1989.
- BERNBURG, Jón Gunnar. Labeling Theory. *In*: KROHN, Marvin. D. *et al.* (Ed.). **Handbook on Crime and Deviance**. Cham: Springer International Publishing, 2019. cap. Chapter 10, p.179-196. (Handbooks of Sociology and Social Research).
- BERMAN, Ron; KATONA, Zsolt. Curation Algorithms and Filter Bubbles in Social Networks. **Marketing Science**, v. 39, n. 2, p. 296-316, 2020.
- BESSI, Alessandro. Personality Traits and Echo Chambers on Facebook. **Computers in Human Behavior**, v. 65, p. 319-324, 2016.
- BOBOK, DALIBOR. **Selective Exposure, Filter Bubbles and Echo Chambers on Facebook**. 2016. 83 Dissertation (Masters). Department of Political Science, Central European University, Budapest, Hungary.
- BOHLER, JEFF; DRAKE, JOHN RICHARD. Building Trust through Social Networking. AMCIS, 2017, Boston, MA, USA. August 10, 2017.
- BONNER, Ann; TOLHURST, Gerda. Insider-outsider perspectives of participant observation. **Nurse Researcher (through 2013)**, v. 9, n. 4, p. 7, 2002.
- BREEN, Lauren. The researcher'in the middle': Negotiating the insider/outsider dichotomy. **The Australian community psychologist**, v. 19, n. 1, p. 163-174, 2007.
- BRUNS, A.; HIGHFIELD, T.; BURGESS, J. The Arab Spring and Social Media Audiences: English and Arabic Twitter Users and Their Networks. **American Behavioral Scientist**, v. 57, n. 7, p. 871-898, 2013.
- BURKE, Peter J. The Self: Measurement Requirements from an Interactionist Perspective. **Social Psychology Quarterly**, v. 43, n. 1, p. 18-29, 1980.
- CARTER, Michelle. **Information Technology (It) Identity: A Conceptualization, Proposed Measures, and Research Agenda**. 2012. 291 Dissertation (PhD). Clemson University
- CARTER, Michelle; GROVER, Varun. Me. My Self, and I (T): Conceptualizing Information Technology Identity and Its Implications. **Management Information Systems Quarterly**, v. 39, n. 4, p. 931-957, Dec 2015.
- CARTER, Michelle; PETTER, Stacie; COMPEAU, Deborah. Identifying with IT in a Digital World. Fortieth International Conference on Information Systems, 2019, Munich, Germany.
- COLE, Nicky Lisa. **Goffman's Front Stage and Back Stage Behavior**. 2018. Available in: <https://www.thoughtco.com/goffmans-front-stage-and-back-stage-behavior-4087971>. Accessed on: Dec. 21, 2020.
- COSTA NETTO, Yves; MAÇADA, Antonio Carlos G. The Antecedents of It Identity Construction through Social Media Usage. XLIII Encontro da ANPAD - EnANPAD 2019, 2019a, São Paulo, Brazil. October 02-05.
- _____. The Influence of Social Media Filter Bubbles and Echo Chambers on IT Identity Construction. European Conference on Information Systems, 2019b, Stockholm & Uppsala, Sweden. aisel.aisnet.org. p.1-14.

- COSTELLO, Leesa; MCDERMOTT, Marie-Louise; WALLACE, Ruth. Netnography: Range of Practices, Misperceptions, and Missed Opportunities. **International Journal of Qualitative Methods**, v. 16, n. 1, p. 1609406917700647, 2017.
- COVINGTON, Martin V. The Role of Self-Processes in Applied Social-Psychology. **Journal for the Theory of Social Behaviour**, v. 15, n. 3, p. 355-389, Oct 1985.
- CRAIG, Kevin; THATCHER, Jason Bennett; GROVER, Varun. The IT Identity Threat: A Conceptual Definition and Operational Measure. **Journal of Management Information Systems**, v. 36, n. 1, p. 259-288, 2019.
- CRAMER, Emily M.; SONG, Hayeon; DRENT, Adam M. Social Comparison on Facebook: Motivation, Affective Consequences, Self-Esteem, and Facebook Fatigue. **Computers in Human Behavior**, v. 64, p. 739-746, 2016.
- CRESWELL, John W.; CLARK, Vicki L. Plano. **Designing and conducting mixed methods research**. 3.ed. Thousand Oaks, CA: Sage publications, 2018.
- CRESWELL, John W; CRESWELL, J David. **Research Design: Qualitative, Quantitative, and Mixed Methods Approaches**. 4. California, USA: Sage Publications, 2017.
- CROSSMAN, Ashley. *The Meaning and Purpose of the Dramaturgical Perspective*. 2019. Available in: <https://www.thoughtco.com/dramaturgical-perspective-definition-3026261>. Accessed on: Mar. 16, 2021.
- DAVIS, Mark H; FRANZOI, Stephen L. Private Self-Consciousness and Self-Disclosure. In: DERLAGA, V. J. e BERG, J. H. (Ed.). **Self-Disclosure Theory, Research, and Therapy**: Springer, 1987. p.59-79.
- DE-WIT, Lee; BRICK, Cameron; VAN DER LINDER, Sander. *Are Social Media Driving Political Polarization?* Jan. 16, 2019. Available in: https://greatergood.berkeley.edu/article/item/is_social_media_driving_political_polarization. Accessed on: Jan. 26, 2020.
- DEL VICARIO, Michela *et al.* Echo Chambers: Emotional Contagion and Group Polarization on Facebook. **Scientific Reports**, v. 6, p. 37825, Dec, 2016.
- DOAS, Michelle Dellaria. Increasing Self-Awareness When Posting on Social Media Sites. **Journal of Nursing Education and Practice**, v. 7, n. 8, p. 101, 2017.
- DUTTON, William. H. *et al.* The Internet and Access to Information About Politics: Searching through Filter Bubbles, Echo Chambers, and Disinformation. In: GRAHAM, M. e DUTTON, W. H. (Ed.). **Society and the Internet: How Networks of Information and Communication Are Changing Our Lives**. 2nd. Oxford, UK: Oxford University Press, 2019. cap. 13, p.228-247.
- DUTTON, William H. *et al.* *Social Shaping of the Politics of Internet Search and Networking: Moving Beyond Filter Bubbles, Echo Chambers, and Fake News*. SSRN Electronic Journal, Working Paper No. 2944191, 2017. Available in: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2944191. Accessed on: Dec. 21, 2020.
- DUVAL, Shelley; WICKLUND, Robert A. Effects of Objective Self-Awareness on Attribution of Causality. **Journal of Experimental Social Psychology**, v. 9, n. 1, p. 17-31, 1973.
- ELLISON, Nicole; HEINO, Rebecca; GIBBS, Jennifer. Managing Impressions Online: Self-Presentation Processes in the Online Dating Environment. **Journal of Computer-Mediated Communication**, v. 11, n. 2, p. 415-441, Jan 2006.
- ELO, Satu *et al.* Qualitative Content Analysis: A Focus on Trustworthiness. **SAGE Open**, v. 4, n. 1, p. 215824401452263, 2014.
- ESCHMANN, Rob *et al.* Bigger Than Sports: Identity Politics, Colin Kaepernick, and Concession Making in #Boycottnike. **Computers in Human Behavior**, v. 114, p. 106583, 2021.

- ESMAEILZADEH, Pouyan. How IT Identity Affects Individuals' Personal Health Devices (Phds) Use Behaviors? An Empirical Study. **Information & Management**, v. 58, p. 103313, 2020.
- ETTER, Michael *et al.* Measuring Organizational Legitimacy in Social Media: Assessing Citizens' Judgments with Sentiment Analysis. **Business & Society**, v. 57, n. 1, p. 60-97, Jan 2018.
- FACEBOOK. **Politically Like-Minded Friends**. 2019. Available in: <https://www.facebook.com/groups/708107066021944/>. Accessed on: Nov. 27, 2020.
- FENIGSTEIN, Allan; SCHEIER, Michael F; BUSS, Arnold H. Public and Private Self-Consciousness - Assessment and Theory. **Journal of Consulting and Clinical Psychology**, v. 43, n. 4, p. 522-527, 1975.
- FLAXMAN, Seth; GOEL, Sharad; RAO, Justin M. Filter Bubbles, Echo Chambers, and Online News Consumption. **Public opinion quarterly**, v. 80, n. S1, p. 298-320, 2016.
- FLICK, Uwe. **Introdução à pesquisa qualitativa**. 3. ed. Porto Alegre: Artmed editora, 2008.
- GAZZALEY, Adam; ROSEN, Larry D. **The Distracted Mind: Ancient Brains in a High-Tech World**. Cambridge, MA, USA: MIT Press, 2016.
- GELLER, Valerie; SHAVER, Phillip. Cognitive Consequences of Self-Awareness. **Journal of Experimental Social Psychology**, v. 12, n. 1, p. 99-108, 1976.
- GERARDS, Ruud; DE GRIP, Andries; BAUDEWIJNS, Claudia. Do New Ways of Working Increase Work Engagement? **Personnel Review**, 2018.
- GESCHKE, Daniel; LORENZ, Jan; HOLTZ, Peter. The Triple-Filter Bubble: Using Agent-Based Modelling to Test a Meta-Theoretical Framework for the Emergence of Filter Bubbles and Echo Chambers. **British Journal of Social Psychology**, v. 58, n. 1, p. 129-149, 2019.
- GIBBS, Jennifer; ELLISON, Nicole; HEINO, Rebecca. Self-Presentation in Online Personals: The Role of Anticipated Future Interaction, Self-Disclosure, and Perceived Success in Internet Dating. **Communication Research**, v. 33, n. 2, p. 152-177, Apr 2006.
- GLEN, Stephanie. **Homogeneity, Homogeneous Data & Homogeneous Sampling**. 2021. Available in: <https://www.statisticshowto.com/homogeneity-homogeneous/#>. Accessed on: Oct. 11, 2021
- GOERTZ, Gary. **Multimethod Research, Causal Mechanisms, and Case Studies**. Princeton University Press, 2017.
- GOFFMAN, Erving. **The Presentation of Self in Everyday Life**. Garden City, New York: Doubleday, 1959. 255p.
- GONG, Xiang; CHEN, Chongyang; LEE, Matthew K.O. What Drives Problematic Online Gaming? The Role of It Identity, Maladaptive Cognitions, and Maladaptive Emotions. **Computers in Human Behavior**, v. 110, n. 106386, p. 1-14, 2020.
- GUPTA, Samrat; JAIN, Gaurav; Tiwari, Amit Anand. Investigating the Dynamics of Polarization in Online Discourse During Covid-19 Pandemic. Conference on e-Business, e-Services and e-Society, 2021, Springer. p.704-709.
- HAKOBYAN, Zaruhi; KOULOVATIANOS, Christos. **Populism and Polarization in Social Media without Fake News: The Vicious Circle of Biases, Beliefs and Network Homophily**. Working Paper. Available in: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3435817 Accessed on: Oct. 13, 2021, 2019.
- HANSEN, Derek; SHNEIDERMAN, Ben; SMITH, Marc A. **Analyzing Social Media Networks with NodeXL: Insights from a Connected World**. Burlington, Massachusetts, USA: Morgan Kaufmann, 2010.
- HARTER, Susan. **The Construction of the Self: A Developmental Perspective**. New York, NY, USA: Guilford Press, 1999.

- HE, Qiwei *et al.* Predicting Self-Monitoring Skills Using Textual Posts on Facebook. **Computers in Human Behavior**, v. 33, p. 69-78, 2014.
- HELBING, Dirk *et al.* Will Democracy Survive Big Data and Artificial Intelligence? *In*: HELBING, D. (Ed.). **Towards Digital Enlightenment: Essays on the Dark and Light Sides of the Digital Revolution**. Cham, Switzerland: Springer, 2019. p.73-98.
- HOGAN, Bernie. The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online. **Bulletin of Science, Technology & Society**, v. 30, n. 6, p. 377-386, 2010.
- HOGG, Michael. A.; TERRY, Deborah. J. Social Identity and Self-Categorization Processes in Organizational Contexts. **Academy of Management Review**, v. 25, n. 1, p. 121-140, Jan 2000.
- HONG, Seoyeon *et al.* Do You Filter Who You Are?: Excessive Self-Presentation, Social Cues, and User Evaluations of Instagram Selfies. **Computers in Human Behavior**, v. 104, p. 106159, 2020.
- HONGLADAROM, Soraj. Personal Identity and the Self in the Online and Offline World. **Minds and Machines**, v. 21, n. 4, p. 533-548, Nov 2011.
- HONGLADAROM, SORAJ. **Online Self: Externalism, Friendship and Games**. 1. Switzerland: Springer International Publishing, 2016. 171.
- HOORENS, Vera. The Social Consequences of Self-Enhancement and Self-Protection. *In*: M., A. e C, S. (Ed.). **The Handbook of Self-Enhancement and Self-Protection**. New York, US: Guilford Publications, 2011. p.235-257.
- HUANG, Ronggui. **Package 'Rqda'**. 2018. Available in: <http://rqda.r-forge.r-project.org/>. Accessed on: May 14th, 2021.
- IPSOS. **Mundo Dividido**. 2018. Available in: <https://www.ipsos.com/pt-br/mundo-dividido>. Accessed on: Jan. 10, 2021.
- JAAKONMÄKI, Roope; MÜLLER, Oliver; VOM BROCKE, Jan. The Impact of Content, Context, and Creator on User Engagement in Social Media Marketing. Hawaii International Conference on System Sciences, 2017, Hawaii, USA. January 4.
- JIANG, L. Crystal.; BAZAROVA, Natalie. N.; HANCOCK, Jeffrey. T. The Disclosure-Intimacy Link in Computer-Mediated Communication: An Attributional Extension of the Hyperpersonal Model. **Human Communication Research**, v. 37, n. 1, p. 58-77, Jan 2011.
- JOHNSON, John. The 'Self-Disclosure' and 'Self-Presentation' Views of Item Response Dynamics and Personality Scale Validity. **Journal of Personality and Social Psychology**, v. 40, p. 761-769, 1981.
- JOHNSON, Vess. Member Retention in Social Networking Sites. AMCIS 2012, Seattle, USA, July 29, 2012.
- JIANG, Shaohai; NGIEN, Annabel. The Effects of Instagram Use, Social Comparison, and Self-Esteem on Social Anxiety: A Survey Study in Singapore. **Social Media+ Society**, v. 6, n. 2, p. 2056305120912488, Apr 2020.
- JUDGE, Timothy A; EREZ, Amir. Interaction and Intersection: The Constellation of Emotional Stability and Extraversion in Predicting Performance. **Personnel Psychology**, v. 60, n. 3, p. 573-596, 2007.
- KASHIAN, Nicole *et al.* Self-Disclosure and Liking in Computer-Mediated Communication. **Computers in Human Behavior**, v. 71, p. 275-283, 2017.
- KHAZRAEE, Emad; NOVAK, Alison N. Digitally Mediated Protest: Social Media Affordances for Collective Identity Construction. **Social Media + Society**, v. 4, n. 1, Mar 19 2018.
- KIM, Ji Won. Online Incivility in Comment Boards: Partisanship Matters - but What I Think Matters More. **Computers in Human Behavior**, v. 85, p. 405-412, 2018.

- KIM, Yonghwan. Does Disagreement Mitigate Polarization? How Selective Exposure and Disagreement Affect Political Polarization. **Journalism & Mass Communication Quarterly**, v. 92, n. 4, p. 915-937, 2015.
- KOOHIKAMALI, Mehrdad; KIM, Dan. Factors Influencing Emotional Attachment to Social Network Apps. **AMCIS 2016 Proceedings**, August 11, 2016.
- KOZINETS, Robert. Netnography 2.0. In: BEK, R. W. (Ed.). **Handbook of Qualitative Research Methods in Marketing**. Northampton, Massachusetts, USA: Edward Elgar Publishing Limited, 2006. p.129-142.
- _____. **Netnography: Doing Ethnographic Research Online**. Cornwall, UK: Sage, 2010.
- _____. Management Netnography: Axiological and Methodological Developments in Online Cultural Business Research. In: CASSEL, Catherine; CUNLIFFE, Ann L.; GRANDY, Gina. (Ed.). **The Sage Handbook of Qualitative Business and Management Research Methods**. London, United Kingdom: Sage Publications Limited, 2015.
- _____. **Netnography: The Essential Guide to Qualitative Social Media Research**. London, United Kingdom: Sage Publications Limited, 2019.
- KOZINETS, Robert V; GAMBETTI, Rossella. **Netnography Unlimited: Understanding Technoculture Using Qualitative Social Media Research**. New York, NY: Routledge, 2021. 325p.
- KRAUS, Michael W.; CHEN, Serena. Relational Self-Verification through Self-Presentation: Implications for Perceptions of One's Honesty and Authenticity. **Self and Identity**, v. 13, n. 1, p. 45-57, 2012.
- LAAJAJ, Rachid *et al.* Challenges to Capture the Big Five Personality Traits in Non-Weird Populations. **Science advances**, v. 5, n. 7, p. eaaw5226, 2019.
- LATIF, KASHMALA *et al.* Social Comparison as a Double-Edged Sword on Social Media: The Role of Envy Type and Online Social Identity. **Telematics and Informatics**, v. 56, p. 101470, 2021.
- LEARY, Mark R. **Self-Presentation: Impression Management and Interpersonal Behavior**. Madison, WI, USA: Brown & Benchmark Publishers, 1995. xv, 246-xv, 246.
- LEE, Richard M.; ROBBINS, Steven B. The Relationship between Social Connectedness and Anxiety, Self-Esteem, and Social Identity. **Journal of Counseling Psychology**, v. 45, n. 3, p. 338-345, Jul 1998.
- LEVINSON, Nanette; COGBURN, Derrick L; VODANOVICH, Shahper. Introduction to the Minitrack on Social Media: Culture, Identity, and Inclusion. Hawaii International Conference on System Sciences, 2018, Hawaii, USA. IEEE. p.2202.
- LIN, Xialing; SPENCE, Patric R. Identity on Social Networks as a Cue: Identity, Retweets, and Credibility. **Communication Studies**, v. 69, n. 5, p. 461-482, 2018.
- LINCOLN, Yvonna S; GUBA, Egon G. **Naturalistic Inquiry**. Thousand Oaks, CA: Sage Publications, 1985. 416p.
- LOUNSBURY, John W. et al. Identity and personality: The big five and narrow personality traits in relation to sense of identity. **Identity: An International Journal of Theory and Research**, v. 7, n. 1, p. 51-70, 2007.
- MACHADO, Jorge; MISKOLCI, Richard. Das Jornadas de junho à cruzada moral: o papel das redes sociais na polarização política brasileira. **Sociologia & Antropologia**, v. 9, p. 945-970, 2019.
- MARKS, Joseph *et al.* Epistemic Spillovers: Learning Others' Political Views Reduces the Ability to Assess and Use Their Expertise in Nonpolitical Domains. **Cognition**, v. 188, p. 74-84, 2019.
- MARKUS, Hazel. Self-Schemata and Processing Information About the Self. **Journal of personality and social psychology**, v. 35, n. 2, p. 63, 1977.

- MARSDEN, Peter V; CAMPBELL, Karen E. Measuring Tie Strength. **Social forces**, v. 63, n. 2, p. 482-501, 1984.
- MARSH, Herb; XU, Man; MARTIN, Andrew. Self-Concept: A Synergy of Theory, Method, and Application. *In*: HARRIS, G. e URDAN (Ed.). **Apa Educational Psychology Handbook, Vol. 1. Theories, Constructs, and Critical Issues**. Washington, DC, USA: American Psychological Association, 2012. p.427-458.
- MARSHALL, Martin N. Sampling for qualitative research. **Family practice**, v. 13, n. 6, p. 522-526, 1996.
- MATTHEWS, Gerald. Personality and Information Processing: A Cognitive-Adaptive Theory. **Handbook of personality theory and assessment**, v. 1, p. 56-79, 2008.
- MESSINGSCHLAGER, Tanja; HOLTZ, Peter. Filter Bubbles Und Echo Chambers. *In*: APPEL, M. (Ed.). **Die Psychologie Des Postfaktischen: Über Fake News, „Lügenpresse“, Clickbait & Co..** . Berlin, Heldeliberger: Springer, 2019. p.91-102.
- MORAIS, Greicille M; SANTOS, Valdeci F; GONÇALVES, Carlos A. Netnography: Origins, Foundations, Evolution and Axiological and Methodological Developments and Trends. **The Qualitative Report**, v. 25, n. 2, p. 441-455, 2020.
- MORIN, Alain; RACY, Famira. Dynamic Self-Processes. *In*: RAUTHMANN, John (Ed.). **Handbook of Personality Dynamics and Processes**. Amsterdam, Netherlands: Elsevier, 2018.
- MOSKALENKO, Sophia; MCCAULEY, Clark. Qanon: Radical Opinion Versus Radical Action. **Perspectives on Terrorism**, v. 15, n. 2, 2021.
- NADKARNI, Ashwini.; HOFMANN, Stefan. Why Do People Use Facebook? **Personality and Individual Differences**, v. 52, n. 3, p. 243-249, 2012.
- NOWELL, Lorelli S. et al. Thematic analysis: Striving to meet the trustworthiness criteria. **International journal of qualitative methods**, v. 16, n. 1, p. 1609406917733847, 2017.
- ORTELLADO, Pablo; SOLANO, Esther; MORETTO, Marcio. Uma Sociedade Polarizada? *In*: Jinkings I, Doria K and Cleto M (eds) **Por Que Gritamos Golpe? Para Entender o Impeachment e a Crise Política No Brasil**. São Paulo: Boitempo, 2016, 194 p.
- OSGOOD, Charles Egerton *et al.* **Cross-Cultural Universals of Affective Meaning**. University of Illinois Press, 1975.
- OSGOOD, Charles Egerton; SUCI, George J; TANNENBAUM, Percy H. **The Measurement of Meaning**. University of Illinois Press, 1957.
- PAN, Zhao *et al.* Who Do You Think You Are? Common and Differential Effects of Social Self-Identity on Social Media Usage. **Journal of Management Information Systems**, v. 34, n. 1, p. 71-101, 2017.
- PATTON, Michael Quinn. **Qualitative research & evaluation methods: Integrating theory and practice**. 3.ed. Thousand Oaks, CA: Sage publications, 2015.
- PAULHUS, Delroy. L. Interpersonal and Intrapsychic Adaptiveness of Trait Self-Enhancement: A Mixed Blessing? **Journal of personality and social psychology**, v. 74, n. 5, p. 1197-208, May 1998.
- PEDERSEN, Mina Young. **Polarization and Echo Chambers: A Logical Analysis of Balance and Triadic Closure in Social Networks**. 2019. 70 (MSc). Institute for Logic, Language and Computation, Universiteit van Amsterdam, Amsterdam, NL.
- QUATTROCIOCCI, Walter; SCALA, Antonio; SUNSTEIN, Cass R. **Echo Chambers on Facebook**. SSRN Electronic Journal June 13, 2016. Available in: <https://ssrn.com/abstract=2795110>. Accessed on: Sep. 23, 2021.
- RAHMAN, Zoha *et al.* Mediating Impact of Fan-Page Engagement on Social Media Connectedness and Followers Purchase Intention. **Online Information Review**, v. 42, n. 7, p. 1082-1105, 2018.
- REPORT, Digital. **Global Digital Report 2019**. 2019. Available in:

- <https://wearesocial.com/global-digital-report-2019>. Accessed on: Jan. 21, 2021.
- RIDING, Richard J. On the Nature of Cognitive Style. **Educational psychology**, v. 17, n. 1-2, p. 29-49, 1997.
- ROBERTS, Brent W *et al.* A Systematic Review of Personality Trait Change through Intervention. **Psychological Bulletin**, v. 143, n. 2, p. 117, 2017.
- ROBINSON, Laura. The Cyberself: The Self-Ing Project Goes Online, Symbolic Interaction in the Digital Age. **New Media & Society**, v. 9, n. 1, p. 93-110, 2016.
- RODGERS, Beth L.; COWLES, Kathleen V. The Qualitative Research Audit Trail: A Complex Collection of Documentation. **Research in Nursing & Health**, v. 16, n. 3, p. 219-226, 1993.
- ROGERS, Carl M; SMITH, Monte D; COLEMAN, J Michael. Social Comparison in the Classroom: The Relationship between Academic Achievement and Self-Concept. **Journal of Educational Psychology**, v. 70, n. 1, p. 50-57, 1978.
- ROGERS, Carl Ransom. A Theory of Therapy, Personality, and Interpersonal Relationships: As Developed in the Client-Centered Framework. *In*: KOCH, S. (Ed.). **Psychology: A Study of a Science Study I. Conceptual and Systematic Volume 3: Formulations of the Person and the Social Context**. New York, USA: McGraw-Hill New York, v.3, 1959. p.184-256.
- SALDAÑA, Johnny. **The Coding Manual for Qualitative Researchers**.2.ed. Thousand Oaks, CA: Sage Publications, 2013. 329p.
- SCHLOSSER, Ann E. Self-Disclosure Versus Self-Presentation on Social Media. **Current Opinion in Psychology**, v. 31, p. 1-6, 2020.
- SCHULTZE, Ulrike; BROOKS, Jo Ann M. An Interactional View of Social Presence: Making the Virtual Other “Real”. **Information Systems Journal**, v. 29, n. 3, p. 707-737, May 2019.
- SEIDMAN, Gwendolyn. Self-Presentation and Belonging on Facebook: How Personality Influences Social Media Use and Motivations. **Personality and Individual Differences**, v. 54, n. 3, p. 402-407, 2013.
- SEYLE, D. Conor; SWANN, William B. Being Oneself in the Workplace: Self-Verification and Identity in Organizational Contexts. *In*: BARTEL, Caroline. A.; BLADER, Steven; WRZESNIEWSKI, Amy (Ed.). **Identity and the Modern Organization**. New York, NY, USA: Psychology Press, 2007. p.201-222.
- SHAVELSON, Richard J.; HUBNER, Judith J.; STANTON, George C. Self-Concept: Validation of Construct Interpretations. **Review of Educational Research**, v. 46, n. 3, p. 407-441, 1976.
- SIMON, Bernd; MUMMENDEY, Amélie. Perceptions of Relative Group Size and Group Homogeneity: We Are the Majority and They Are All the Same. **European Journal of Social Psychology**, v. 20, n. 4, p. 351-356, 1990.
- ŠLERKA, Josef; ŠISLER, Vít. Who Is Shaping Your Agenda? Social Network Analysis of Anti-Islam and Anti-Immigration Movement Audiences on Czech Facebook. *In*: STEINER, Kristian.; ÖNNERFORS, Andreas. (Ed.). **Expressions of Radicalization: Global Politics, Processes and Practices**. Cham: Springer International Publishing, 2018. p.61-85.
- SNYDER, Mark. Self-Monitoring of Expressive Behavior. **Journal of Personality and Social Psychology**, v. 30, n. 4, p. 526-537, 1974.
- _____. **Public Appearances, Private Realities: The Psychology of Self-Monitoring**. New York, NY, US: W H Freeman/Times Books/ Henry Holt & Co, 1987. 266p.
- SPOHR, Dominic. Fake News and Ideological Polarization: Filter Bubbles and Selective Exposure on Social Media. **Business Information Review**, v. 34, n. 3, p. 150-160, 2017.
- STATISTA. **Most Popular Global Mobile Messenger Apps as of October 2019, Based on**

- Number of Monthly Active Users*. 2019. Available in: <https://www.statista.com/statistics/258749/most-popular-global-mobile-messenger-apps/>. Accessed on: Nov. 28, 2020.
- _____. *Brazil: Frequency of WhatsApp Use 2019*. 2020. Available in: <https://www.statista.com/statistics/1076956/brazil-frequency-whatsapp-usage/>. Accessed on: Jan. 17, 2020.
- STETS, Jan; BURKE, Peter. A Sociological Approach to Self and Identity. *In*: LEARY, Mark. e TANGNEY, June P.. (Ed.). **Handbook of Self and Identity**. New York, USA.: Guilford Press, 2003. p.128-152.
- STETS, Jan; MCCAFFREE, Kevin. The Moral Identity and Immoral Behavior. *In*: STETS, J. E. e SERPE, R. T. (Ed.). **Identities in Everyday Life**. Oxford, England, UK: Oxford University Press Inc, 2019. p.137-166.
- STEVENSON, Robert Louis. **The Strange Case of Dr. Jekyll and Mr. Hyde**. London, UK: Longmans, Green. and Co, 1886.
- SWANN, William B.; STEIN-SEROUSSI, Alan; GIESLER, R. Brian. Why People Self-Verify. **Journal of Personality and Social Psychology**, v. 62, n. 3, p. 392-401, 1992.
- SWANN, William B. To Be Adored or to Be Known? The Interplay of Self-Enhancement and Self-Verification. *In*: SORRENTINO, Richard. M; HIGGINS, E. Tory (Ed.). **Handbook of Motivation and Cognition: Foundations of Social Behavior, Vol. 2**. 1. New York, NY, USA: Guilford Press, 1990. p.408-448.
- THE CONVERSATION. *Mapping Brazil's Political Polarization Online*. 2018. Available in: <https://theconversation.com/mapping-brazils-political-polarization-online-96434>. Accessed on: Jan. 28, 2020.
- TYLER, James M.; KEARNS, Peter O.; MCINTYRE, Miranda M. Effects of Self-Monitoring on Processing of Self-Presentation Information. **Social Psychology**, v. 47, n. 3, p. 174-178, May 2016.
- UNLUER, Sema. Being an Insider Researcher While Conducting Case Study Research. **Qualitative Report**, v. 17, p. 58, 2012.
- VENKATESH, Viswanath; BROWN, Susan; BALA, Hillol. Bridging the Qualitative-Quantitative Divide: Guidelines for Conducting Mixed Methods Research in Information Systems. **MIS quarterly**, v. 37, n. 1, p. 21-54, Mar 2013.
- VINNEY, Cynthia. *What Is Self-Concept in Psychology?* , 2018. Available in: <http://thoughtco.com/self-concept-psychology-4176368>. Accessed on: Dec. 20, 2020.
- WALTHER, Joseph B. Computer-Mediated Communication. **Communication Research**, v. 23, n. 1, p. 3-43, Mar. 2016.
- WAN, Jinlin; WU, Tailai; LU, Yaobin. How Selfies Change the Effect of Product Endorsers in Social Media: The Role of Self-Disclosure and Social Interactivity. *In*: AIS, PACIS, 2015, Singapore. Jan. p.91.
- WANG, Shuting. A.; PANG, Min-Seok.; PAVLOU, Paul. A. Cure or Poison? Impact of Identity Verification on the Creation of Fake Posts on Social Media. ICIS 2017, 2018, Seoul, South Korea. December 10th-13th.
- WANG, Tien *et al.* Antecedents of Emotional Attachment of Social Media Users. **The Service Industries Journal**, v. 36, n. 9-10, p. 438-451, 2016.
- WANG, Yen-Yao; WANG, Tawei; CALANTONE, Roger. **Momentum in Social Media and Offline Car Sales after Automobile Recalls**. Proceedings of ICIS 2016, Dublin, Ireland, 2016.
- WATTENBERG, Martin; VIÉGAS, Fernanda B. The word tree, an interactive visual concordance. **IEEE transactions on visualization and computer graphics**, v. 14, n. 6, p. 1221-1228, 2008.
- WEHRLE, Katja; FASBENDER, Ulrike. Self-Concept. *In*: ZEIGLER-HILL, Virgil;

- SHACKELFORD, Todd K. (Ed.). **Encyclopedia of Personality and Individual Differences**. Cham, Switzerland: Springer, 2018. p.1-5.
- WHITLEY, Edgar A.; GAL, Uri; KJAERGAARD, Annemette. Who Do You Think You Are? A Review of the Complex Interplay between Information Systems, Identification and Identity. **European Journal of Information Systems**, v. 23, n. 1, p. 17-35, 2014.
- WINTER, STEPHAN *et al.* Another Brick in the Facebook Wall—How Personality Traits Relate to the Content of Status Updates. **Computers in Human Behavior**, v. 34, p. 194-202, May 2014.
- WOLFSFELD, Gadi; SEGEV, Elad; SHEAFER, Tamir. Social Media and the Arab Spring: Politics Comes First. **The International Journal of Press/Politics**, v. 18, n. 2, p. 115-137, Apr 2013.
- WOLLEBÆK, Dag *et al.* Anger, Fear, and Echo Chambers: The Emotional Basis for Online Behavior. **Social Media + Society**, v. 5, n. 2, p. 1-14, 2019.
- YANG, Chia-Chen; HOLDEN, Sean M.; CARTER, Mollie D. K. Social Media Social Comparison of Ability (but Not Opinion) Predicts Lower Identity Clarity: Identity Processing Style as a Mediator. **Journal of Youth and Adolescence**, v. 47, n. 10, p. 2114-2128, Oct 2018.
- YIN, Chunxiao; ZHANG, Xiaofei; LIU, Libo. Reposting Negative Information on Microblogs: Do Personality Traits Matter? **Information Processing & Management**, v. 57, n. 1, p. 102106, Jan. 2020.
- YU, Xianqi *et al.* Modeling User Intrinsic Characteristic on Social Media for Identity Linkage. **ACM Transactions on Social Computing**, v. 1, n. 3, p. 39-50, 2018.
- ZYWICA, Jolene; DANOWSKI, James. The Faces of Facebookers: Investigating Social Enhancement and Social Compensation Hypotheses; Predicting Facebook™ and Offline Popularity from Sociability and Self-Esteem and Mapping the Meanings of Popularity with Semantic Networks. **Journal of Computer-Mediated Communication**, v. 14, n. 1, p. 1-34, 2008.

5 PAPER 3: THE INFLUENCE OF IT IDENTITY DUE TO SOCIAL MEDIA USE ON COMPUTER-BASED OFFICE WORK DURING THE COVID-19 PANDEMIC

At the beginning of 2020, when the World Health Organization (WHO) declared the COVID-19 pandemic, organizations were forced to adopt the home office regimen extensively to ensure employees' safety while they deliver task outcomes. While employees acquired improved autonomy to make their schedule, they needed to depend more critically on the technology to deliver working outcomes remotely. The New Ways of Working is a thriving organizational study branch that investigates distinct aspects of the work environment such as the physical space, work relationships, the use of technology, and the balance between work and life. Adopting the duality theory lens and through Partial Least Squares (PLS) structural equation modeling analysis, this study sought to assess the impact of IT identity (acquired due to the use of social media) for the computer-based office workers on delivering work outcomes during the COVID-19 pandemic. Therefore, the relationship between the IT identity dimensions and four NWW facets was measured. Data was collected through an online survey. It was obtained 139 valid answers. Seven hypotheses were confirmed. Results indicate that relatedness about social media platforms is positively related to access to colleagues and organizational knowledge. On the other hand, dependence on social media is negatively related to flexibility in working relations, which brings employees difficulties to keep the balance between work and personal lives. Furthermore, the difference between the three pairs of categorical variables was evaluated, and the results were discussed. Among the findings, it was verified that feelings of enthusiasm about using social media (relatedness) could counterbalance the adverse effects of social media dependence to foster a greater adjustment in personal and professional life. These findings may indicate that the role of social media in the organizational environment should be better assessed and explored because the hybrid model of working is becoming prominent since the surge of COVID-19. Therefore, NWW facets and their relationships may be understood in view of social media use, and one of these possible paths is to understand the impact of IT identity due to the use of this technology.

Keywords: IT Identity, Social Media, New Ways of Working, COVID-19, Home Office, Duality Theory

1. INTRODUCTION

In the current scenario where the pandemic caused by the SARS-CoV2 virus is still in course, organizations worldwide have needed to adapt to this new setting quickly (PWC, 2021). Given this new reality, since the escalation of the COVID-19 worldwide, the home office regimen has been vastly adopted (JOHNSON, 2020), shifting designated working spaces to the employees' home environment (GERARDS; DE GRIP; WEUSTINK, 2020).

In this context, running alongside the popularization of the Internet, digital technology revolutionized how people work, reducing the need for synchronous communication and employees in-company allocation (KINGMA, 2019). Inasmuch became apparent the need to modernize the work settings to accompany the IT communication advance (BLOK; VAN DER MEULEN; DHONDT, 2016; LEEDE, 2016). The New Ways of Working (NWW) emerged in response to this call and comprised aspects ranging from organizational knowledge to the employees' work-life balance (GERARDS; DE GRIP; WEUSTINK, 2020).

One of these revolutionary internet-based communication technologies, social media, got steam due to the advances in specific features as Web 2.0 and originated what was termed by the internet evangelist Tim O'Reilly as "internet as a platform" (O'REILLY, 2005). This critical step allowed the development of companies like Facebook and Twitter, which services are ubiquitous around the globe (KAPLAN; MAZUREK, 2018; KASPERIUNIENE; ZYDZIUNAITE, 2019). As a result, the intense interaction and content generation allowed by these platforms, in the long run, have been carrying consequences to the development of people's self-concept and identities (COSTA NETTO; MAÇADA, 2019A; ESMAEILZADEH, 2021).

In diverse knowledge areas, researchers resort to IT identity - a specific technology-oriented type of identity proposed by Carter (2012) - to understand how individuals' identification with IT artifacts influences the behaviors they adopt in their daily lives (ALAHMAD; ROBERT, 2020; ESMAEILZADEH, 2021; MOSAFER; SARABADANI, 2021). The identity development process in social media occurs regularly both in external and internal instances insofar as users navigate in and out of virtual and physical social structures (HOGAN, 2010).

Correspondingly, the IT identity acquired due to the use of social media platforms may pose, at the same time, adverse as beneficial advantages to improve organizational results since the use of social media - for hedonic or professional motivation - is associated with positive and negative consequences for individuals' behavior and organizational performance (BAKER, 2019). Therefore, this study aims to assess the impact of IT identity (acquired due to the use of

social media) for the computer-based office workers on delivering work outcomes during the COVID-19 pandemic.

2. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

2.1. THE NEW WAYS OF WORKING IN PANDEMIC TIMES

The New Ways of Working (NWW) emerged parallel with the revolution of personal computers in the workplace (HENDRICKX, 2018; ZIENKOWSKI *et al.*, 2019). Authors as Peters, Kraan and Echtelt (2013) observed that NWW was initially conceptualized as a combination of three main aspects: “access to teleworking,” “job autonomy,” and “output management “. Diversely, Slagter (2011) argues that NWW consists of (i) time and independent work location, (ii) independent production management, (iii) access to organizational knowledge, and (iv) flexible work relationships. More recently, Gerards, De Grip and Baudewijns (2018), based on Van Heck (2010), Graham (2004), and Halford (2005), emphasized the need to address the role of the physical work environment on the studies of NWW. In view of that, they proposed that a “freely accessible open workplace” should also be investigated as an NWW facet. Table 19 shows Duque *et al.*’s (2020) compilation of the NWW facets.

Table 19 - The New Ways of Working Facets

NWW Facets	Definitions	Author(s)/ Year
Time and location-independent work	The execution of work outside the physical environment of the organization and at alternative times	Slagter (2011); Zienkowski <i>et al.</i> (2019)
Management of output	Employees’ flexibility to define the form and pace of delivery work demands	Slagter (2011); Hendrickx (2018); Jemine, Dubois and Pichault (2018)
Access to organizational knowledge	The employee has greater access to the information necessary to perform their functions and the ability to interact with colleagues and managers	Ruostela <i>et al.</i> (2015); Eskola (2017); Palvalin (2019)
Access to the colleagues		
Flexibility in working relations	Employee's freedom to adjust work functions with those of their personal life	Loi (2003); Blok <i>et al.</i> (2012); Zienkowski <i>et al.</i> (2018)
Freely accessible open workplace	Permission for employees to frequent workplaces and perform their functions at different times	Hill (2009); Canepa (2011); Stolwijk (2015); Bos (2016)

Source: Duque *et al.* (2020, p.2)

The first three facets relate to the home office. Several studies investigate the relationship between these facets and social interaction. More specifically, those that focus on

remote work emphasize its positive effects in providing faster and more efficient communication (TEN BRUMMELHUIS *et al.*, 2012; TER HOEVEN; VAN ZOONEN, 2015) and improving the relationship between employees and managers (GOLDEN, 2006; GAJENDRAN; HARRISON, 2007). The fourth and fifth facets involve the relationship of employees' internal aspects and the physical work environment. Concerning the fourth NWW facet, flexibility in working relations, Branine (2003) and Kossek and Lee (2008) defend that, combined with reduced workload (or part-time work), it assists in improving the relationship among co-workers.

In 2020, with the outbreak of the Sars-CoV-2 virus, to ensure people's safety while they continue to deliver work outcomes, organizations worldwide were forced to rapidly change their working settings - from their physical environment to remote working (WUERSCH; NEHER, 2020). At this moment, when the employees acquired improved autonomy to work remotely, the successful adoption of specific NWW facets as "management of output" and "access to organizational knowledge" has been more critical when compared with the pre-pandemic period (GERARDS; VAN WETTEN; VAN SAMBEEK, 2020). Concerning the third facet, "flexibility in working relations," related studies about the theme during the pandemic have shown evidence of the adverse consequences for the work-life balance due to the consequences of the prolonged period of working remotely (STALLER; RANDLER, 2021).

The sudden change in the physical environment brought many positives and adverse outcomes to the employees and organizations (KNIFFIN *et al.*, 2021). For instance, it has encouraged the enhanced use of IT resources to perform job functions and informal communication (PIRES; MELO; RODRIGUES, 2020). However, since the popularization of mobile technology and the advancement of internet communication, the line between work and personal life has been progressively more indistinguishable. Given the arguments presented in this section, the first three hypotheses are proposed. Formally stated,

H1: The access to colleagues positively influences the computer-based office workers in managing the work output.

H2: The access to organizational knowledge positively influences the computer-based office workers in managing the work output.

H3: The flexibility in working relations positively influences the computer-based office workers in managing the work output.

The consequences of the COVID-19 pandemic to computer-based workers compromised the work-life balance even more as they started to depend more on digital tools at home to continue delivering work outcomes (COOK; RUDNICKA; NEWBOLD, 2021). A massive number of companies worldwide are adopting the hybrid model of work as standard, even after the end of the pandemic. For this reason, negative outcomes for employees' health, such as burnout and depression, are also being considered when discussing the future of corporative work (ESTRADA, 2021).

The social distancing between the workforce and managers has posed a great challenge for essential aspects, such as the lack of social interaction (KNIFFIN *et al.*, 2021). For instance, in a recent study, Yang *et al.* (2021) found a decline in synchronous communication while asynchronous communication became prevalent. As a result, they also noted that the bridge between collaboration networks had been weakened due to the extensive adoption of remote work.

In this respect, the need for workers to have greater autonomy in managing how they deliver work outcomes is growing in importance [e.g., PWC, (2021); Yang *et al.* (2021)]. However, for this to be possible, access to information must be provided by organizations, either through solutions such as VPNs or the provision of personal computers and communication devices. This measure becomes even more critical while communication between colleagues and work teams has been made possible through communication software such as Skype, Zoom, Teams, and others (KLOSOWSKI, 2021). In the context of IT use, selective interaction implies that individuals will actively seek out opportunities to interact with IT that they view as integral to their self (CARTER; GROVER, 2015, p.946).

Working collaboratively and prompt access to information are two of the main advantages when employees can meet physically in conference rooms and filing cabinets (NEWPORT, 2021). In this vein, the extensive adoption of home office regimens due to the pandemic has been constantly pointed to weaken the collaborative work and elicit work-life conflict (KNIFFIN *et al.*, 2021).

Nevertheless, authors such as Van Zoonen, Sivunen and Rice (2020) investigated the effects of communicating through smartphones to execute work tasks and family demands. They found that work-life conflict was only associated with the communication between employees and supervisors about family-related needs. In view of the arguments mentioned above, hypotheses 4, 5, and 6 are proposed. Formally, stated,

H4: *The access to organizational knowledge positively influences the computer-based office workers to access their colleagues*

H5: *The access to organizational knowledge positively influences the computer-based office workers in keeping flexible working relations*

H6: *The access to colleagues positively influences the computer-based office workers in keeping flexible working relations*

2.2. THE DEVELOPMENT OF IT IDENTITY DUE TO SOCIAL MEDIA USE

The experiences and interactions in social structures shape individuals' selves (FONCHA, 2014; CARTER; GROVER, 2015; SUN; GOSCHNICK, 2018; CRAIG; THATCHER; GROVER, 2019). Sheldon Stryker (2008, p.17) suggested that “society emerges out of interaction and shapes self, but self shapes interaction playing back on society”. An essential element to comprehend the construction of the self, the self-concept, is the structure that stands out when individuals think about themselves as “objects” (WEHRLE; FASBENDER, 2018).

Insofar it became clear that technology is an essential element to understand the construction of the different identities that individuals assume in their daily lives (DUNN, 2013; KASPERIUNIENE; ZYDZIUNAITE, 2019), researchers in several knowledge areas began to investigate how the identification with IT artifacts is affecting individuals' self-concepts — and consequently, their identities (BOUDREAU; SERRANO; LARSON, 2014; WHITLEY; GAL; KJAERGAARD, 2014; PAN *et al.*, 2017; ALAHMAD; ROBERT, 2020; ESMAEILZADEH; 2020).

Social media sites allowed an unprecedented degree of self-expressiveness, stimulating emotional bonds' construction, which leads to an enhanced emotional attachment and loyalty to the platforms (WANG *et al.*, 2016). Social media's IT identity development goes beyond virtual instances, affecting individuals' behaviors in physical and virtual environments. In the case of a static IT artifact, the self-concept expands to incorporate new capabilities and goes back to its original form in the absence of IT. Social media platforms are consumptions artifacts in the same category as smartphones, tablets, and cloud services (CARTER; GROVER, 2015). Nonetheless, individuals insert themselves in more complex networks than static IT artifacts such as spreadsheets or text editors (ZHANG *et al.*, 2015).

Identities are the main responsible for shaping human behaviors (STETS; SERPE, 2019), progressively promoting positive attitudes, and integrating the social and individual contexts (CARTER; GROVER, 2015). At this point, another issue also deserves to be addressed. The computer-based office workers tend to be in different stages regarding expertise in the use of digital solutions. Often the training provided by the organization is not enough for them to acquire skills to master such solutions in a short time.

Therefore, this paper defends that IT identity about social media can assist in delivering work outcomes. In this case, the reflective dimensions of IT Identity, emotional energy, and relatedness can assist workers in accessing organizational information and communicating with colleagues and work teams. Nonetheless, IT identity about social media can either compromise the balance between work and personal life since feelings of dependence on social media can lead to an even greater obstacle in maintaining the balance between personal and professional life when working in the home office regimen.

2.3. DUALITY THEORY IN MANAGEMENT

Considered a by-product of Giddens Structuration Theory, Duality Theory offers a framework to embrace two opposed (apparently) contradictory poles as interdependent and complementary (SMITH; SUTHERLAND; GILBERT, 2017). However, the difference is that the two aspects are interdependent and no longer separate or opposed. In this regard, it is argued that the traditional organizational systems and New Ways of Working should no longer be considered as opposite sides of the same coin. With this in mind, the dualities approach views them as complementary, contiguous sides of the same coin.

According to Smith, Sutherland and Gilbert's (2017) proposition, proficiency in the duality characteristics enables the ambidexterity capability (i.e., allows the connection between apparently opposed poles like exploitation and exploration; individual and organizational; internal and external, and differentiation and integration). At the first moment, the boundaries between the concepts of duality and ambidexterity may not be apparent. Ambidexterity is primarily focused on organizational opportunities to explore **or** exploit (ultimately leading to innovation and improved performance). (GRAETZ; SMITH, 2009).

The duality theory framework conceptualizes change incorporating complexity and contradiction without the implicit emphasis on removing, micromanaging, ignoring, or denying tension or contradictions (SMITH; SUTHERLAND; GILBERT, 2017). Instead, duality theory approaches insoluble (apparently) paradigms as opposing forces that must be embraced by

senior management. In this respect, several studies address the effects of social media on individual and organizational performance. However, many researchers have concluded that its use can benefit in areas such as information sharing and knowledge management [e.g., Alahmad et al., (2018); Bennett, (2017); Liu and Guo, (2015)]., research in the pre-pandemic period also pointed out that its excessive use, both outside and in the workplace, can lead to addiction, information overload, and decrease worker performance [e.g., Fu et al. (2020); Savci and Aysan (2017)].

Repetition in the use of technology has consequences on individuals' identities. Its effects are perceived by how they use technology and in how they search for new ways of using it (CARTER, 2012). For example, job satisfaction as a result of the intense use of social networks can lead to a higher organizational commitment (MOQBEL; NEVO; KOCK, 2013). Furthermore, the use of social media also positively influences cultural, interpersonal, and personal adaptability. These three factors, in turn, positively influence the performance of work functions (CAO *et al.*, 2016; GAO *et al.*, 2016).

Employees' use of social media may reflect in increased organizational performance (BENNETT *et al.*, 2010; SHEPHERD, 2011; AOUN; VATANASAKDAKUL, 2012). For instance, closer ties between employees foster trust and knowledge sharing and increase knowledge transfer, impacting organizational performance (MOQBEL; NEVO; KOCK, 2013; MOQBEL; NAH, 2017). Even the indirect effect of using social media can benefit organizational performance. For example, in a survey of an insurance company with a sample of 1799 employees, Leftheriotis, Giannakos and Pappas (2016) concluded that, regardless of whether employees use social media for hedonic or work purposes, their use has a strong positive relationship with increased performance at work.

2.4. THE DUALISTIC ROLE OF IT IDENTITY ACQUIRED DUE TO THE USE OF SOCIAL MEDIA FOR EMPLOYEES IN DIFFERENT WORK SETTINGS

The digital permeability in everyday life increases the influence of technology on the self-concept (DUNN, 2013). Social media is yet relatively recent communication phenomenon, and its outcomes for the working environment are still besieged by dualities. Therefore, understanding how changes in their resources, determinants, and consequences influence its users still poses a challenge for organizations, individuals, and communities (HOGAN; QUAN-HAASE, 2010; KIETZMANN *et al.*, 2012; AHMED; SCHEEPERS; STOCKDALE, 2014; NGAI; TAO; MOON, 2015).

The use of social media transformed several dimensions of social and organizational life (HAFEZIEH; ESHRAGHIAN, 2017). For example, in the working environment, despite the well-known adverse effects on organizational productivity (CURRIE *et al.*, 2009), its use has also been associated positively (both directly as indirectly) with how employees perform their functions (ZHANG *et al.*, 2015; CHEN; WEI, 2020; CHENG *et al.*, 2020; JIA *et al.*, 2020). Given this, its moderate use was verified to foster formal and informal organizational learning, including increased job satisfaction, emotional connection, and identification with organizations (SHEPHERD, 2011; MOQBEL; NEVO; KOCK, 2013).

Moqbel, Nevo and Kock (2013) investigated the influence of social media usage intensity on job performance, positing job satisfaction and organizational commitment as mediating variables, and concluded that the effect of the intensity of using social networks on job performance was not significant. On the other hand, the intensity of using social networks positively influences job satisfaction, which is positively related to organizational commitment and job performance - directly increasing job satisfaction and indirectly the organizational commitment.

In the same line, Zhang *et al.* (2015) investigated the influence of social media use at work on information sharing and strengthening relationship networks. The positive effect of strengthening ties and sharing knowledge on adaptive performance implies that social media can play a critical role in employees' adaptability. Moreover, individuals with a higher adaptation capacity tend to execute work tasks more successfully (NIESSEN; SWAROWSKY; LEIZ, 2010). Bennett *et al.* (2010) noted that social media positively impacts the workplace by improving collective and organizational knowledge, increasing productivity, and promoting and maintaining employees' self-esteem. In another study, Ellison, Steinfield and Lampe (2007) investigated the effects of using Facebook and concluded that the platform's use is associated with an improved capacity to cope with low self-esteem and low life satisfaction. Furthermore, it was also verified that employees' ability to access Facebook at work encouraged new employees' retention and organizational commitment to connecting with family, friends, and colleagues.

Cao *et al.* (2016) studied social media's influence on social capital (the combination of shared vision, relationship networks, and trust). They observed its positive influence on knowledge transfer — which, in its turn, can stimulate improved work performance. Among the conclusions, the authors found that relationship networks and trust do not significantly influence work performance. Of the three variables that compose social capital, only the shared view presented a direct and positive relationship with work performance.

It was not considered the distinction between organizations' or third parties' solutions when enlisting the consequences of social media use for organizational performance. Moreover, it was not considered the social media use purpose. Table 20 shows the positive consequences of using social media for individuals and organizations.

Table 20 - Social Media Usage Positive Outcomes for Individuals and Organizations

Social Media Use Positive Consequences for Employees and Teams	Consequences for Organizations*	Author(s)/Year
Job Satisfaction	Reduction in Turnover	Schneider <i>et al.</i> (2003); Moqbel, Nevo and Kock (2013); Moqbel and Aftab (2015); Bakotić (2016)
Commitment with the Organization	Increased productivity per employee Reduction of labor costs per employee	
Individual Innovation Behavior	Innovation at work (products, services, and processes)	Wu, Parker and De Jong (2014); Cheng <i>et al.</i> (2020)
Strengthen ties at the workplace	Innovative job performance	Chen <i>et al.</i> (2019)
Fostering Shared Vision	Fosters social capital, sharing, and knowledge transfer	Zhang <i>et al.</i> (2015); Cao <i>et al.</i> (2016); Moqbel and Nah (2017); Garcia-Morales, Martín-Rojas and Lardón-López (2018)
Strengthen personal ties		
Increases Employees Trust		
Individual Adaptability	Improved task performance	Kim and Miranda (2013); Gao <i>et al.</i> (2016); Mikalef and Pateli (2017); Garcia-Morales, Martín-Rojas and Lardón-López (2018)
Interpersonal Adaptability		
Cultural Adaptability		
Improved Transactive Memory System	Enhanced absorptive capacity and Innovative Performance	Ali <i>et al.</i> (2020)

Note. This study does not distinguish direct or indirect consequences of social media for organizational performance, nor the purpose of social media use at work (to execute work tasks, communication, or hedonic reasons).

Carter and Grover (2015) emphasize that IT identity development depends on the extent to which an IT artifact allows access to relationships, networks, and an overarching range of social contexts. Insofar, these two elements are interrelated; they also improve the propensity to stimulate individuals' identification and modify their behaviors.

To illustrate this last argument, it is referred again to Carter's IT identity conceptualization to demonstrate how the theoretical background of the three elementary reflective dimensions relates to the outcomes of social media use according to the literature. Table 21 outlines IT identity dimensions theoretical foundations and the corresponding associated outcomes related to social media usage. In addition, the relationship of the diverse aspects of IT identity dimensions is shown beside the related outcomes of using social media, such as polarization, online addiction, platforms engagement, and continued use intention.

Table 21 - IT identity Dimensions and Associated Outcomes for Social Media Usage

IT Identity Dimensions	Universal Dimension of Affective Meaning	Range	Refers to (about an IT)	Associated Outcomes of Social Media Usage	Author(s)/ Year
Emotional Energy	Evaluation	Good-bad feelings	Confidence, enthusiasm, energy	Polarization, enhanced use	Fullwood, James and Chen-Wilson (2016); Bohler and Drake (2017); Spohr (2017)
	Activity	Active-passive or lively-quiet	Emotional attachment	Continued Use Intention, Platform's loyalty, Platform's engagement	Johnson (2012); Abouzahra, Yuan and Tan (2014); Koohikamali and Kim (2016); Wang, Wang and Calantone (2016)
Dependence	Potency	Strong-weak	Reliance, IT exert power over a person	Platform's addiction	Moqbel and Kock (2018); Boroon, Abedin and Erfani (2019)
Relatedness	Self-expansion	Higher-Low (Attained IT characteristics)	Connectedness	Platform's engagement	Rahman <i>et al.</i> (2018)

Note. This table encompasses and builds on the IT Identity dimensions and their outcomes feelings developed by Carter (2012). In its turn, she based on Evolution-potency activity (EPA) and self-expansion theories (OSGOOD; SUCI; TANNENBAUM, 1957; OSGOOD *et al.*, 1975; ARON, ARON, SMOLLAN, 1992; ARON, ARON, 1997; ARON; NORMAN, ARON, 1998; ARON *et al.*, 2004). The associated outcomes for social media use are referenced by the authors mentioned above in the last column.

Historically, working from home is a privilege of a restricted type of working category. For this reason, the measurement of the effects of remote work has also been limited to a few workers (YANG *et al.*, 2021). However, the progressive change for this hybrid model is forcing organizations worldwide to extend remote working to new working classes. To succeed in this, they have been adopting new practices to maintain and even expand employees' performance while keeping them engaged (FAYARD; WEEKS; KHAN, 2021).

In this respect, social media features can improve individuals' sense of belonging, relatedness, and social connectedness when interacting online. Moreover, stimulating users' engagement and continued use of social media platforms (ELLISON; STEINFELD; LAMPE, 2007; GOSWAMI *et al.*, 2010; DAVIS, 2014; WALTHER, 2016; RAHMAN *et al.*, 2018; LUPINACCI, 2020).

In a 2020 paper, Carter *et al.* (2020) demonstrated that IT identity is a crucial determinant of IT feature and exploratory usage opportunities and can provide an improved understanding of how individuals interact with IT in the post-adoption setting. In this paper, she argues that individuals with strong IT identities tend to show this positive self-identification with an IT by using a more extensive number of technology features. In view of the arguments presented in this section, it is hypothesized that IT identity acquired by using social media,

which Carter (2020, p. 984) considers as "all information technologies or *classes* of IT), may be a positive factor when employees work remotely since feelings of relatedness and emotional energy stimulate them to embrace diverse technological features, improving their capacity to accessing information and colleagues. In this regard, six hypotheses are proposed. Formally stated,

H7a: The intensity of feelings of emotional energy due to the use of social media positively influences the computer-based office workers to access their colleagues

H7b: The intensity of feelings of emotional energy due to social media positively influences the computer-based office workers in accessing organizational knowledge

H7c: The intensity of feelings of emotional energy due to the use of social media positively influences the computer-based office workers to keep flexible working relations

H8a: The intensity of feelings of relatedness about social media positively influences the computer-based office workers to access their colleagues

H8b: The intensity of feelings of relatedness about social media positively influences the computer-based office workers in accessing organizational knowledge

H8c: The intensity of feelings of relatedness about social media positively influences the computer-based office workers to keep flexible working relations

Isaranon (2019) concluded in a study that overuse of Facebook might lead to a detachment between the self-image and the ideal self. When using social media, platforms' characteristics like the capacity to remain anonymous can encourage individuals to explore other aspects of their self-concepts (WARKENTIN *et al.*, 2010). Moreover, it gives them the ability to modify their identities which may detach them from their physical world selves (JOINSON, 2001; WARKENTIN *et al.*, 2010). To illustrate this point, Davis (2013) noted that the quality of online friendships mediated the relationship between online identity expression/exploration and self-concept clarity (SCC).

Carter and Grover (2015, p.940) noted that self-concept expands in the presence of an IT artifact to incorporate new capabilities afforded by IT. In addition, novel and exciting

experiences in social environments were verified to be positively related to self-concept expansion (MATTINGLY; LEWANDOWSKI, 2014). However, the combination of the quick expansion and sudden attachment of many new attributes to the self-concept occasionally results in reduced self-concept clarity (SCC) (EMERY; WALSH; SLOTTER, 2015). In a quantitative study about the influence of interpersonal relationships and digital media use on adolescents' sense of identity, Davis (2013) found that online peer communication indirectly affected self-concept clarity through the quality of their friendships. Subdivided in displacement and stimulation hypothesis, positive effects of friendship quality are conditional on anonymity (VALKENBURG; PETER, 2011). In other words, online communication with already known physical world friends was verified to improve the quality of friendships in adolescents. Diversely, contact with people they did not know in the physical world decreased friendship quality.

According to Salo, Percalines and Koskelainen (2019), the intense comparisons in social media may impair individuals' selves. Campbell, Assanand and Di Paula (2003), drawing on the studies of Donahue *et al.* (1993) observed that while a high degree of self-concept fragmentation is associated with adverse outcomes such as neuroticism, depression, and anxiety, a cohesive self-concept structure upholds high self-esteem levels. In a study about the effects of Facebook exposure on self-esteem, Gonzales and Hancock (2011) observed that selective self-presentation in digital media, while intensifying relationship formation, influences how individuals choose certain aspects of themselves to develop impressions.

Quinones and Kakabadse (2015) reported that the improved capacity of social media interactions to construct presentations motivates individuals with low SCC to choose these environments to socialize. In addition, they found that the preference for engaging in virtual interactions mediates the relationship between SCC and social anxiety. Finally, low SCC was confirmed as a critical vulnerability factor to adults engaging in compulsive internet use (CIU). From the discussion about the adverse effects of using social media, Table 22 shows the negative outcomes for individuals and organizations.

Table 22 - Social Media Usage Negative Outcomes for Individuals and Organizations

Social Media Use Negative Outcomes	Consequences for Individuals and Organizations	Author(s)/Year
Information and Communication Overload Social Media Exhaustion	Reduction of Job Performance	Yu, Cao, <i>et al.</i> (2018); Fu <i>et al.</i> (2020)
Addiction	Depression, loneliness, Task Distraction, Reduced Performance	Brooks, Longstreet and Califf (2017); Moqbel and Kock (2018); Longstreet, Brooks and Gonzalez (2019)

Since the beginning of the COVID-19 pandemic, people have needed to adapt rapidly to the use of digital tools to deliver remote work outcomes. According to Mckinsey's report, 70% of computer-based office work can potentially be executed remotely. In the same report, compared with the pre-COVID scenario, a rise of 17% in digital tools adoption by organizations in the United States (MCKINSEY, 2021).

Despite the benefits for employees and organizations (e.g., improved flexibility to deliver work outcomes, reducing in the time spent on commuting to reach the working places, better capacity to adjust the responsibilities of personal lives), it is progressively discussed the adverse consequences of working from home (KNIFFIN *et al.*, 2021; ZHANG *et al.*, 2021).

In 2018, Carter, Schmalz and Compeau (2018) proposed that individuals may have a positive but also a negative identification with IT. They called the latter "anti-IT identity". In this work, the authors claimed that they found evidence of the orthogonality between concepts and an ambivalent IT identity (i.e., when people acquire IT identities regarding some IT and anti-IT identities about others).

Based on the above arguments, this paper's second assumption defends that when individuals acquire an anti-IT identity about an IT, feelings of dependence on social media platforms can reduce flexibility in working relations and disturb the balance between work and personal lives. Given that, the three final hypotheses are proposed. Formally stated,

H9a: *The intensity of feelings of dependence due to the use of social media negatively influences the computer-based office workers to access their colleagues*

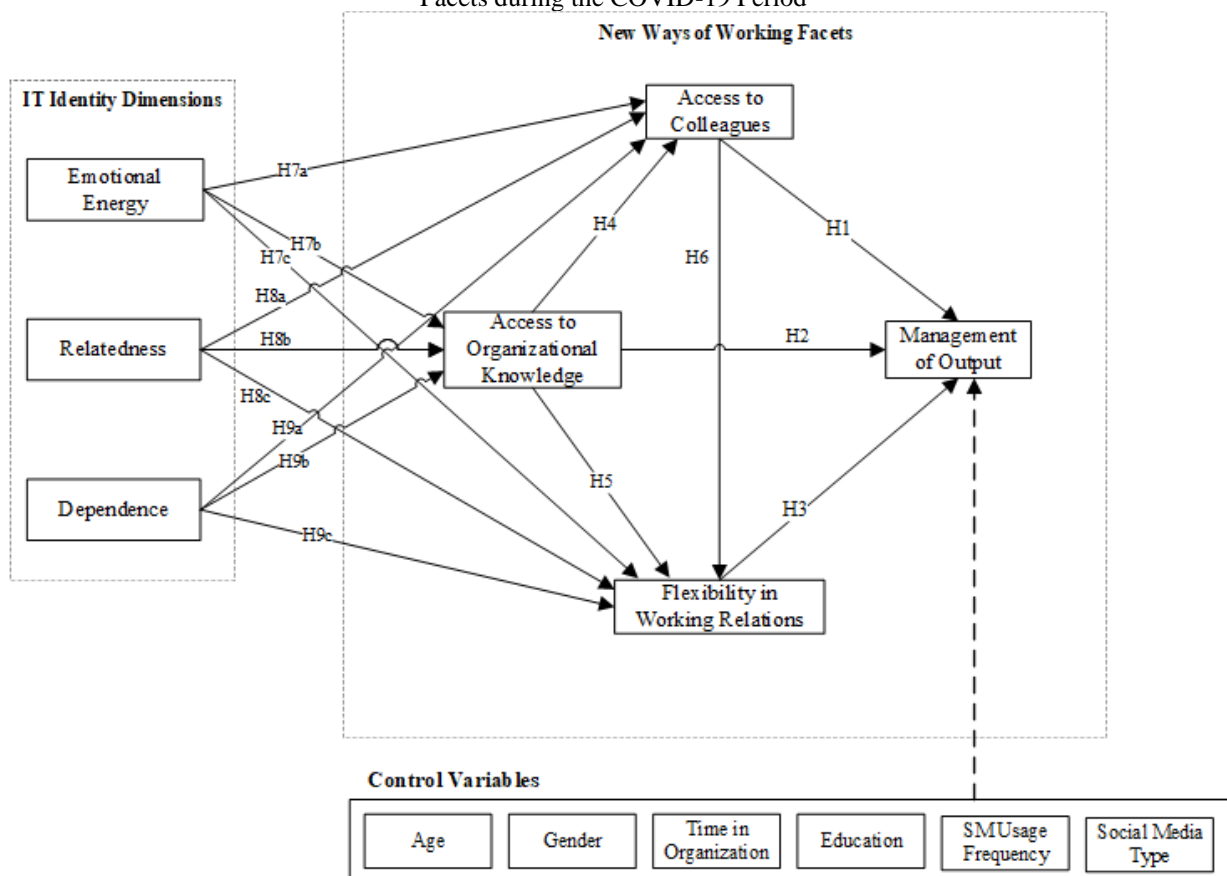
H9b: *The intensity of feelings of dependence due to the use of social media negatively influences the computer-based office workers to access organizational knowledge*

H9c: *The intensity of feelings of dependence due to the use of social media negatively influences the computer-based office workers to keep flexible working relations*

Figure 22 shows the study's conceptual model and the 15 hypotheses. The model was developed by integrating the relationship of the New Ways of Working facets [(e.g., Ten Brummelhuis *et al.* (2012); De Leede and Heuver, (2016); Gerards, de Grip and Baudewijns,

(2018; Duque *et al.*, (2020)] with the social media and IT identity literature [(e.g., Carter and Grover (2015); Dunn (2013); Kasperuniene and Zydziunaite (2019); Gündüz (2017)].

Figure 22 - A Model of the Relationship of Social Media IT Identity Dimensions and the New Ways of Working Facets during the COVID-19 Period



Source: The Author (2021)

The model does not show the NWW facets, “time-independent location” and “freely accessible open workplace”. Regarding the former, due to the compulsory adoption of the home-office regimen, it was considered that organizations would forcibly provide digital tools (laptops, smartphones, VPNs access, and others) to maintain employees working remotely. About the latter, the justification is similar since many of the employees surveyed were not even allowed to access the organization's physical spaces at that moment. Moreover, this exploratory study builds on recent studies, consulting reports, and specialists panel discussion [e.g., Onderdijk *et al.* (2021), Pham (2021), PWC (2021), Spagnoli *et al.* (2020), Yang *et al.* (2021)] about what types of elements have been contributing to the delivering work outcomes in the pandemic period, and hopefully at the post-pandemic.

Although there is not yet a consensus about which facets and how they combine to deliver work outcomes remotely or in a hybrid mode, reports as the one of Harvard Business

Review signed by Fayard, Weeks and Khan (2021) or the McKinsey's report entitled "The Future of Work after COVID-19", (MCKINSEY, 2021) agree on the need to change the focus from how the work is executed to how the work outcomes are delivered. For this reason, in this research, the NWW facet "Management of Output" is the only (exclusively) dependent LV and was hypothesized how the IT identity dimensions are related to the four NWW facets and how those facets are related among them to improve employees capacity to delivering outcomes in these new working settings. Summing up, by focusing on the relationship between four specific home office-related NWW facets and IT identity dimensions, this study intended to measure how the feelings of relatedness, emotional energy, and dependence regarding employees' preferred social media platforms could impact the relationships as mentioned above.

3. RESEARCH METHOD

3.1. INSTRUMENT DEVELOPMENT

The survey questionnaire consists of four blocks, which are: (i) Participants' demographics characteristics, (ii) Social media use frequency habits, (iii) IT Identity dimensions, and (iv) New Ways of Working facets. The items that compose the NWW facets were adapted from the studies of Duque *et al.* (2020) and Gerards, De Grip and Boldewijn's (2018) to the Portuguese and adapted according to the respondents' socio-cultural characteristics. Initially, the questionnaire aimed to identify the sociodemographic characteristics of the respondents, which are: (i) age, (ii) profession, (iii) gender, (iv) degree of education, (v) role in the organization, and (vi) working time in the organization. Additionally, two closed questions were presented to determine whether the respondent worked full-time in the organization's physical facilities, in a hybrid regimen, or wholly in the home office regimen.

The IT identity dimensions were developed based on the initial measure of Carter's (2012) conceptual and operational definitions in her thesis dissertation and the social media literature referenced in section 2.2. To increase the instrument's face validity, the questionnaire was previously submitted to three masters, a Ph.D. student, and two PhDs of the business management area. The academics suggested changes, and the questionnaire was adjusted accordingly. The IT Identity dimensions were measured through seven points Likert scale in which the first position (1) was "totally disagree," and the seventh position (7) was "totally agree". The questionnaire link was sent to the respondents and was hosted on the Qualtrics platform (QUALTRICS, 2013). In the final sample, a total of 173 individuals responded to the

survey questionnaire. After data depuration, incomplete responses were discarded and the outliers (discrepant values). The final sample`s number totaled 139 individuals⁴¹. This research was carried out in a cross-sectional study between September and October 2021. Data were analyzed using statistical analysis software SPSS (version 24) and SmartPLS (version 3.3.2). The final instrument is shown in Appendix F.

3.2. SAMPLE ESTIMATION

The study`s target population was the Brazilians who worked (or are still working) under the home office regimen since the beginning of the COVID-19 pandemic. The study's sample was non-probabilistic (HAIR *et al.*, 2005). According to Hair *et al.* (2009), when using this type of sample, there is no statistical method to measure the sampling error, and it is unknown the probability of a single element being chosen among the population. Therefore, the non-probabilistic sample was collected adopting the snowball strategy. Malhotra (2012) points out that snowball sampling begins by choosing a random group of individuals among the population of interest. Then, request these individuals to identify others who belong to the target population of interest. Still, according to the author, the other interviewees are selected based on these references, being the process executed in successive waves, which leads to a snowball effect. Malhotra (2012) states that the main objective of this sampling technique is to estimate characteristics rare in the population, and the main advantage is that it dramatically increases the possibility of locating the desired characteristic in the population.

In a study of 2015, the consulting company ComScore pointed out that Brazilians spend about 650 hours a month on social media. At that moment, an average of 60% higher than that of the rest of the world (COMSCORE, 2015). Furthermore, a survey conducted by Nielsen consultancy concluded that the country leads social media usage globally, surpassing more populous countries like the United States, India, and China. Mobile devices are mainly responsible for increasing social media use in the world. That becomes more evident because 75% of the population believes that smartphones' primary function is to access social media (WESTWOOD, 2015; KERPEN, 2016). Brazil's internet users are generally relatively young. On average, individuals ranging from 15 to 32 years old have seven social media profiles. Facebook figures in the first position, with 61,7%, followed by Pinterest (14,81%), Twitter (11,86%), YouTube (7.18%), Instagram (3.83%) (STATCOUNTER, 2021).

⁴¹ Minimum sample`s definition and its estimation procedures are shown in Section 4.2

4. RESULTS AND ANALYSIS

4.1. SAMPLE SOCIAL DEMOGRAPHIC CHARACTERISTICS

After refining and compiling the database, it was obtained a total of 139 valid responses. The respondents' age average was 38 years. Of the total, 53,95% are male, and 46,05 % are female. Concerning the level of education, the majority of the respondents are graduates. Finally, a total of 24 individuals are graduates (have a Master's or Ph.D. title). Table 23 shows in detail the respondents' demographic profiles.

Table 23 - Respondents Demographic Profile

Socio-Demographic Profile	N	Percentage (%)
Gender		
Male	75	53,95
Female	64	46,05
Other	-	-
Age (years)		
20 + 25	2	1.44
25 + 30	15	10.79
30 + 35	12	8.63
35 + 40	23	16.55
40 + 45	27	19.42
45 + 50	32	23.02
50 + 55	12	8.63
55 + 60	5	3.60
60 + 65	4	2.88
> 65	7	5.04
Educational Degree		
High School	4	2.88
Undergraduate	103	74.10
Specialization	8	5.76
Graduated	24	17,27
Working time in the organization		
Less than one year	13	9.35
1 to 5 years	55	39.57
6 to 10 years	18	12.95
11 to 15 years	20	14.39
More than 15 years	31	22.30
Retired	2	1.44
Work Category		
Public or Private Sector Employee	113	81.29
Retired	2	1.44
Entrepreneur	24	17.27
Current Work Regimen		
In the organization's facilities (full period)	22	15.83
In home office (entire period)	72	51.80
In the organization's facilities (partially)	45	32.37
Daily Usage Frequency (Access)		
+ Five accesses	32	23.02
Six + ten accesses	32	23.02

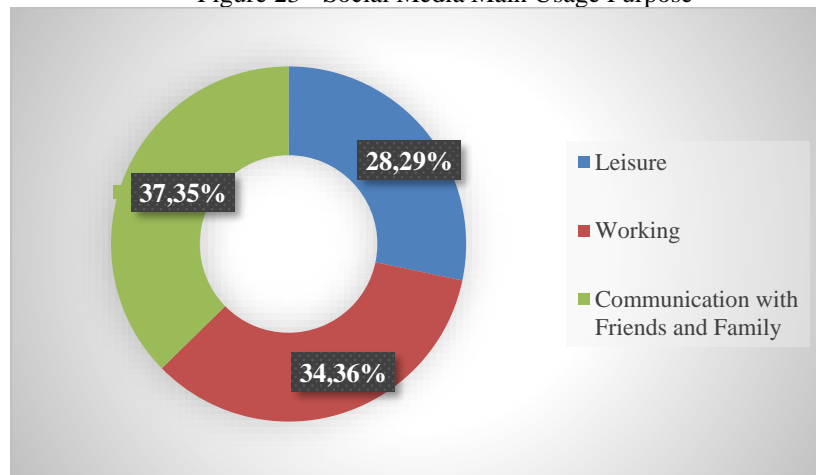
Socio-Demographic Profile	N	Percentage (%)
Eleven - Twenty accesses	24	17.27
> 20 accesses	51	36.69
Daily Usage Frequency (Minutes)		
Less than 30 minutes	10	7.19
Up to 60 minutes	36	25.90
Up to 120 minutes	23	16.55
Over 120 minutes	70	50.36
Social Media Platforms Preferences*		
Instagram	9	6.47
YouTube	2	1.44
Twitter	1	0.72
WhatsApp	117	84.17
LinkedIn	2	1.44
Facebook	8	5.76
Social Media Number of Groups or Communities		
1 to 5	45	32.37
6 to 10	46	33.09
11 to 20	24	17.27
Over 20	24	17.27
Social Media Main Usage Purpose*		
Leisure	24	17.27
Working	61	43.88
Communicating with Friends and Family	54	38.85
Social Media Notifications Active		
Yes	57	41.01
No	54	38.85
I turn it off or put it in silent mode when I am working	28	20.14
Preference of Device to Access Social Media*		
Laptop	15	10.79
Personal Computer (Desktops)	8	5.76
Smartphones	116	83.45
Tablets	-	10.79

Source: Research Data (2021)

Note. * This table shows only the counting of the first position of the three ranked answers. Nonetheless, in Figures 23, 24, and 25, the percentage of the responses is presented according to the ranking weight to show a more nuanced view of the results of the ranked answers.

Figure 23 shows the percentages of the three purposes of social media usage, considering the ranking positions' weight.

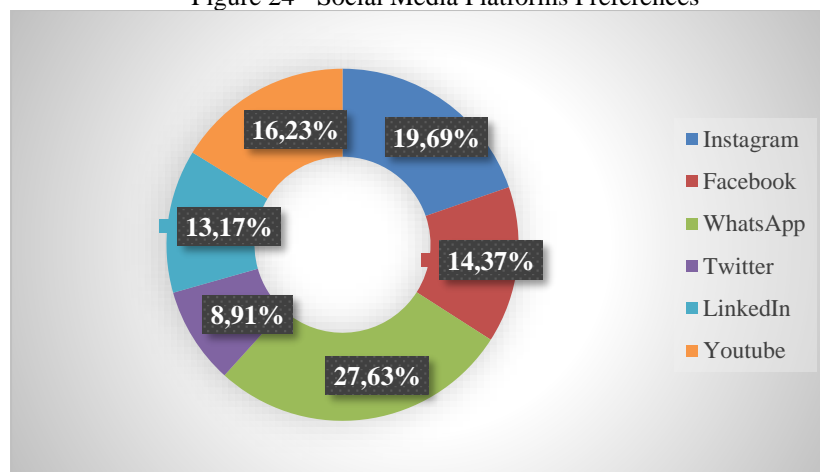
Figure 23 - Social Media Main Usage Purpose



Source: Research Data (2021)

Figure 24 shows the percentages of the social media platforms' preferences considering the ranking positions' weight.

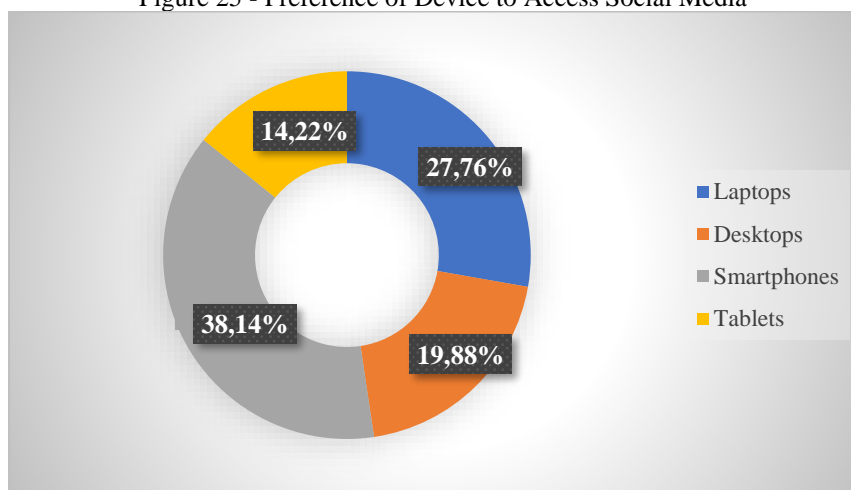
Figure 24 - Social Media Platforms Preferences



Source: Research Data (2021)

Figure 25 shows the percentages of the preferred devices to access social media considering the ranking positions' weight. Three platforms that belong to the Facebook group (Facebook, Instagram, and WhatsApp) responded for 61,69% of the sample's preferences.

Figure 25 - Preference of Device to Access Social Media



Source: Research Data (2021)

In the following section, it is presented the instrument validation and database depuration.

4.2. INSTRUMENT VALIDATION AND DATABASE DEPURATION

In the pre-test phase, 47 responses were obtained⁴². First, the corrected item-total correlation in every construct was evaluated, and items with indexes below the threshold of 0.300 were removed, following Pedhazur and Schmelkin's (2013) recommendations. Therefore, it was possible to proceed with the validity and reliability tests of the instrument (HINKIN, 1998; KOUFTEROS, 1999).

The KMO index is based on the partial correlations between the variables, the closer to 1, the greater the commonality between the variables and the better the factorability (LAROS *et al.*, 2018). The variables showed an index of 0.727. Given that indexes above the 0.6 thresholds indicate the sample's adequacy to perform the factor analysis (MALHOTRA, 2012). The correlation assessment between the items was analyzed through Bartlett's test and with a confidence level of 99%.

It was obtained an index of 3280,131. Werts, Linn and Jöreskog (1974) defend that at least three items should be kept to allow exploratory factor analysis because it provides the appropriate number of degrees of freedom to measure the one-dimensionality of each construct. In cases where reliability measurement is performed through Cronbach's alpha, the dimensionality of constructs is a primary factor in ensuring their validity (GERBING;

⁴² It was defined in the platform's settings to randomize the order of the Likert scale questions. With this measure it was intended to avoid order bias in order to improve the survey responses rates.

ANDERSON, 1988).

The first step to estimate the study's minimum sample estimation was to follow Chin (2010, p.662) recommendation that "the researcher needs to determine which dependent variable (either at the structural level or item measure level) has the highest number of predictors (i.e., arrows directed) because it represents the largest regression performed during the PLS iterative process. Given that the Latent Variable (LV), "Access to Organizational Knowledge," had five direct arrows, this number was considered to estimate the minimum sample.

The second step was using the parameters recommended by Cohen (1992) regarding the effect size (0,15) and power (0,80). Therefore, a minimum sample of 92 valid questionnaires was estimated through the GPower software (FAUL *et al.*, 2007). Finally, due to the predictive and exploratory nature of the research, the PLS-SEM was adopted as a statistical technique to test the hypotheses (HAIR *et al.*, 2016).

As a result, 139 valid answers were obtained. Thus, above the minimum estimated threshold. In the final sample, the relationship between respondents and questionnaires is 6.04 answers per item, above the recommendation of Hair *et al.* (2016), which indicates that the ratio should be from 5 to 10 respondents per item.

4.3. MEASUREMENT MODEL ANALYSIS

This section shows the results and discusses the measurement model analysis. Firstly, it presents the items and constructs' reliability tests. Second, the convergent and discriminant validity.

4.3.1. Items Reliability

According to Henseler, Ringle and Sinkovics (2009), the reliability of each reflective item is measured by its latent load in relation to its respective construct. The authors recommend that the indexes be at least 0.7. Table 24 shows the corrected item-total correlation (CITC) and constructs' Cronbach alpha indexes.

Table 24 - Corrected Item-Total Correlations and Constructs Cronbach Alpha Indexes

Construct/Dimension/Item	Number of Items	CA ^a	CITC ^b
IT Identity Dimensions			
Emotional Energy	5	0,811	
Emotional Energy 1 (EE3)			0,693

Construct/Dimension/Item	Number of Items	CA^a	CITC^b
Emotional Energy 2 (EE4)			0,588
Emotional Energy 3 (EE5)			0,492
Emotional Energy 4 (EE7)			0,610
Emotional Energy 5 (EE9)			0,561
Dependence	3	0,746	
Dependence (DEP2)			0,557
Dependence (DEP3)			0,479
Dependence (DEP10)			0,487
Relatedness	3	0,526	
Relatedness (REL1)			0,300
Relatedness (REL3)			0,328
Relatedness (REL4)			0,326
New ways of working Facets			
Access to Colleagues	3	0,759	
Access to Colleagues (AC1)			0,365
Access to Colleagues (AC2)			0,686
Access to Colleagues (AC3)			0,649
Access to Information	3	0,768	
Access to Information (AI1)			0,521
Access to Information (AI2)			0,712
Access to Information (AI3)			0,634
Management of Output	3	0,655	
Management of Output (MO1)			0,497
Management of Output (MO2)			0,596
Management of Output (MO3)			0,356
Flexibility in Working Relations (FWR)	3	0,788	
Flexibility in Working Relations (FWR1)			0,606
Flexibility in Working Relations (FWR2)			0,686
Flexibility in Working Relations (FWR4)			0,588

Source: Research Data (2021)

Note. a – Cronbach's alpha; b – Corrected Item Total Correlation.

Table 25 shows the outer loadings and the cross-loadings of items in relation to their respective constructs. In this respect, every item presented significantly higher indexes within its constructs than within other constructs, which denotes the one-dimensionality of the items about their constructs.

Table 25 - Items Outer Loadings and Cross Loadings

Items	Access to information	Access to Colleagues	Dependence	Emotional Energy	Management of Output	Relatedness	Flexibility in Working Relations	p-value
AC1	0.702	0.4	0.015	0.088	0.181	0.216	0.229	0.000
AC2	0.885	0.334	0.057	0.032	0.362	0.227	0.092	0.001
AC3	0.877	0.318	0.051	0.071	0.368	0.333	0.125	0.001
AI1	0.339	0.783	-0.059	-0.139	0.251	0.1	0.227	0.000
AI2	0.406	0.868	0.09	-0.075	0.249	0.108	0.157	0.000
AI3	0.298	0.829	0.118	-0.019	0.213	0.163	0.182	0.000
DEP10	0.073	0.162	0.768	0.333	-0.042	0.299	-0.21	0.000
DEP2	-0.083	-0.052	0.762	0.469	-0.106	0.227	-0.264	0.000
DEP3	0.124	0.016	0.741	0.372	-0.03	0.289	-0.216	0.000
EE3	0.041	0.01	0.474	0.781	-0.094	0.271	-0.112	0.000
EE4	0.048	-0.004	0.399	0.692	0.063	0.334	-0.089	0.000

Items	Access to information	Access to Colleagues	Dependence	Emotional Energy	Management of Output	Relatedness	Flexibility in Working Relations	p-value
EE5	0.061	-0.097	0.359	0.734	-0.048	0.263	-0.134	0.000
EE7	0.049	-0.053	0.429	0.724	-0.08	0.312	-0.102	0.000
EE9	0.074	-0.139	0.326	0.785	-0.052	0.374	-0.112	0.000
MO1	0.416	0.274	-0.063	-0.032	0.879	0.155	0.287	0.000
MO2	0.187	0.026	-0.038	0.162	0.565	0.123	0.246	0.000
MO3	0.207	0.283	-0.07	-0.19	0.775	-0.041	0.369	0.000
REL1	0.178	0.102	0.169	0.071	0.148	0.508	-0.147	0.025
REL3	0.328	0.114	0.254	0.437	0.067	0.659	0.088	0.000
REL4	0.187	0.213	-0.257	-0.096	0.289	0.87	-0.013	0.000
FLWR1	0.132	0.222	-0.236	-0.096	0.355	0.011	0.822	0.000
FLWR 2	0.133	0.142	-0.269	-0.185	0.353	0.022	0.869	0.000
FLWR 4	0.074	0.112	0.471	0.352	-0.039	-0.054	0.818	0.000

Source: Research Data (2021)

After the instrument validation and depuration, the final questionnaire comprised 23 items that presented only three outer loadings lower than the threshold 0.7 (still, all above 0.5). However, all the seven Average Variance Extracted (AVE) show that these items contribute to measuring at least half of the variance (HAIR *et al.*, 2017; MATTHEWS; HAIR; MATTHEWS, 2018). Therefore, they were maintained in the model evaluation.

4.3.2. Constructs Reliability

The constructs' discriminant validity was evaluated by measuring the relationship between the square root of the AVE and the correlation between the factors. This procedure aims to determine whether the items of each construct are different from the items that constitute the other constructs (HENSELER; RINGLE; SARSTEDT, 2015; AB HAMID; SAMI; SIDEK, 2017).

Before proceeding with the assessment of discriminating and convergent validity, the items' significance and the constructs' internal consistency are shown. Cronbach alpha and composite reliability coefficient are the most used methods to assess internal reliability and the degree of consistency of responses between items (FORNELL; LARCKER, 1981; KLINE, 2011). These two indexes aid in demonstrating that the items of each construct converge in the sense of measuring only to one dimension (HAIR *et al.*, 2005).

Table 26 depicts the latent variables, items loadings, Cronbach Alpha, Composite Reliability, and Average Variance Extracted indexes.

Table 26 - Manifest Variables Outer Loadings, Latent Variables, Cronbach Alpha, Average Variance Extracted, and Composite Reliability

Latent Variables/Items	Loading	t* values	CA ^a	CR ^b	AVE ^c
IT Identity Dimensions					
Emotional Energy			0,880	0,861	0,559
Emotional Energy 1 (EE3)	0.781	5.006			
Emotional Energy 2 (EE4)	0.692	4.155			
Emotional Energy 3 (EE5)	0.752	4.694			
Emotional Energy 4 (EE7)	0.724	4.409			
Emotional Energy 5 (EE9)	0.796	5.154			
Dependence			0,628	0,801	0,573
Dependence (DEP2)	0.765	4.023			
Dependence (DEP3)	0.756	4.784			
Dependence (DEP10)	0.768	4.265			
Relatedness			0,526	0,728	0,500
Relatedness (REL1)	0.567	1.869			
Relatedness (REL3)	0.714	3.459			
Relatedness (REL4)	0.87	6.209			
New Ways of Working Facets					
Access to Colleagues			0,747	0,858	0,671
Access to Colleagues (AC1)	0.702	9.078			
Access to Colleagues (AC2)	0,885	25.034			
Access to Colleagues (AC3)	0,877	24.330			
Access to Organizational Knowledge			0,759	0,862	0,678
Access to Organizational Knowledge (AI1)	0.783	10.171			
Access to Organizational Knowledge (AI2)	0.868	28.683			
Access to Organizational Knowledge (AI3)	0.829	17.480			
Management of Output			0,612	0,790	0,564
Management of Output (MO1)	0.879	28.435			
Management of Output (MO2)	0.580	4.118			
Management of Output (MO3)	0.775	11.341			
Flexibility in Working Relations			0,785	0,875	0,700
Flexibility in Working Relations (FWR1)	0.822	17.793			
Flexibility in Working Relations (FWR2)	0.869	27.503			
Flexibility in Working Relations (FWR4)	0.818	21.182			

Source: Research Data (2021)

Note. a – Cronbach's alpha; b – Composite reliability; c – Average Variance Extracted.

* Two-tailed test t-value: 1.96 (95 % significance level).

Latent variables (LVs) internal consistency was evaluated through Cronbach's alpha and composite reliability (NUNALLY; BERNSTEIN, 1978). Composite Reliability showed indexes above 0,7 and lower of 0,9, which are considered satisfactory according to Hair *et al.* (2017). Still, compared to Cronbach Alpha, Composite Reliability is less sensitive about the sample size and the number of manifest variables. Finally, the seven LVs presented Average Variance Extracted (AVE) indexes above the recommended threshold. Therefore, it was possible to proceed with the discriminant and convergent validity analysis.

4.3.3. Convergent and Discriminant Validity

The discriminant validity (the extent to which the items of a given construct differ from the items of the other constructs) was evaluated by two criteria. The first was through the Average Variance Extracted (AVE) of each construct in relation to its indicators. Following

Fornell-Larcker's recommendation (FORNELL; LARCKER, 1981), the AVE's square root of items of each construct must be greater than their correlation with the other. The seven constructs met this condition. Table 27 shows the Discriminant Validity according to the Fornell-Larcker criterion.

Table 27 - Discriminant Validity by the Fornell-Larcker Criterion

Construct	Access to colleagues	Access to Organizational Knowledge	Dependence	Emotional Energy	Flexibility in Working Relations	Management of Output	Relatedness
Access to Colleagues	0.826						
Access to Organizational Knowledge	0.426	0.824					
Dependence	0.051	0.058	0.757				
Emotional Energy	0.077	-0.097	0.515	0.748			
Flexibility in Working Relations	0.179	0.229	-0.304	-0.151	0.837		
Management of Output	0.376	0.291	-0.078	-0.063	0.398	0.751	
Relatedness	0.32	0.148	0.359	0.419	-0.008	0.098	0.707

Source: Research Data (2021)

Showing AVE with squared correlations allows a more intuitive interpretation since it represents the percentage overlap (i.e., shared variance) among constructs and constructs to indicators (CHIN, 2010). Another statistical index to assist discriminant validity results is the heterotrait-monotrait ratio of the correlations (HTMT).

Table 28 shows discriminant validity according to the heterotrait-monotrait ratio of the correlations. Henseler, Ringle and Sarstedt (2015) recommend that reflective variables present indexes below the threshold of 0,85. The highest index resulted in 0,76.

Table 28 - Discriminant Validity Heterotrait-Monotrait Ratio (HTMT)

Constructs	Access to Colleagues	Access to Organizational Knowledge	Dependence	Emotional Energy	Flexibility in Working Relations	Management of Output	Relatedness
Access to Colleagues							
Access to Organizational Knowledge	0.595						
Dependence	0.176	0.173					
Emotional Energy	0.097	0.16	0.760				
Flexibility in Working Relations	0.239	0.298	0.433	0.164			

Management of Output	0.528	0.415	0.15	0.267	0.589	
Relatedness	0.44	0.253	0.744	0.642	0.202	0.276

Source: Research Data (2021)

Convergent validity, the degree of confidence that a group of items assess only a given construct, was assessed by the Average Variance Extracted (AVE) (HAIR *et al.*, 2017; MACEDO, 2017; SARSTEDT, 2019). Table 29 shows constructs' AVE significance.

Table 29 - Convergent Validity: Constructs' AVE significance

Constructs	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-value ^a (O/STDEV)	p values ^b
Access to Colleagues	0.682	0.683	0.035	19.376	0
Access to Organizational Knowledge	0.678	0.68	0.034	20.025	0
Dependence	0.57	0.53	0.085	6.671	0
Emotional Energy	0.559	0.532	0.081	6.881	0
Flexibility in Working Relations	0.694	0.693	0.038	18.029	0
Management of Output	0.564	0.562	0.042	13.298	0
Relatedness	0.5	0.485	0.064	7.755	0

Source: Research Data (2021)

^a t-value for a two-tailed test, ^b 1.96 (significance level:95%)

AVE indexes above 0.50 indicate that at least half of the construct's variance can be explained by their respective indicators. It indicates the existence of more variance than error in the analyzed dimension (BAGOZZI; YI, 1988; HAIR *et al.*, 2005). Additionally, each item's weight and significant standardized loads also demonstrated convergent validity in their respective constructs.

4.4. STRUCTURAL MODEL ANALYSIS

This section aims to assess the structural model. After the analysis of the measurement model, the structural model was examined. This phase evaluated the strength, significance, the total variance explained by the endogenous constructs, and the model's predictive relevance (HENSELER; RINGLE; SARSTEDT, 2015; MATTHEWS; HAIR; MATTHEWS, 2018). First, the multicollinearity analysis was carried out according to Hair *et al.*'s (2017) recommendations that the inner Variance Inflation Factor (VIF) indexes should range between 0.2 and 5. This case indicates the absence of negative influence of multicollinearity among the constructs

(considering they are all reflective). Furthermore, it was obtained numbers that ranged between 1,063 and 1,567. Table 30 shows the inner VIF results.

Table 30 - Inner (Structural Model) VIF Results

	Access to Colleagues	Access to Organizational Knowledge	Dependence	Emotional Energy	Flexibility in Working Relations	Management of Output	Relatedness
Access to Colleagues					1.393	1.266	
Access to Organizational Knowledge	1.063				1.309	1.294	
Dependence	1.435	1.428			1.453		
Emotional Energy	1.559	1.504			1.567		
Flexibility in Working Relations						1.064	
Management of Output							
Relatedness	1.317	1.264			1.421		

Source: Research Data (2021)

The model's predictive relevance was assessed by estimating the Stone-Geisser criterion (Q^2). Then, following Hair *et al.*'s (2017) recommendations, it was carried out the blindfolding adopting an omission distance D between 5 and 12. Given that an omission distance of seven ($D=7$) indicates that each fifth data point of a latent variable's indicators will be eliminated in a single blindfolding round, the analysis proceeded with the distance.

The Stone-Geisser criterion (Q^2) assesses how close the model is to what was expected to be (i.e., the quality of the model's prediction or the adjusted model's accuracy). As an evaluation criterion, values greater than zero should be obtained (HAIR *et al.*, 2017). Table 31 shows the predictive relevance of the model.

Table 31 - Latent Variables Predictive Relevance Q^2

Latent Variables (LVs)	Q^2
Access to Colleagues	0.162
Access to Organizational Knowledge	0.021
Flexibility in Working Relations	0.086
Management of Output	0.130
Dependence	
Relatedness	
Emotional Energy	

Source: Research Data (2021)

Note. Reference threshold. $Q^2 > 0$

Regarding the endogenous constructs cross-validation, all the indexes showed values above zero. Thus, it was confirmed the model's predictive relevance. Table 32 shows the results of LVs effects.

Table 32 - Results of Latent Variables Effects

	Access to Colleagues	Access to Organizational Knowledge	Dependence	Emotional Energy	Flexibility in Working Relations	Management of Output	Relatedness
Access to Colleagues					0.006	0.082	
Access to Organizational Knowledge	0.232				0.036	0.008	
Dependence	0.013	0.004			0.093		
Emotional Energy	0.005	0.036			0.001		
Flexibility in Working Relations						0.143	
Management of Output							
Relatedness	0.079	0.042			0.002		

Source: Research Data (2021)

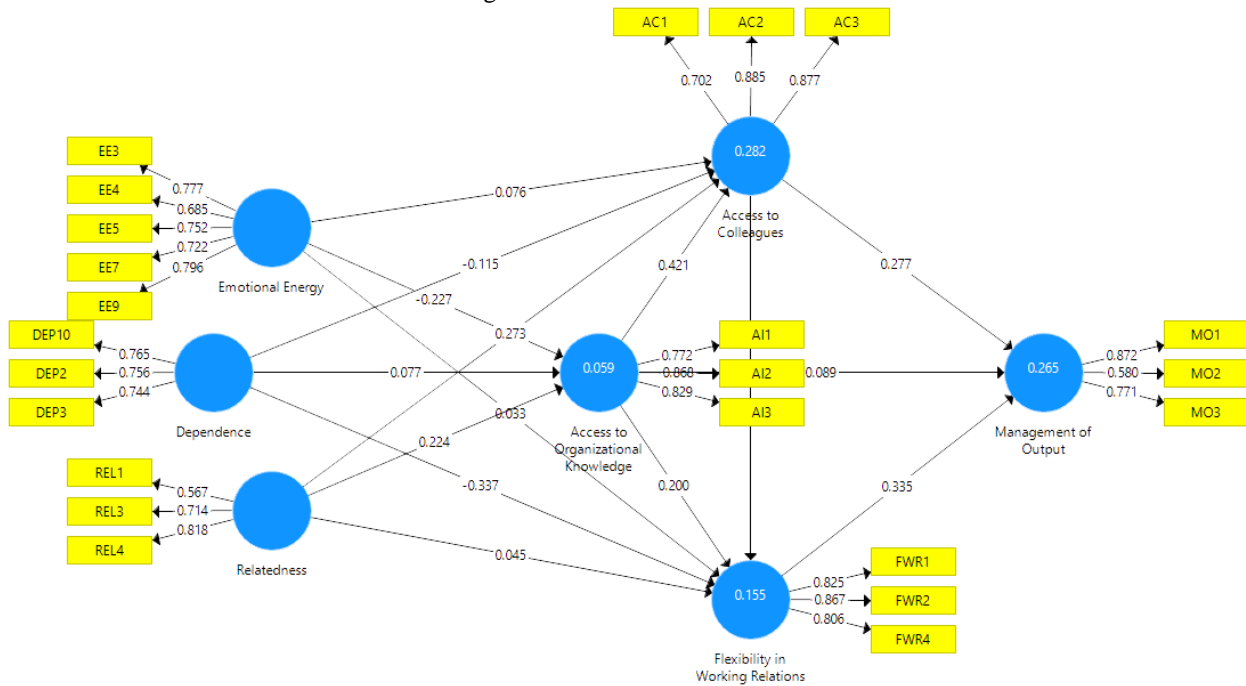
Note. Reference threshold f^2 , 0.02, 0.15, and 0.36 respectively for low, medium, and high effects (COHEN, 1988)

According to Cohen (1988), f^2 indexes below the threshold of 0,02 have low predictive power. As an extra precaution, the Harman factor test (HARMAN, 1976) was obtained by analyzing all items in a single factor, and it resulted in an explained variance of 16,1%. Results higher than 50% indicate that the model's variance may be ascribed to the chosen analysis method rather than of the model's dimensions (BAGOZZI; YI; PHILLIPS, 1991; PODSAKOFF *et al.*, 2003). The following section shows the results of the path coefficients analysis and the explained variance of the four NWW facets.

4.5. PATHS COEFFICIENTS ANALYSIS

In the sample of 139 individuals, results show that 26,5% of the variance in the management of output can be explained by the variance of the endogenous latent variables. Figure 26 shows the structural model results, the structural relationships, manifest variable outer loadings coefficients (beta), and the variance explained by the LVs. The flexibility of work relation showed an influence of 0,143 on the management of output.

Figure 26 - Structural Model Results



Source: Research Data (2021)

Cohen (1988) suggests that R^2 indexes above 26% are considered substantial, specifically in the areas of the social and behavioral sciences. In the model’s results, the LVs “management of output” and “access to colleagues” presented 26,5% and 28,2%, respectively.

4.6. HYPOTHESIS TEST SUMMARY

It was carried out the bootstrapping resampling technique with 5000 samples following Hair *et al.*'s (2016) recommendations to assess the measurement and validity of the structural model. The standardized path coefficients (β) were evaluated at a 95% significance level ($p < 0.05$). Table 33 shows the hypotheses test results, paths, path coefficients, t-value, and p-value.

Table 33 - Hypothesis Test Results

Hypotheses	Paths	Paths Coefficients (β)	Sample Mean	STDEV	t-value	p-value*	Decision
H1	AC->MO	0.275	0.293	0.133	2.068	0.039	Supported*
H2	AOK-> MO	0.099	0.091	0.131	0.75	0.453	Not Supported
H3	FLWR->MO	0.326	0.328	0.09	3.620	0	Supported*
H4	AOK->AC	0.396	0.396	0.09	4.393	0	Supported*
H5	AOK->FLWR	0.205	0.203	0.084	2.439	0.015	Supported*
H6	AC->FLWR	0.093	0.099	0.085	1.092	0.275	Not Supported
H7a	EE->AC	0.051	0.057	0.098	0.514	0.607	Not Supported
H7b	EE->AOK	-0.24	-0.212	0.133	1.805	0.071	Not Supported
H7c	EE->FLWR	0.021	0.002	0.114	0.183	0.855	Not Supported
H8a	REL->AC	0.275	0.267	0.097	2.837	0.005	Supported*

Hypotheses	Paths	Paths Coefficients (β)	Sample Mean	STDEV	t-value	p-value*	Decision
H8b	REL->AOK	0.211	0.22	0.105	2.004	0.045	Supported*
H8c	REL->FLWR	0.048	0.025	0.125	0.382	0.703	Not Supported
H9a	DEP->AC	-0.097	-0.083	0.104	0.93	0.352	Not Supported
H9b	DEP->AOK	0.106	0.083	0.144	0.734	0.463	Not Supported
H9c	DEP->FLWR	-0.348	-0.326	0.12	2.910	0.004	Supported*

Source: Research Data (2021)

* p-value for a two-tailed test, 1.96 (significance level:95%)

At a significance level of 95%, hypotheses H1, H3, H4, H5, H8a, H8b, H9c were supported.

4.7. ANALYSIS OF UNOBSERVED HETEROGENEITY

The study's sample reunites people of different ages, cultural backgrounds, and educational degrees. Additionally, living in four different Brazilian regions spread through several states and even living overseas. For this reason, as an extra precaution, the sample was evaluated to verify any unobserved heterogeneity. SmartPLS offers a set of procedures in the FIMIX module - PLS (Finite Mixture PLS) called latent class techniques. The results of the analysis are shown in Table 34.

Table 34 - Unobserved Heterogeneity Results: Adjustment Indicators and Segments

Number of Segments	Adjustment Indicators				Segments' Relative Sizes					
	AIC	BIC	CAIC	NE	Seg 1	Seg 2	Seg 3	Seg 4	Seg 5	Seg 6
2	1464,065	1578,510	1617,510	0,561	0,652	0,348				
3	1448,197	1621,331	1680,331	0,685	0,503	0,342	0,155			
4	1383,930	1615,753	1694,753	0,774	0,558	0,331	0,075	0,036		
5	1407,518	1698,031	1797,031	0,825	0,432	0,338	0,113	0,064	0,053	
6	1390,448	1739,650	1858,650	0,797	0,430	0,280	0,131	0,080	0,043	0,036

Source: Research Data (2021)

Note. Bayesian information criterion (BIC) (SARSTEDT; RINGLE, 2010); Consistent Akaike Information Criterion (CAIC) (SARSTEDT; RINGLE, 2010); Normed Entropy Criterion (EN) (RAMASWAMY *et al.*, 1993).

Two adjustment indicators (CAIC and EN) were compared among six segments to assess the sample's unobserved heterogeneity. Following Sarstedt and Ringle's (2010) recommendations, EN values above 0,50 indicate distinct segments, and values below 0.5 indicate a likely unobserved heterogeneity.

As can be observed, segment 1 shows the lower CAIC and EN indexes. Moreover, observing the results, the relative size of partition 1 is 187,36% larger than partition 2. Considering that the difference between the group of respondents working remotely and the

other group working in hybrid mode was already expected (therefore, it was a previously identified heterogeneity), it was decided to explore both groups in more detail.

4.8. MULTI-GROUP ANALYSIS RESULTS

A multigroup analysis (MGA) tests the null hypothesis that the path coefficients between two groups are not significantly different (HAIR *et al.*, 2017). According to Matthews (2017), multigroup analysis allows a researcher to analyze differences among subsamples further, which would not be evident when examining the complete sample.

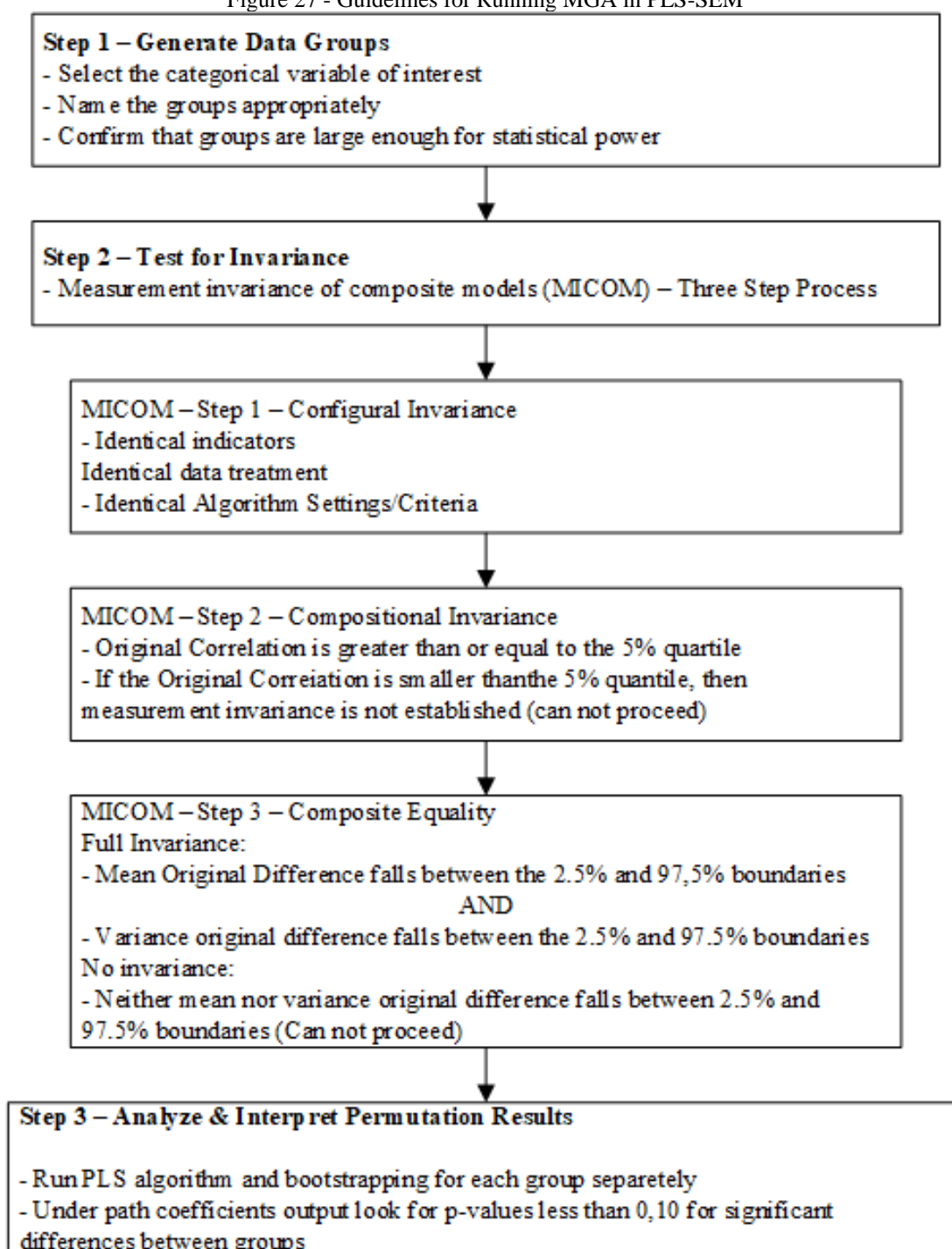
This study considered three pairs of subsamples to be analyzed. Since groups size should be considered when carrying out an MGA, it was followed Hair *et al.* (2017) recommendation to avoid comparing groups that are 50% larger than others as the difference may generate bias to the statistical tests

4.8.1. Measurement Invariance of Composite Models (MICOM)

Sarstedt, Ringle and Hair (2017) recommend the analysis of group differences to confirm that model estimates do not result from the latent variables' specific content or meanings across groups or from the measurement scale. Therefore, to assess the measurement invariance of composite models (MICOM) when using PLS-SEM, it is necessary to follow three steps. First, configural invariance ensures that the same parametrization and estimation settings were used to analyze the sample.

Second, compositional invariance tests whether the composite scores are created equally across groups, despite possible differences in the indicator weights. Finally, the equality of composite mean tests the composites' mean values and variances (HENSELER; RINGLE; SARSTEDT, 2016). Figure 27 presents the guidelines for running MGA in PLS-SEM according to Matthews (2017, p.222).

Figure 27 - Guidelines for Running MGA in PLS-SEM



Source: Matthews (2017, p.222)

Table 35 shows the pair of groups analyzed to evaluate statistical differences.

Table 35 - Pair of Groups to perform MGA

Pairs of Groups	Group 1	Group 2
Work Regimen	Hybrid (At the organization or partly remote)	Remote Work (Fully Remotely)
Social Media Use (Motivation)	Hedonic (Communication with family and friends or leisure)	Work
Social Media Use (Intensity)	Heavy Users	Light Users

Source: Research Data (2021)

Permutation p-values of less than or equal to 0.10 designate a significant difference between the two groups of interest (MATTHEWS, 2017). Therefore, the first pair to be compared was the Work Regimen Groups. It comprises the group working at the organization or party-time remotely (Group 1) and the group working entirely remotely (Group 2). Table 36 shows the results of Permutations Significant Difference Between Path Coefficient Results Among the Three Pair of Groups.

Table 36 - Results of Permutations Significant Difference Between Path Coefficient of the Three Pair of Groups

Pair of Groups	Path Coefficient	Path Coefficient Original Difference	Permutation p-value
Work Regimen (Hybrid vs. Remote Work)	Relatedness -> Access to Colleagues	0,427	0,021
Social Media Use Motivation (Hedonic vs. work-oriented use)	Emotional Energy -> Flexibility in Working Relations	-0,470	0,038
Social Media Use Intensity (Heavy vs. Light Users)	Emotional Energy -> Access to Colleagues	-0,052	0,043
	Dependence -> Access to Colleagues	0,346	0,078

Source: Research Data (2021)

Note. The Hybrid group comprised individuals who answered that they have been working both at full periods in the organization or partly at home. In the case of the pair of groups of social media use motivation, the Hedonic use group consisted of individuals who answered that they used social media to communicate with family and friends or to have fun.

The complete results of MICOM analysis are shown in Appendix L.

4.8.2. Work Regimen: Hybrid vs. Remote Work

Table 37 shows the difference between the coefficient of determination (R^2) among the four dependent LVs.

Table 37 - Results of Differences between Coefficients of Determination (R^2) of the Four LVs among Hybrid vs. Remote Work Groups

Dependent Latent Variables	R Square-diff (Hybrid - Remote Work)	p-Value original 1-tailed (Hybrid vs. Remote Work)	p-Value* new (Hybrid vs. Remote Work)
Access to Colleagues	0.412	0.003	0.006*
Access to Organizational Knowledge	0.034	0.385	0.769
Flexibility in Working Relations	-0.167	0.889	0.223
Management of Output	-0.275	0.989	0.021*

Source: Research Data (2021)

Note. * p-value for a two-tailed test (significance level:95%)

Table 38 shows the results of Differences between Path Coefficients (β) of Hybrid vs. Remote Work Groups

Table 38 - Results of Differences between Path Coefficients (β) of Hybrid vs. Remote Work Groups

Paths	Path Coefficients-diff (Hybrid - Remote Work)	p-Value original 1-tailed (Hybrid vs. Remote Work)	p-Value new (Hybrid vs. Remote Work)
Access to Colleagues -> Flexibility in Working Relations	-0.086	0.661	0.679
Access to Colleagues -> Management of Output	-0.063	0.575	0.85
Access to Organizational Knowledge -> Access to Colleagues	0.287	0.067	0.134
Access to Organizational Knowledge -> Flexibility in Working Relations	0.065	0.362	0.724
Access to Organizational Knowledge -> Management of Output	-0.12	0.646	0.708
Dependence -> Access to Colleagues	0.021	0.463	0.926
Dependence -> Access to Organizational Knowledge	-0.013	0.509	0.981
Dependence -> Flexibility in Working Relations	0.329	0.078	0.156
Emotional Energy -> Access to Colleagues	0.116	0.285	0.571
Emotional Energy -> Access to Organizational Knowledge	0.14	0.301	0.602
Emotional Energy -> Flexibility in Working Relations	-0.275	0.868	0.265
Flexibility in Working Relations -> Management of Output	-0.189	0.836	0.327
Relatedness -> Access to Colleagues	0.427	0.023	0.046*
Relatedness -> Access to Organizational Knowledge	0.236	0.159	0.318
Relatedness -> Flexibility in Working Relations	0.087	0.368	0.735

Source: Research Data (2021)

Note. * p-value for a two-tailed test (significance level:95%)

Subsequently, the comparison of the groups in relation to the use habits is shown.

4.8.3. Social Media Use Habits: Hedonic vs. Work-oriented Use

Table 39 shows the difference between the coefficient of determination (R^2) among the four dependent LVs in relation to social media use habits (Hedonic vs. Work-Oriented groups).

Table 39 - Results of Differences between Coefficients of Determination (R^2) of the Four LVs among Hedonic vs. Work-Oriented Social Media Use Groups

Dependent Latent Variables	R Square-diff (Hedonic – Work-Oriented Use)	p-Value original 1-tailed (Hedonic vs. Work-Oriented Use)	p-Value new (Hedonic vs. Work-Oriented Use)
Access to Colleagues	0.412	0.003	0.006*
Access to Organizational Knowledge	0.034	0.385	0.769
Flexibility in Working Relations	-0.167	0.889	0.223
Management of Output	-0.275	0.989	0.021*

Source: Research Data (2021)

Note. * p-value for a two-tailed test (significance level:95%)

Table 40 shows the results of differences between path coefficients (β) of hedonic vs. work-oriented social media use groups

Table 40 - Results of Differences between Path Coefficients (β) of Hedonic Use vs. Work-Oriented Use

Paths	Path Coefficients-diff (Hedonic – Work-Oriented Use)	p-Value original 1-tailed (Hedonic vs. Work-Oriented Use)	p-Value new (Hedonic vs. Work-Oriented Use)
Access to Colleagues -> Flexibility in Working Relations	0.026	0.459	0.917
Access to Colleagues -> Management of Output	0.314	0.125	0.249
Access to Organizational Knowledge -> Access to Colleagues	-0.251	0.918	0.164
Access to Organizational Knowledge -> Flexibility in Working Relations	0.042	0.411	0.821
Access to Organizational Knowledge -> Management of Output	-0.261	0.842	0.315
Dependence -> Access to Colleagues	0.168	0.227	0.454
Dependence -> Access to Organizational Knowledge	0.202	0.281	0.562

Paths	Path Coefficients- diff (Hedonic – Work-Oriented Use)	p-Value original 1- tailed (Hedonic vs. Work-Oriented Use)	p-Value new (Hedonic vs. Work- Oriented Use)
Dependence -> Flexibility in Working Relations	0.173	0.246	0.492
Emotional Energy -> Access to Colleagues	-0.107	0.699	0.602
Emotional Energy -> Access to Organizational Knowledge	-0.199	0.795	0.409
Emotional Energy -> Flexibility in Working Relations	-0.47	0.962	0.075*
Flexibility in Working Relations -> Management of Output	-0.052	0.621	0.758
Relatedness -> Access to Colleagues	0.163	0.222	0.443
Relatedness -> Access to Organizational Knowledge	-0.223	0.824	0.351
Relatedness -> Flexibility in Working Relations	0.1	0.372	0.743

Source: Research Data (2021)

Note. * p-value for a two-tailed test (significance level:90%)

Subsequently, the comparison of the groups in relation to the frequency of use is shown.

4.8.4. Social Media Use Habits: Heavy Users vs. Light Users

Table 41 illustrates the analysis of the differences between the path coefficients of the Heavy Users and Light Users groups.

Table 41 - Results of Differences between Path Coefficients (β) of Heavy Users vs. Light Users

Paths	Path Coefficients- diff (Heavy Users – Light Users)	p-Value original 1- tailed (Heavy Users vs. Light Users)	p-Value new (Heavy Users vs. Light Users)
Access to Colleagues -> Flexibility in Working Relations	0.116	0.459	0.506
Access to Colleagues -> Management of Output	-0.124	0.125	0.7
Access to Organizational Knowledge -> Access to Colleagues	-0.065	0.918	0.73
Access to Organizational Knowledge -> Flexibility in Working Relations	-0.172	0.411	0.314
Access to Organizational Knowledge -> Management of Output	-0.169	0.842	0.63
Dependence -> Access to Colleagues	0.346	0.227	0.078*

Paths	Path Coefficients- diff (Heavy Users – Light Users)	p-Value original 1- tailed (Heavy Users vs. Light Users)	p-Value new (Heavy Users vs. Light Users)
Dependence -> Access to Organizational Knowledge	-0.061	0.281	0.858
Dependence -> Flexibility in Working Relations	0.055	0.246	0.827
Emotional Energy -> Access to Colleagues	-0.379	0.699	0.04**
Emotional Energy -> Access to Organizational Knowledge	-0.037	0.795	0.873
Emotional Energy -> Flexibility in Working Relations	-0.164	0.962	0.466
Flexibility in Working Relations -> Management of Output	0.175	0.621	0.364
Relatedness -> Access to Colleagues	0.056	0.222	0.723
Relatedness -> Access to Organizational Knowledge	-0.089	0.824	0.668
Relatedness -> Flexibility in Working Relations	0.248	0.372	0.305

Source: Research Data (2021)

Note. * p-value for a two-tailed test (significance level:90%), ** p-value for a two-tailed test (significance level:95%),

The following section discusses the paper's main findings.

5. RESULTS DISCUSSION

In 1991, Sproull, Kiesler and Kiesler (1991) released the book “Connections: New Ways of Working in the Networked Organization”. Thirty years later, their book resonates as due to the COVID-19 pandemic, the workforce relies on the network to deliver work tasks through IT solutions. However, the authors could not predict how fast computers became embedded in people’s lives, especially in the social media era (COULDRY, 2015). For instance, Mukherjee (2021) recently observed that organizational space is simultaneously collapsed and expanded thanks to IT.

Almost ten years ago, Carter (2012) proposed IT identity as a distinct identity based on people’s feelings of relatedness, emotional energy, and dependence in relation to an IT or a group of ITs. In this study, it was hypothesized that IT identity about social media platforms might be helpful at this moment when the New Ways of Working, proposed by Sproull, Kiesler and Kiesler (1991), became more necessary than ever to support computer-based workers in delivering work outcomes⁴³. The following sections will discuss the hypothesis test results and the difference between the groups shown in section 4.8. The discussion will be guided by three

⁴³ Cf. section 2

main questions involving the study's objective.

5.1. HOW DOES IT IDENTITY DUE TO SOCIAL MEDIA USE IMPACT THE NWW FACETS?

Before the pandemic period, the study of Gerards, De Grip and Baudewijns (2018) demonstrated that management of output (MO) was the only NWW facet that directly impacted employees' work engagement. In this study (during the pandemic period), it was found that Access to Colleagues (AC), Access to Organizational Knowledge (AOK), and Flexibility in Working Relations are positively associated with employees' Management of Output (MO).

The correlation coefficient (β) of the path Access to Organizational Knowledge (AOK) to Flexibility of Working Relations (FLWR) was positive (0.205). In addition, a small effect was found among them (0.036) (COHEN,1988). The NWW facet, "Flexibility of Working Relations" (FLWR), is associated positively with the Management of Output (MO). However, there was a large difference between FLWR and MO (0.143).

Relatedness, one of the IT identity dimensions, was positively associated with "Access to colleagues" and "Access to organizational knowledge". Relatedness showed a small effect on AC (0.079). The objective of reporting the effect size (f^2) was to emphasize the importance of the result obtained (i.e., maintaining all equal variables, the larger the effect size, the more significant the impact that the dependent variable has on the independent variable, and correspondingly, the more critical its contribution to the issue being examined (LINDENAU; GUIMARÃES, 2012). In the case of the relationship between Access to Organizational Knowledge (AOK) and Access to Colleagues (AC), a medium effect of (0.232) was verified (COHEN,1988).

Dependence (DEP) was negatively related to the flexibility of working relations. It was hypothesized that feelings of dependence on social media would negatively impact the three NWW facets. However, only the path DEP->FLWR showed a significant and expressive relationship (-0,348). Though it showed a small effect (0.093), feelings of dependence on social media platforms may lead to reduced flexibility in working relations and disturb the balance between work and personal lives.

McIntyre *et al.* (2014) conducted two experiments involving the effects on self-expansion of jobs that stimulate employees to develop skills and assume new identities. Among its findings, they reported that individuals who worked in these jobs presented higher self-concept clarity (SCC). Additionally, they found that self-expansion resulting from working in

these jobs was linked to job satisfaction and commitment. Diversely, low SCC results in adverse outcomes, like emotional distress, low self-esteem, and depression (RADER; GRAY, 2015; SCOTT; FULLWOOD, 2020). Relatedness is linked to self-expansion (CARTER; GROVER, 2015). This study's results showed a greater effect than dependence and emotional energy on the dependent variables. This finding may be explored through the duality theory. Campbell *et al.* (1996, p.141) define SCC as the degree to which individuals' self-concept parts are visibly and firmly defined, internally constant, and unchanged over time. Incongruence between self-image and ideal self frequently leads to negative consequences for self-esteem (CAMPBELL; ASSANAND; DI PAULA, 2003; BROWN, 2014) and difficulties in achieving self-actualization — a superior capacity of individuals to perceive their inner voices, accomplish most personal goals and reach full potential as human beings (ROGERS, 1959; MASLOW, 1965).

The COVID-19 pandemic has been forcing a drastic change in the corporate environment. As a result, many companies and employees are dependent even more on digital tools, like social media, to remotely deliver work outcomes (ZHANG *et al.*, 2021) which is accelerating the pace at which individuals' relationships become centered around digital social structures (KELLY, 2020; VON GAUDECKER *et al.*, 2020). As discussed in sections 2.2 and 2.3, the effects of social media usage on individuals when working remotely are extensively debated under a dichotomous perspective [e.g., Ali-Hassan, Nevo and Wade (2015); Cheng *et al.* (2020)]. However, organizations have been forced to adapt from traditional forms of working to a hybrid modality to deliver projected outcomes (PWC, 2021). This is discussed in the next section.

5.2. HOW DOES THE WORK-SETTINGS IMPACT THE RELATIONSHIP BETWEEN IT IDENTITY AND NWW FACETS?

This section analyzes the following question: do the individuals working remotely, and those already working at the organization's physical sites (or hybrid) differ regarding the impact on the relationship between IT identity dimensions and NWW facets?

Regarding the correlation coefficient (β), the path AOK->AC presented a positive index of 0.396. The difference in the explained variance (R^2) of 41.2% favors the group that worked in a hybrid model (in relation to the group that worked or has been working exclusively remotely). This result indicates that the three dimensions of IT identity concerning social media

(the independent variables in the relationship with AC) become more relevant when the worker needs to reach colleagues both remotely and in the organization's dependencies.

Differently, concerning the management of output, the group that worked in a hybrid mode presented a disadvantage of 27.5% compared to the group that worked exclusively remotely. The group working in the hybrid model showed a difference of 0.427 about the group that was still working remotely. This result indicates feelings of connectedness when individuals think about themselves in relation to social media (i.e., how social media is intertwined in their daily lives, how it allows them to interact with friends and family, and how they know how to use social media to foster greater connectedness) can improve the capacity of employees to access their colleagues partly due to the IT identity acquired by the use of social media even at the moment when they are returning to work at the physical office installations.

A small effect was found between Access to Colleagues and Management of Output (0.082). The difference in Management of Output (R^2) for the hybrid and remote groups was -0.275. In its turn, the difference in Access to Colleagues (R^2) was 0.412. It was found a small effect of Relatedness on Access of Colleagues (0,042). The significance in the difference of paths coefficients, Dependence -> Access to Colleagues and Emotional Energy -> Access to Colleagues, between the two groups denotes that dependence and emotional energy about social media produce diverse outcomes among heavy and light users (i.e., the former results in a positive difference while the latter in a negative difference). Although in the general hypothesis test, the relationship between Emotional Energy and Access to Colleagues and between Dependence and Access to Colleagues was not significant, the results were significant for the path-coefficient difference when separating the groups by the frequency of use.

Concerning the path Dependence-> Access to colleagues, the group that used social media most often had an advantage of 0.346 over the group that used it less frequently. This finding indicates that dependence on social media, even if it relates to the excessive use of this type of IT, also aids in access to colleagues

5.3. HOW DOES SOCIAL MEDIA USE HABITS IMPACT THE RELATIONSHIP BETWEEN IT IDENTITY DIMENSIONS AND THE NWW FACETS?

This section analyzes the two following questions: (i) do the group of individuals who use social media for hedonic motivations, and those who use it mainly for work-oriented motives differ regarding the impact on the relationship between IT identity dimensions and the

NWW facets? (ii) Do individuals who use social media more frequently differ from the less-frequent group of users regarding the impact on the relationship between IT identity dimensions and the NWW facets?

In regard to the difference between the path coefficient Emotional Energy-> Flexibility in Working Relations among the groups “Hedonic Use- and Work Oriented-Use, it was found an index of -0.47. This study compared the group that used social media primarily for communication with friends and family or for leisure activities (named Hedonic Use) and the group that used it mainly for work tasks (termed Work Oriented-Use). The groups' difference regarding the path coefficient (β), Emotional Energy (EE) -> Flexibility in Working Relations (FLWR), was found significant at a 95% confidence level. More specifically, regarding the Work-Oriented Use group, it was found a 0,47 difference when compared to the Hedonic Use group.

From this result, it is concluded that even though the complete data results show a negative relationship between dependence and flexibility in work relationships ($\beta = - 0,337$), feelings of enthusiasm about using social media (relatedness) can counterbalance the adverse effects of social media dependence to foster a greater adjustment in personal and professional life. In the case of the difference between groups by media use (hedonic and for work), the EE-FLWR path presented a significant variation of -0.47 in favor of the group that responded that used social media primarily for hedonic reasons.

On the other hand, when comparing the difference between the path coefficient (β) Emotional Energy -> Flexibility in Working Relations between respondents who pointed out the main purpose of using social media for work and those who use it mainly for communication with family and friends, there was a significant difference of 0.633 in favor of the first group.

Ernst, Pfeiffer and Rothlauf (2015) found that perceived usefulness (PU) and perceived enjoyment (PE) were two essential factors in motivating the use of social network sites (SNS). In the same vein, Ali-Hassan, Nevo and Wade (2015) analyzed the use of social media according to three use dimensions: social, hedonic, and cognitive. They found that social and cognitive use were positively and indirectly linked to innovative behavior and job performance. Diversely, hedonic use, while negatively impacting job performance, positively contributed to the construction of social ties. About the latter, it also contributed positively to stimulating innovative performance. This finding extends Hassan, Nevo, and Wade's (2015) conclusions that social and hedonic use of social media positively influences innovative behavior and job performance. The effects of social media on IT identity may explain these and other dual influences on individuals' self and, accordingly, their behaviors in the work

environment

Regarding the path “emotional energy to access to colleagues”, the group that used social media more frequently showed a difference of -0.379 of the path coefficients in relation to the group that used it less frequently. This finding indicates that emotional energy may be related to excessive use of social media. What ultimately reveals that although frequent use is an ally in access to colleagues, the way in which individuals relate to the media (emotional energy in relation to IT) can difficult this access.

Conclusively, the IT identity about social media reflected in emotional energy (EE) (i.e., extended feelings of confidence, enthusiasm, and energy regarding social media) upholds a stronger performance when individuals channel these feelings to their work use, allowing them to better handle the work-life conflicts.

6. CONCLUSION

This study aimed to assess the impact of IT identity (acquired due to social media) on computer-based office work during the COVID-19 pandemic. In this period, the distance between the employees and the physical work environment may have weakened aspects as professional identity (HOFF, 2021). Among the various types of identity, the professional identity is developed insofar employees perceive themselves as members of a professional class and is associated with the roles assumed in the work environment (CHREIM; WILLIAMS; HININGS, 2007; ARJALIES; KODEIH; RAYNARD, 2015; KASPERIUNIENE; ZYDZIUNAITE, 2019) and is influenced by personal characteristics (GRAHAM; SHIER, 2014) and institutional forces (CHREIM, 2007).

The internal aspect is formed by characteristics such as skills, abilities, values, education, morals, and ethics (HSIAO; WANG, 2016; KOHTAMÄKI *et al.*, 2016; PURCHASE *et al.*, 2016). Besides, through the influence of colleagues, bosses, the network of professional relationships in which the individual is inserted, and the culture of the organizations' mission and goals (ARJALIES *et al.*, 2015; FIESELER *et al.*, 2015). In this regard, the first finding of this study is that IT identity about social media platforms may be a positive factor in preserving the cohesion of employees' professional identity since feelings of relatedness and emotional energy favored access to organizational knowledge and colleagues when working remotely.

Strictly from the organizational aspect, this paper adopted duality theory as the starting point, arguing the need to adopt new theoretical approaches to study the future of computer-

based office work in the post-pandemic. More specifically, the factors that can increase organizational performance in this new working setting still need to be better understood. By bridging the discussion between purely organizational aspects to the context of the management of Information system systems, this paper argued that the IT identity theory could be an adequate theoretical basis to demonstrate and reinforce the premise of duality theory. Reciprocally, reinforce the importance of IT identity theory for organizational studies in this new work settings.

The comparison between duality theory and ambidexterity theory in section 2.3 aimed to demonstrate that adopting the ambidexterity theory would not be appropriate in the case of this paper's proposition. This paper argues that when people view the use of social media in the strictly organizational context, the two ambidexterity premise options (explore **or** exploit) would be exclusionary. In other words, following the premise of ambidexterity theory, whether it promotes its use indirectly to raise benefits (also indirect) for organizations or explores its use directly by aiming more direct organizational benefits (e.g., savings in communication between colleagues and information sharing).

In the case of social media, its use may be directly linked to facilitating and fostering an organization's performance [(e.g., Leftheriotis and Giannakos, (2014)]. However, its use is more commonly linked to the employee's daily life [e.g., Ali-Hassan, Nevo and Wade (2015)], which involves communication with friends, family, playing games, watching videos and being work-related use only one of the motivators [e.g., Chennamaneni, and Taneja (2015)].

Since that COVID-19 pandemic forced the need to adopt home-office extensively, the IT identity due to social media grows in importance as it can potentially influence the computer-based office workers' behavior in this new model. This study provided empirical evidence of this assumption.

Given that Carter *et al.* (2020) demonstrated that a strong IT identity in relation to an IT (or a class of IT, such as social media) reflects a greater propensity to explore the use of new IT features, the computer-based office worker, whether working in a hybrid, remote, or presential model, can benefit from this IT identity in relation to social media in an even more expressive way because this class of ITs involves the use of different IT artifacts (CARTER, 2012; CARTER et al., 2020). Therefore, its use (and consequently the development of its IT Identity) also implies a stronger IT identity with a greater number of artifacts, improving the workers' willingness to explore their features mastering the various tools that involve the use of social media.

Still, social distancing reduced direct control over employees and their work deliveries

(KNIFFIN *et al.*, 2021). For this reason, it is argued that the ambivalence "**explore or exploit**" acquired less relevance. Therefore, this paper sought to demonstrate that IT Identity in relation to social media may provide a theoretical framework to understand and empirically measure this **duality** in this "new normal", respecting the nuances of the indirect effects of social media on human behavior.

For this reason, three types of groups were analyzed. Two of them related to the social media use habits and one to the work regime in the period of the COVID-19 pandemic. This stratification provided a richer discussion to achieve the research objective (in the form of the analysis of three types of groups) of how the IT ID can be more or less positive for organizational performance in this new post-pandemic reality.

6.1. THEORETICAL AND PRACTICAL IMPLICATIONS

The first theoretical contribution regards the construct of IT identity. Since Carter developed the concept in 2012, researchers have been looking for a validated instrument to expand IT Identity's research. This study developed and validated an 11 items questionnaire covering the three reflective IT Identity dimensions. Even if it may be limited to the study's sample, future research may use it to adapt it to different cultural backgrounds and hopefully to a representative sample of their respective populations.

The second theoretical contribution concerns duality theory since duality thinking also reinforces the need to discard assumptions about opposing values and instead acknowledge them as complementary concepts (SUTHERLAND; SMITH, 2011). The investigation of the adverse and beneficial effects of using social media through IT identity may provide to the research field a broader and more realistic view of the platforms' influence on human behavior and contribute to finding improved frameworks to study this complex IT artifact.

The practice may benefit from comprehensive knowledge about social media use in the work environment and employees' personal lives. Although some companies do not allow the use of social media in the workplace, many recognize their value and develop strategies to leverage the positive benefits of its use while reducing its adverse effects on organizational performance (CHENG *et al.*, 2020). In this regard, organizations search for ways to maximize the benefits of social media use within their business plans. Among their benefits, social media can improve internal communication, assist brand promotion, and prospect new talent. Additionally, it was also verified that it aids in reducing costs in marketing and sales for startups (WESTWOOD, 2015; ISARANON, 2019).

Insofar social media technologies are transforming social and organizational life (HAFEZIEH; ESHRAGHIAN, 2017), in the organizational context, the decision-makers have been thriving understand their influence on employees' behaviors in the work environment and how it influences performance (MOQBEL; NEVO; KOCK, 2013; ZHANG *et al.*, 2015; GAO *et al.*, 2016; SYKES; VENKATESH, 2017). In this regard, the third theoretical contribution regards the role of IT identity due to the use of social media in the context of NWW literature.

The results discussed in section 5.1 may coalesce and amplify NWW' studies findings [e.g., Baudewijns, Gerards, de Grip, (2015); Demerouti *et al.* (2014); Gerards, van Wetten and van Sambeek (2020). For example, Renard *et al.*'s (2021) reviewed the NWW literature and concluded that a lack of empirical data restricts valid conclusions on NWW's effects on workers and organizations. Nevertheless, authors such as Gerards, van Wetten and van Sambeek (2020) found that output management positively impacts employees' intrapreneurial behavior ⁴⁴.

6.2. LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS

This study's findings may be interpreted with some precautions because many factors related to this pandemic period could lead to an overinterpretation of the results. For example, this study did not consider the psychological effects of the measures of social restriction and the stress associated with the pandemic. Therefore, the inferences are limited to the specific delimited settings (i.e., computer-based office workers who have been working under home office regimen, at the companies, or in a hybrid model).

The first future research suggestion is to reproduce this investigation in different cultures may provide further insights about the identification with social media and how it will assist in the transition to the new normal at the end of the COVID-19 pandemic. Secondly, replicating the study after the pandemic will give a more balanced understanding of how the factors that limit this study's findings affect the original study.

Third, given that this study aimed to explore the relationships exposed in the model, it did not intend to proceed to a confirmatory phase. Therefore, future research should extend this study's contributions by testing the proposed model in this study in a covariance-based structural equations modeling (CB-SEM) approach.

⁴⁴ Employees' innovative, proactive and risk-taking behavior. Cf. Gerards, van Wetten and van Sambeek (2020, p.2079)

REFERENCES

- AB HAMID, MR; SAMI, W; SIDEK, MH MOHMAD. Discriminant Validity Assessment: Use of Fornell & Larcker Criterion Versus HTMT Criterion. **Journal of Physics: Conference Series**, v. 890, n. 1, p. 1-5, 2017.
- AHMED, Ashir; SCHEEPERS, Helana; STOCKDALE, Rosemary. Social Media Research: A Review of Academic Research and Future Research Directions. **Pacific Asia Journal of the Association for Information Systems**, v. 6, n. 1, p. 21-37, 2014.
- ALAHMAD, Rasha; ROBERT, Lionel. Artificial Intelligence (AI) and IT Identity: Antecedents Identifying with AI Applications. AMCIS, 2020, Salt Lake City, Utah. August 12-16. p.13-15.
- ALI, Ahsan *et al.* Improving Team Innovation Performance: Role of Social Media and Team Knowledge Management Capabilities. **Technology in Society**, v. 61, p. 101259, 2020.
- ALI AZLAN, Shah; CHUA, Shirley Jin Lin; LIM; Melissa Ee-Ling. The Effect of Physical Environment Comfort on Employees' Performance in Office Buildings: A Case Study of Three Public Universities in Malaysia. **Structural Survey**, v. 33, n. 4/5, p. 294-308, 2015.
- ALI-HASSAN, Hossam; NEVO, Dorit; WADE, Michael. Linking Dimensions of Social Media Use to Job Performance: The Role of Social Capital. **The Journal of Strategic Information Systems**, v. 24, n. 2, p. 65-89, 2015.
- ANWAR, Zainul; FURY, Erlin Dias; FAUZIAH, Santhia Roya. The fear of missing out and usage intensity of social media. In: **Advances in Social Science, Education and Humanities Research: 5th ASEAN Conference on Psychology, Counselling, and Humanities (ACPCH 2019)**. 2020. p. 183-187.
- AOUN, Chadi; VATANASAKDAKUL, Savanid. Social Media in the Workplace: Key Drivers for Inclusive Innovation. AMCIS, 2012, Seattle, WA, USA. July 29, 2012.
- ARJALIES, Diane-Laure; KODEIH, Farah; RAYNARD, Mia. Professional Role Identity as a Filter for Institutional Complexity. Academy of Management Annual Meeting 2015, Vancouver, British Columbia, Canada. Academy of Management. p.12126.
- BAKOTIĆ, Danica. Relationship between Job Satisfaction and Organisational Performance. **Economic research-Ekonomska istraživanja**, v. 29, n. 1, p. 118-130, 2016.
- BAGOZZI, Richard P; YI, Youjae. On the Evaluation of Structural Equation Models. **Journal of the Academy of Marketing Science**, v. 16, n. 1, p. 74-94, 1988.
- BAUDEWIJNS, Claudia; GERARDS, Ruud; DE GRIP, Andries. **New Ways of Working and Work Engagement**. *GSBE Research Memoranda*. Maastricht: Maastricht University 2015.
- BAUMEISTER, ROY F.; HUTTON, DEBRA G. Self-Presentation Theory: Self-Construction and Audience Pleasing. In: MULLEN, B. e GOETHALS, G. R. (Ed.). **Theories of Group Behavior**. New York, NY: Springer New York, 1987. p.71-87.
- BECKER, JOSHUA; PORTER, ETHAN; CENTOLA, DAMON. The Wisdom of Partisan Crowds. *Proceedings of the National Academy of Sciences*, v. 116, n. 22, p. 10717-10722, 2019.
- BENNETT, James *et al.* Workplace Impact of Social Networking. **Property Management**, v. 28, n. 3, p. 138-148, 2010.
- BLOK, Merle; VAN DER MEULEN, F.; DHONDT, S. A Comparison between New Ways of Working and Sociotechnical Systems. In: (Ed.). **New Ways of Working Practices (Advanced Series in Management)**: Emerald Group Publishing Limited, 2016. p.145-162.
- BONNER, Ann; TOLHURST, Gerda. Insider-outsider perspectives of participant

- observation. **Nurse Researcher (through 2013)**, v. 9, n. 4, p. 7, 2002.
- BOUDREAU, Marie Claude; SERRANO, Christina.; LARSON, Keri. IT-Driven Identity Work: Creating a Group Identity in a Digital Environment. **Information and Organization**, v. 24, n. 1, p. 1-24, Jan 2014.
- BRANINE, Mohamed. Part-Time Work and Job sharing in Health Care: Is the NHS a Family-Friendly Employer? **Journal of Health Organization and Management**, v. 17, n. 1, p. 53-68, 2003.
- BROOKS, Stoney; LONGSTREET, Phil; CALIFF, Christopher. Social Media Induced Technostress and Its Impact on Internet Addiction: A Distraction-Conflict Theory Perspective. **AIS Transactions on Human-Computer Interaction**, v. 9, n. 2, p. 99-122, 2017.
- BROWN, Jonathon D. Self-Esteem and Self-Evaluation: Feeling Is Believing. *In*: SULLS, Jerry. (Ed.). **Psychological Perspectives on the Self: The Self in Social Perspective**: Psychology Press, v.4, 2014. p.27-58.
- CAO, Xiongfei *et al.* Exploring the Influence of Social Media on Employee Work Performance. **Internet Research**, v. 26, n. 2, p. 529-545, 2016.
- CAMPBELL, Jennifer D. *et al.* Self-Concept Clarity: Measurement, Personality Correlates, and Cultural Boundaries. **Journal of personality and social psychology**, v. 70, n. 1, p. 141-156, 1996.
- CAMPBELL, Jennifer D.; ASSANAND, Sunaina; DI PAULA, Adam. The Structure of the Self-Concept and Its Relation to Psychological Adjustment. **Journal of Personality**, v. 71, n. 1, p. 115-140, Feb 2003.
- CARTER, Michelle; GROVER, Varun. Me. My Self, and I (T): Conceptualizing Information Technology Identity and Its Implications. **Management Information Systems Quarterly**, v. 39, n. 4, p. 931-957, 2015.
- CARTER, Michelle; COMPEAU, Deborah; SCHMALZ, Marc. The Ambivalent Potential of IT Identity: Me, Not-Me, and Conflicted Me in a Digital World. Twenty-third DIGIT Workshop, 2018, San Francisco, USA. December 2018.
- CHENNAMANENI, Anitha; TANEJA, Aakash. Communication Privacy Management and Self-Disclosure on Social Media - a Case of Facebook. AMCIS 2015, 2015, Fajardo, Puerto Rico. AISELibrary, August 13-15.
- CHEN, Xiayu; WEI, Shaobo. The Impact of Social Media Use for Communication and Social Exchange Relationship on Employee Performance. **Journal of Knowledge Management**, v. 24, n. 6, p. 1289-1314, 2020.
- CHENG, Tan *et al.* Social Media Use and Employee Innovative Performance: Work Engagement as a Mediator. **Social Behavior & Personality**, v. 48, n. 1, Jan 2020.
- CHREIM, Samia. Social and Temporal Influences on Interpretations of Organizational Identity and Acquisition Integration. **The Journal of Applied Behavioral Science**, v. 43, n. 4, p. 449-480, 2007.
- CHREIM, Samia.; WILLIAMS, Bernie. E.; HININGS, C. R. Interlevel Influences on the Reconstruction of Professional Role Identity. **Academy of Management Journal**, v. 50, n. 6, p. 1515-1539, Dec 2007.
- CLIVE, Shepherd. Does Social Media Have a Place in Workplace Learning? **Strategic Direction**, v. 27, n. 2, p. 3-4, 2011.
- COHEN, Jacob. **Statistical Power Analysis for the Behavioral Sciences**. 2. ed. New Jersey, USA: Lawrence Earlbaum Associates, 1988.
- COMSCORE. **2015 Brazil Digital Future in Focus**. 2015. Available in: <https://www.comscore.com/por/Insights/Apresentacoes-e-documentos/2015/2015-Brazil-Digital-Future-in-Focus>. Accessed on: Oct. 01, 2021.
- COOK, Dave; RUDNICKA, Anna; NEWBOLD, JOSEPH. **Work-Life Balance in a**

- Pandemic: A Public Health Issue We Cannot Ignore*. 2021. Available in: <https://theconversation.com/work-life-balance-in-a-pandemic-a-public-health-issue-we-cannot-ignore-155492>. Accessed on: Sep. 27, 2021.
- COULDRY, Nick. Social Media: Human Life. **Social Media + Society**, v. 1, 05/11 2015.
- COVINGTON, Martin V. The Role of Self-Processes in Applied Social-Psychology. **Journal for the Theory of Social Behaviour**, v. 15, n. 3, p. 355-389, 1985.
- CRAIG, Kevin; THATCHER, Jason Bennett; GROVER, Varun. The IT Identity Threat: A Conceptual Definition and Operational Measure. **Journal of Management Information Systems**, v. 36, n. 1, p. 259-288, Jan. 2, 2019.
- CRESWELL, John W; CRESWELL, J. David. **Research Design: Qualitative, Quantitative, and Mixed Methods Approaches**. 4. California, USA: Sage Publications, 2017.
- CURRIE, Candace *et al.* Social Determinants of Health and Well-Being among Young People. **Health Behaviour in School-aged Children (HBSC) study: international report from the**, v. 2010, p. 271, 2009.
- DAVIS, Jenny. L. Triangulating the Self: Identity Processes in a Connected Era. **Symbolic Interaction**, v. 37, n. 4, p. 500-523, 2014.
- DE LEEDE, Jan; HEUVER, Paddy. New Ways of Working and Leadership: An Empirical Study in the Service Industry. *In*: LEEDE, J. D. (Ed.). **New Ways of Working Practices**. Bingley, UK: Emerald Group Publishing Limited, v.16, 2016. p.49-71. (Advanced Series in Management).
- DE-WIT, Lee; BRICK, Cameron; VAN DER LINDER, Sander. *Are Social Media Driving Political Polarization?* Jan. 16, 2019. Available in: https://greatergood.berkeley.edu/article/item/is_social_media_driving_political_polarization. Accessed on: Jan. 26, 2020.
- DEMEROUDI, Evangelia *et al.* New Ways of Working: Impact on Working Conditions, Work–Family Balance, and Well-Being. *In*: KORUNKA, C. e HOONAKKER, P. (Ed.). **The Impact of ICT on Quality of Working Life**. Dordrecht, Netherlands: Springer, 2014. p.123-141.
- DONAHUE, Eileen M. *et al.* The Divided Self: Concurrent and Longitudinal Effects of Psychological Adjustment and Social Roles on Self-Concept Differentiation. **Journal of personality and social psychology**, v. 64, n. 5, p. 834-46, May 1993.
- DUNN, Robert Andrew. Identity Theories and Technology. *In*: LUPPICINI, R. (Ed.). **Handbook of Research on Technoself: Identity in a Technological Society**. Hershey, PA, USA: IGI Global, 2013. Chap. 2, p.26-44.
- DUXBURY, Linda; NEUFELD, Derrick. An Empirical Evaluation of the Impacts of Telecommuting on Intra-Organizational Communication. **Journal of Engineering and Technology Management**, v. 16, n. 1, p. 1-28, Mar 1999.
- ELLISON, Nicole; STEINFELD, Charles; LAMPE, Cliff. The Benefits of Facebook “Friends:” Social Capital and College Students’ Use of Online Social Network Sites. **Journal of computer-mediated communication**, v. 12, n. 4, p. 1143-1168, Jul 2007.
- ERNST, Claus-Peter; PFEIFFER, Jella; ROTHLAUF, Franz. Hedonic and Utilitarian Motivations of Social Network Site Usage. *In*: (Ed.). **Factors Driving Social Network Site Usage**: Springer Gabler, 2015. p.11-28.
- ESMAEILZADEH, Pouyan. How IT Identity Affects Individuals’ Personal Health Devices (Phds) Use Behaviors? An Empirical Study. **Information & Management**, v. 58, n. 1, p. 103313, 2020.
- FAGNOT, Isabelle; PAQUETTE, Scott. Social Media Use and Employee Attitudes Towards Information Security. IFIP 8.2, 2010, December 7, 2010.
- FAYARD, Anne-Laure; WEEKS, JOHN; KHAN, MAHWESH. *Designing the Hybrid Office: From Workplace to “Culture Space”* 2021. Available in:

- <https://hbr.org/2021/03/designing-the-hybrid-office>. Accessed on: Oct. 13, 2021.
- FIESELER, Christian; MECKEL, Miriam; RANZINI, Giulia. Professional Personae-How Organizational Identification Shapes Online Identity in the Workplace. **Journal of Computer-Mediated Communication**, v. 20, n. 2, p. 153-170, Mar 2015.
- FLICK, Uwe. **Introdução à pesquisa qualitativa**. 3. ed. Porto Alegre: Artmed editora, 2008.
- FONCHA, John. W. Who Am I: Identity Construction of Otherness on a Social Media. **Mediterranean Journal of Social Sciences**, v. 5, n. 23, p. 1805-1812, 2014.
- FU, Shaoxiong *et al.* Social Media Overload, Exhaustion, and Use Discontinuance: Examining the Effects of Information Overload, System Feature Overload, and Social Overload. **Information Processing & Management**, v. 57, n. 6, p. 102307, 2020.
- GAJENDRAN, Ravi S.; HARRISON, David A. The Good, the Bad, and the Unknown About Telecommuting: Meta-Analysis of Psychological Mediators and Individual Consequences. **Journal of applied psychology**, v. 92, n. 6, p. 1524-1541, 2007.
- GAO, Yang *et al.* Adapt to Changes or Not? The Mediating Effect of Individual Adaptability between Social Media and Task Performance. 49th HICSS 2016, IEEE. p.2126-2135.
- GARCIA-MORALES, Victor Jesus; MARTÍN-ROJAS, Rodrigo; LARDÓN-LÓPEZ, María Esmeralda. Influence of Social Media Technologies on Organizational Performance through Knowledge and Innovation. **Baltic Journal of Management**, v. 13, n. 3, p. 345-367, 2018.
- GERARDS, Ruud; DE GRIP, Andries; BAUDEWIJNS, Claudia. Do New Ways of Working Increase Work Engagement? **Personnel Review**, v. 47, n. 2, p. 517-534, 2018.
- GERARDS, Ruud; DE GRIP, Andries; WEUSTINK, Arnoud. Do New Ways of Working Increase Informal Learning at Work? **Personnel Review**, v.50, n.4, p. 1200-1215.
- GERARDS, Rudd; VAN WETTEN, Sanne; VAN SAMBEEK, Cecile. New Ways of Working and Intrapreneurial Behaviour: The Mediating Role of Transformational Leadership and Social Interaction. **Review of Managerial Science**, v. 15, n. 7, p. 2075–2110, 2020.
- GOLDEN, Timothy D. The Role of Relationships in Understanding Telecommuter Satisfaction. **Journal of Organizational Behavior**, v. 27, n. 3, p. 319-340, 2006.
- GOSWAMI, Suparna *et al.* Using Online Social Networking to Enhance Social Connectedness and Social Support for the Elderly. International Conference on Information Systems, 2010, St. Louis, Missouri, USA. Association for Information Systems (AIS), December 12-15. p.1705-1714.
- GRAETZ, Fiona; SMITH, Aaron. Duality Theory and Organizing Forms in Change Management. **Journal of Change Management**, v. 9, p. 9-25, 2009.
- GRAHAM, Stephen. Beyond the ‘Dazzling Light’: From Dreams of Transcendence to the ‘Remediation’ of Urban Life: A Research Manifesto. **New Media & Society**, v. 6, n. 1, p. 16-25, 2004.
- GRAHAM, John; SHIER, Micheal. Intersecting Personal Identity and Professional Role: Impact on Social Worker Subjective Well-Being. **Journal of Baccalaureate Social Work**, v. 19, n. 1, p. 133-150, 2014.
- GUMBAKETI, Benedict. A Study of Integrated Poe Technique for Assessing Workplace Constraints and Crowding. Indoor Air 2002 - 9th International Conference on Indoor Air Quality and Climate, 2000, Rotterdam, Netherlands. p.291-395.
- GUNNAR, Megan R; SROUFE, L Alan. **Self Processes and Development**. J, USA: L. Erlbaum Associates, 1991. 268.
- GÜNDÜZ, Uğur. The Effect of Social Media on Identity Construction. **Mediterranean Journal of Social Sciences**, v. 8, n. 5, p. 85-92, 2017.
- HAFEZIEH, Najmeh; ESHRAGHIAN, Farjam. **Affordance Theory in Social Media Research: Systematic Review and Synthesis of the Literature**. 25th European

- Conference on Information Systems (ECIS 2017). Guimarães, Portugal: 3155-3166 p. 2017.
- HALFORD, Susan. Hybrid Workspace: Re-Spatialisations of Work, Organisation and Management. **New Technology, Work and Employment**, v. 20, n. 1, p. 19-33, 2005.
- HARMAN, Harry H. **Modern Factor Analysis**. Chicago, IL, USA: University of Chicago Press, 1976.
- HENDRICKX, Frank. Regulating New Ways of Working: From the New 'Wow'to the New 'How.' **European Labour Law Journal**, v. 9, n. 2, p. 195-205, 2018.
- HENSELER, Jörg; RINGLE, Christian M; SARSTEDT, Marko. A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. **Journal of the Academy of Marketing Science**, v. 43, n. 1, p. 115-135, Jan 2015.
- HENSELER, Jörg; RINGLE, Christian M; SINKOVICS, Rudolf R. The Use of Partial Least Squares Path Modeling in International Marketing. *In: (Ed.). **New Challenges to International Marketing***: Emerald Group Publishing Limited, 2009. p.277-319.
- HINKIN, Timothy R. A Brief Tutorial on the Development of Measures for Use in Survey Questionnaires. **Organizational Research Methods**, v. 1, n. 1, p. 104-121, Jan 1998.
- HOFF, TIMOTHY. Covid-19 and the Study of Professionals and Professional Work. **Journal of Management Studies**, p. 10.1111/joms.12694, 2021.
- HOGAN, Bernie; QUAN-HAASE, Anabel. Persistence and Change in Social Media. **Bulletin of Science, Technology & Society**, v. 30, n. 5, p. 309-315, 2010.
- HOGG, M. A.; TERRY, D. J. Social Identity and Self-Categorization Processes in Organizational Contexts. **Academy of Management Review**, v. 25, n. 1, p. 121-140, 2000.
- HSIAO, Chia-Chun; WANG, Pei-Wen. Relationships among Creative Role Identity, Work Motivation, Instructional Skill for Creativity, and Creative Instructional Behavior. **Journal of Research in Education Sciences**, v. 61, n. 2, p. 185-211, Jun 2016.
- IBGE. **Estimativas Da População Residente No Brasil E Unidades Da Federação Com Data De Referência Em 1º De Julho De 2020**. 2020. Available in: https://ftp.ibge.gov.br/Estimativas_de_Populacao/Estimativas_2020/POP2020_20201030.pdf. Accessed on: Jan. 12, 2020.
- JIA, Jianyao *et al.* Influence of Social Media Use at Work on Construction Managers' Work Performance: The Knowledge Seeker's Perspective. **Engineering, Construction and Architectural Management**, Dec 25, 2020.
- JOHNSON, Eric. *Why Has the Great Work-from-Home Experiment Been So Successful?*, December 11, 2020. Available in: <https://www.forbes.com/sites/forbestechcouncil/2020/12/11/why-has-the-great-work-from-home-experiment-been-so-successful/?sh=3cfc446b28c7>. Accessed on: Jan. 06, 2020.
- JOHNSON, Adam N. Self-Disclosure in Computer-Mediated Communication: The Role of Self-Awareness and Visual Anonymity. **European Journal of Social Psychology**, v. 31, n. 2, p. 177-192, Mar-Apr 2001
- KAPLAN, Andreas; MAZUREK, Grzegorz. Social Media: State of the Art and Research Agenda. *In: MIERZEJEWSKA, Bozena; JUNG, Jaemim, ALBARRAN, Alan B. (Ed.). **Handbook of Media Management and Economics***. London, United Kingdom: Routledge, 2018. p.272-286.
- KASPERIUNIENE, Judita.; ZYDZIUNAITE, Vilma. A Systematic Literature Review on Professional Identity Construction in Social Media. **Sage Open**, v. 9, n. 1, 2019.
- KELLY, J. A. The New" Covid-19" Home Office Worker: Evolving Computer-Human Interactions and the Perceived Value of Workplace Technology. **Technium Soc. Sci. J.**, v. 13, n. 1, p. 575-581, 2020.

- KLOSOWSKI, Thorin. *How Your Boss Can Use Your Remote-Work Tools to Spy on You*. 2021. Available in: <https://www.nytimes.com/wirecutter/blog/how-your-boss-can-spy-on-you/>. Accessed on: January 20, 2022.
- KHAZRAEE, Emad; NOVAK, Alison N. Digitally Mediated Protest: Social Media Affordances for Collective Identity Construction. *Social Media + Society*, v. 4, n. 1, Mar 19, 2018.
- KERPEN, Carrie. *How Has Social Media Changed Us?* April 21, 2016. Available in: <https://www.forbes.com/sites/carriekerpen/2016/04/21/how-has-social-media-changed-us/#742434fe5dfc>. Accessed on Mar. 03, 2021.
- KIETZMANN, Jan H. *et al.* Unpacking the Social Media Phenomenon: Towards a Research Agenda. *Journal of public affairs*, v. 12, n. 2, p. 109-119, 2012.
- KIM, Inchan; MIRANDA, Shaila. How Do Social Media Increase Firm Performance? Entrainment of Innovation to Contention. AMCIS, 2013, Chicago, IL, USA. May 27, 2013.
- KIM, Ji Won. Online Incivility in Comment Boards: Partisanship Matters - but What I Think Matters More. *Computers in Human Behavior*, v. 85, p. 405-412, 2018.
- KIM, Jungsoo; DE DEAR, Richard. Workspace Satisfaction: The Privacy-Communication Trade-Off in Open-Plan Offices. *Journal of Environmental Psychology*, v. 36, p. 18-26, Dec 2013.
- KINGMA, Sytze. New Ways of Working (NWW): Work Space and Cultural Change in Virtualizing Organizations. *Culture and Organization*, v. 25, n. 5, p. 383-406, 2019.
- KLINE, Rex B. *Principles and practice of structural equation modeling*. 3.ed. New York, NY: Guilford, 2011.
- KNIFFIN, Kevin M. *et al.* Covid-19 and the Workplace: Implications, Issues, and Insights for Future Research and Action. *American Psychologist*, v. 76, n. 1, p. 63-77, Jan 2021.
- KOHTAMÄKI, Marko; THORGREN, Sara; WINCENT, Joakim. Organizational Identity and Behaviors in Strategic Networks. *Journal of Business & Industrial Marketing*, v. 31, n. 1, p. 36-46, 2016.
- KOSSEK, Ellen Ernst; LEE, Mary Dean. Implementing a Reduced-Workload Arrangement to Retain High Talent: A Case Study. *The Psychologist-Manager Journal*, v. 11, n. 1, p. 49-64, 2008.
- KOUFTEROS, Xenophon A. Testing a Model of Pull Production: A Paradigm for Manufacturing Research Using Structural Equation Modeling. *Journal of Operations Management*, v. 17, n. 4, p. 467-488, 1999.
- LAROS, Jacob Arie *et al.* Validity Evidence of Two Short Scales Measuring the Big Five Personality Factors. *Psicologia: Reflexão e Crítica*, v. 31, 2018.
- LEE, Chei Sian *et al.* Use of Social Media in the Workplace. PACIS 2013, Jeju Island, Korea. June 18, 2013.
- LEE, Richard; ROBBINS, Steven. Measuring Belongingness - the Social Connectedness and the Social Assurance Scales. *Journal of Counseling Psychology*, v. 42, n. 2, p. 232-241, 1995.
- LEE, So Young; BRAND, Jay L. Effects of Control over Office Workspace on Perceptions of the Work Environment and Work Outcomes. *Journal of Environmental Psychology*, v. 25, n. 3, p. 323-333, 2005.
- LEEDE, Jan De. *New Ways of Working Practices: Antecedents and Outcomes*. Bingley, United Kingdom: Emerald Group Publishing Limited, 2016. 175p.
- LEFTHERIOTIS, Ioannis; GIANNAKOS, Michail. Using Social Media for Work: Losing Your Time or Improving Your Work? *Computers in Human Behavior*, v. 31, p. 134-142, Feb 2014.
- LEFTHERIOTIS, Ioannis; GIANNAKOS, Michail N.; PAPPAS, Ilias O. Social Media Use

- for Work: Does Work Experience Really Matter? Mediterranean Conference on Information Systems, 2016, Paphos, Cyprus. AIS eLibrary, 4-6 September. p.45.
- LIN, Jhih-Syuan et al. Personality traits, motivations, and emotional consequences of social media usage. **Cyberpsychology, Behavior, and Social Networking**, v. 20, n. 10, p. 615-623, 2017.
- LINDENAU, JULIANA DAL-RI; GUIMARÃES, LUCIANO SANTOS PINTO. Calculando O Tamanho De Efeito No SPSS. **Clinical & Biomedical Research**, v. 32, n. 3, 2012.
- LOI, Daria. Shared Work Environments as Ecologies: New Ways of Working and Designing. Techné -5th European Academy of Design Conference, 2003, Barcelona, Spain.
- LONGSTREET, Phil; BROOKS, Stoney; GONZALEZ, Ester S. Internet Addiction: When the Positive Emotions Are Not So Positive. **Technology in Society**, v. 57, p. 76-85, 2019.
- LUPINACCI, Ludmila. 'Absentmindedly Scrolling through Nothing': Liveness and Compulsory Continuous Connectedness in Social Media. **Media, Culture & Society**, v. 0, n. 0, p. 1-18, 2020.
- MALHOTRA, Naresh K. **Pesquisa De Marketing: Uma Orientação Aplicada**. Porto Alegre, Brasil: Bookman, 2012.
- MASLOW, Abraham. Self-Actualization and Beyond. Conference on the Training of Counselors of Adults, 1965, Chatham, MA, USA. May 22-28.
- MATTHEWS, Lucy. Applying Multigroup Analysis in PLS-SEM: A Step-by-Step Process. *In: LATAN, Hengky. e NOONAN, Richard. (Ed.). Partial Least Squares Path Modeling*. Cham, Switzerland: Springer, 2017. p.219-243.
- MATTHEWS, Lucy; HAIR, Joseph F.; MATTHEWS, Ryan. PLS-SEM: The Holy Grail for Advanced Analysis. **Marketing Management Journal**, v. 28, n. 1, 2018.
- MCINTYRE, Kevin P. *et al.* Workplace Self-Expansion: Implications for Job Satisfaction, Commitment, Self-Concept Clarity, and Self-Esteem among the Employed and Unemployed. **Basic and Applied Social Psychology**, v. 36, n. 1, p. 59-69, 2014.
- MCKINSEY. **The Future of Work after Covid-19**.2021. (Report). Available in: <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19?cid=repeat-soc-twi-mip-mck-oth-2106--&sid=5062301839&linkId=122572486>. Accessed on: Sep. 25, 2021.
- MCLUHAN, Marshall. **Understanding Media: The Extension of Man**. Cambridge, Massachusetts, USA: The MIT Press, 1994. 365p.
- MIKALEF, Patrick; PATELI, Adamantia. Social Media for Open Innovation: A Study of Adoption Determinants. **PACIS 2017 Proceedings**, July 19, 2017.
- MOQBEL, Murad A.; AFTAB, Fizza. Employees' Social Networking Site Use Impact on Job Performance: Evidence from Pakistan. **AIS Transactions on Replication Research**, v. 1, n. 1, p. 1-11, 2015.
- MOQBEL, Murad; KOCK, Ned. Unveiling the Dark Side of Social Networking Sites: Personal and Work-Related Consequences of Social Networking Site Addiction. **Information & Management**, v. 55, n. 1, p. 109-119, 2018.
- MOQBEL, Murad; NAH, Fiona. The Role of Knowledge Sharing Via Organizational Social Media in the Workplace. AMCIS, 2017, Boston, MA, USA. August 10, 2017.
- MOQBEL, Murad; NEVO, Saggi; KOCK, Ned. Organizational Members' Use of Social Networking Sites and Job Performance: An Exploratory Study. **Information Technology & People**, v. 26, n. 3, p. 240-264, 2013.
- MORGANSON, Valerie J. *et al.* Comparing Telework Locations and Traditional Work Arrangements: Differences in Work-Life Balance Support, Job Satisfaction, and Inclusion. **Journal of Managerial Psychology**, v. 25, n. 6, p. 578-595, 2010.

- NEWPORT, Cal. *Is Going to the Office a Broken Way of Working?* , 2021. Available in: <https://www.newyorker.com/culture/office-space/is-going-to-the-office-a-broken-way-of-working>. Accessed on: Sep. 27, 2021.
- NGAI, Eric W.T; TAO, Spencer S.C.; MOON, Karen K. L. Social Media Research: Theories, Constructs, and Conceptual Frameworks. **International Journal of Information Management**, v. 35, n. 1, p. 33-44, 2015.
- NIESSEN, Cornelia; SWAROWSKY, Christine; LEIZ, Markus. Age and Adaptation to Changes in the Workplace. **Journal of Managerial Psychology**, v. 25, n. 4, p. 356-383, 2010.
- OLIVEIRA, Gustavo Henrique; WATSON-MANHEIM, Mary Beth. Use of Social Media in the Workplace: Contradictions and Unintended Consequences. AMCIS, 2013, Chicago, Illinois, USA. AIS eLibrary, May 27, 2013.
- ONDERDIJK, Kelsey E. *et al.* Livestream Experiments: The Role of Covid-19, Agency, Presence, and Social Context in Facilitating Social Connectedness. **Frontiers in Psychology**, v. 12, n. 1741, p. 647929, 2021-May-24 2021.
- ORSATTI, Jo; RIEMER, Kai. Identity-Making: A Multimodal Approach for Researching Identity in Social Media. European Conference on Information Systems, 2015, Münster, Germany. AIS eLibrary, May 29.
- PAN, Zhao *et al.* Who Do You Think You Are? Common and Differential Effects of Social Self-Identity on Social Media Usage. **Journal of Management Information Systems**, v. 34, n. 1, p. 71-101, 2017.
- PHAM, Quyen. *The Future of Work: Remote, Hybrid and in-Office*. 2021. Available in: <https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2021/08/19/the-future-of-work-remote-hybrid-and-in-office/?sh=5928064d6168>. Accessed on: Oct. 23, 2021.
- PODSAKOFF, Philip M. *et al.* Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. **Journal of applied psychology**, v. 88, n. 5, p. 879, Oct 2003.
- PURCHASE, Sharon.; ROSA, Raymond. D.; SCHEPIS, Daniel. Identity Construction through Role and Network Position. **Industrial Marketing Management**, v. 54, p. 154-163, Apr 2016.
- PWC. *It's Time to Reimagine Where and How Work Will Get Done*. 2021. Available in: <https://www.pwc.com/us/en/library/covid-19/us-remote-work-survey.html>. Accessed on: Sep. 25, 2021.
- QUALTRICS, I. **Qualtrics**. Provo, UT, USA 2013.
- QUINONES, Cristina; KAKABADSE, Nada Korak. Self-Concept Clarity and Compulsive Internet Use: The Role of Preference for Virtual Interactions and Employment Status in British and North American Samples. **Journal of Behavioral Addictions**, v. 4, n. 4, p. 289-298, 2015.
- RAHMAN, Zoha *et al.* Mediating Impact of Fan-Page Engagement on Social Media Connectedness and Followers Purchase Intention. **Online Information Review**, v. 42, n. 7, p. 1082-1105, 2018.
- RADER, Emilee; GRAY, Rebecca. Understanding User Beliefs About Algorithmic Curation in the Facebook News Feed. 33rd Annual ACM Conference on Human Factors in Computing Systems, 2015, Seoul, Republic of Korea. ACM. p.173-182.
- RENARD, Karine *et al.* The Impact of New Ways of Working on Organizations and Employees: A Systematic Review of Literature. **Administrative Sciences**, v. 11, n. 2, p. 38, Jun 2021.
- ROGERS, Carl Ransom. A Theory of Therapy, Personality, and Interpersonal Relationships: As Developed in the Client-Centered Framework. *In*: KOCH, S. (Ed.). **Psychology: A Study of a Science Study I. Conceptual and Systematic Volume 3: Formulations of**

- the Person and the Social Context**. New York, USA: McGraw-Hill New York, v.3, 1959. p.184-256.
- ROMERO, Sonia M. T.; NASCIMENTO, Belmiro J. C. Métodos de pesquisa. In: FOSSATI, Nelson C.; LUCIANO, Edimara M.(ORGS). *Prática Profissional em administração: ciência, método e técnica*. Porto Alegre: Sulina, 2008. p. 51-64.
- SALO, Markus; PIRKKALAINEN, Henri; KOSKELAINEN, Tiina. Technostress and Social Networking Services: Explaining Users' Concentration, Sleep, Identity, and Social Relation Problems. **Information Systems Journal**, v. 29, n. 2, p. 408-435, Mar 2019.
- SCHNEIDER, Benjamin *et al.* Which Comes First: Employee Attitudes or Organizational Financial and Market Performance? **Journal of Applied Psychology**, v. 88, n. 5, p. 836, 2003.
- SCOTT, Graham G.; FULLWOOD, Chris. Does Recent Research Evidence Support the Hyperpersonal Model of Online Impression Management? **Current Opinion in Psychology**, v. 36, p. 106-111, Dec 2020.
- SHEPHERD, Clive. Does Social Media Have a Place in Workplace Learning? **Strategic Direction**, v. 27, n. 2, p. 3-4, 2011.
- SMITH, Aaron; SUTHERLAND, Fiona; GILBERT, David. Duality Theory. In: SMITH, Aaron; SUTHERLAND, Fiona; GILBERT, David (Ed.), **Reinventing Innovation Designing the Dual Organization**, London. UK: Palgrave Macmillan, 2017. p.35-53.
- SPAGNOLI, Paola *et al.* Workaholism and Technostress During the Covid-19 Emergency: The Crucial Role of the Leaders on Remote Working. **Frontiers in Psychology**, v. 11, 2020.
- SPROULL, Lee; KIESLER, Sara; KIESLER, Sara B. **Connections: New ways of working in the networked organization**. MIT Press, 1991.
- STALLER, Naomi; RANDLER, Christoph. **Changes in Sleep Schedule and Chronotype Due to Covid-19 Restrictions and Home Office**. *Somnologie*, v. 25, n.2, p. 131-137, 2021
- STATCOUNTER. *Social Media Stats Brazil*. 2021. Available in: <https://gs.statcounter.com/social-media-stats/all/brazil>. Accessed on: Jan. 28. 2021.
- STATISTA. **Number of Social Media Users in Brazil from 2017 to 2025**. Available in: <https://www.statista.com/statistics/278408/number-of-social-network-users-in-brazil/#:~:text=In%202019%2C%20there%20were%20approximately,in%20the%20South%20American%20country>. Accessed on: Aug. 12, 2020.
- STOKOLS, Daniels. On the Distinction between Density and Crowding: Some Implications for Future Research. **Psychological Review**, v. 79, n. 3, p. 275-279, 1972.
- SUN, Christine Yunn-Yu; GOSCHNICK, Steve. Formation and Control of Identity: In a Social Media World. In: (Ed.). **Innovative Methods, User-Friendly Tools, Coding, and Design Approaches in People-Oriented Programming**, 2018. chapter 9, p.286-323. (Advances in Computer and Electrical Engineering).
- SYKES, Tracy ANN; VENKATESH, Viswanath. Explaining Post-Implementation Employee System Use and Job Performance: Impacts of the Content and Source of Social Network Ties. **Management Information Systems Quarterly**, v. 41, n. 3, p. 917-936, September 1, 2017.
- TEN BRUMMELHUIS, Lieke *et al.* Do New Ways of Working Foster Work Engagement? **Psicothema**, v. 24, n. 1, p. 113-120, 2012.
- TER HOEVEN, Claartje.L.; VAN ZOONEN, Ward. Flexible Work Designs and Employee Well- Being: Examining the Effects of Resources and Demands. **New Technology, Work and Employment**, v. 30, n. 3, p. 237-255, 2015.
- UNLUER, Sema. Being an Insider Researcher While Conducting Case Study Research. **Qualitative Report**, v. 17, p. 58, 2012.

- VALKENBURG, Patti M.; PETER, Jochen. Online Communication among Adolescents: An Integrated Model of Its Attraction, Opportunities, and Risks. **Journal of Adolescent Health**, v. 48, n. 2, p. 121-127, 2011.
- VAN HECK, Eric. **New Ways of Working: Microsoft's 'Mobility' office**. Available in: https://repub.eur.nl/pub/39942/Insight_NewWays_2010.pdf. Accessed on: Sep. 23, 2021.
- VON GAUDECKER, Hans-Martin *et al.* **Labour Supply in the Early Stages of the Covid-19 Pandemic: Empirical Evidence on Hours, Home Office, and Expectations**. 2020. (Report)
- WALTHER, Joseph B. Computer-Mediated Communication. **Communication Research**, v. 23, n. 1, p. 3-43, 2016.
- WANG, Tien *et al.* Antecedents of Emotional Attachment of Social Media Users. **The Service Industries Journal**, v. 36, n. 9-10, p. 438-451, 2016.
- WARKENTIN, Darcy *et al.* Warrants and Deception in Computer-Mediated Communication. ACM Conference on Computer Supported Cooperative Work, 2010, Savannah, Georgia, USA. ACM. p.9-12.
- WERTS, Charles E.; LINN, Robert L.; JÖRESKOG, Karl G. Intraclass Reliability Estimates - Testing Structural Assumptions. **Educational and Psychological Measurement**, v. 34, n. 1, p. 25-33, 1974.
- WESTWOOD, Ryan. **Do You 'Like' Social Media in the Workplace?** Forbes, March 5, 2015. Available in: <https://www.forbes.com/sites/ryanwestwood/2015/03/05/hit-like-if-you-agree-with-social-media-in-the-workplace/#1c32a4f1341b>. Accessed on: January 28.
- WHITLEY, Edgar A.; GAL, Uri; KJAERGAARD, Annemette. Who Do You Think You Are? A Review of the Complex Interplay between Information Systems, Identification and Identity. **European Journal of Information Systems**, v. 23, n. 1, p. 17-35, 2014.
- WU, Chia-Huei; PARKER, Sharon K; DE JONG, Jeroen P.J. Need for Cognition as an Antecedent of Individual Innovation Behavior. **Journal of Management**, v. 40, n. 6, p. 1511-1534, 2014.
- YU, Lingling *et al.* Excessive Social Media Use at Work: Exploring the Effects of Social Media Overload on Job Performance. **Information Technology & People**, v. 31, n. 6, p. 1091-1112, 2018.
- ZHANG, Xi *et al.* Enhancing Creativity or Wasting Time?: The Mediating Role of Adaptability on Social Media-Job Performance Relationship. Pacific Asia Conference on Information Systems (PACIS), 2015, Singapore. AIS Electronic Library (AISeL). p.230.
- ZIENKOWSKI, Jan *et al.* Les Logiques Interprétatives Managériales Des Nouvelles Manières De Travailler: Ambiguïtés Et Silences Dans Les Critiques Des Nwows (New Ways of Working). Org&Co 2019: Le côté obscur de la communication des organisations, 2019, Bordeaux, France.

GENERAL DISCUSSION AND CONCLUSION

This last chapter discusses the main findings of the thesis, how the three papers are integrated, and their relationships with the research questions and specific objectives. Moreover, it presents the implications for academia and the practice and suggestions for future research.

OVERVIEW OF RESEARCH OBJECTIVES

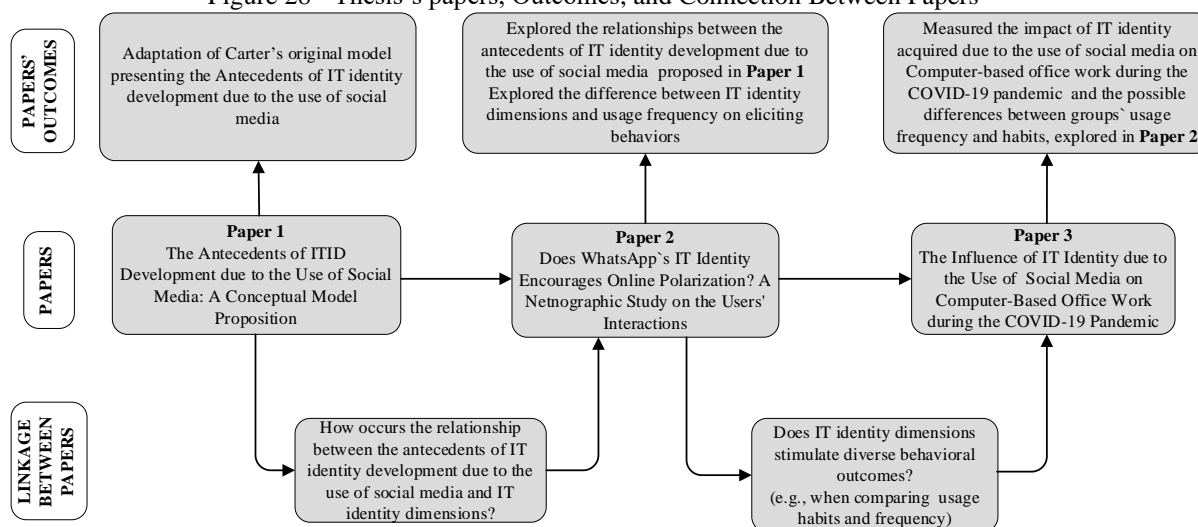
This section presents the overview of the research objectives and how they were achieved (section 6.1). Next, the research originality and the main results are presented. Finally, it is presented the contributions of the thesis, the limitations, and suggestions for future studies.

First and foremost, this thesis results from the need to understand the influence of social media on identity development. Even before the popularization of the Internet, the effects of media on individuals have been discussed in several areas of knowledge [e.g., Bogart and Orenstein (1965); Olearnik (1988); Singer (1973)]. Nevertheless, the degree of sophistication to the communication process provided by this technology and its byproducts has been carrying unprecedented consequences for the cognitive and motivational processes involved in self-concept construction and is becoming part of the process of individuals' identities development (SCHLOSSER, 2020). Therefore, the broad objective of this paper was to comprehend the development of IT Identity due to social media use and evaluate its impact on computer-based office work during the COVID-19 pandemic

The first specific objective of this thesis sought to identify the antecedents of IT identity due to the use of social media. Secondly, understand how this relationship occurs, and finally, measure the impact of IT identity acquired due to the use of social media on computer-based office work, a work arena highly affected by the COVID-19 pandemic (MCKINSEY, 2021; SPAGNOLI *et al.* 2020; YANG *et al.*, 2021).

The three papers were developed through different methodological approaches (literature review, netnography, and a survey). Figure 28 shows the three papers and their outcomes. Furthermore, it shows the links between the papers to emphasize their connection.

Figure 28 - Thesis's papers, Outcomes, and Connection Between Papers



Source: Author (2021)

In 2012, Carter presented a theoretical model of IT identity containing their antecedents and the relationships between their dimensions (CARTER, 2012). In this thesis, paper 1 proposed an adaptation of Carter's model to contemplate the development of IT identity due to social media use. This dynamic IT artifact is interrelated and embedded with other IT artifacts (CARTER; GROVER, 2015), o que faz com que para que o usuário possa interagir nesses espaços virtuais⁴⁵ sejam necessários diversos artefatos de TI. Por exemplo, o uso do Facebook no smartphone, tablet, laptop ou desktop, envolve o próprio dispositivo e a plataforma. The dimensions shown in the model are intended to posit the IT identity under the context of the interrelationship of personal and social identity elements proper of the use of social media. Both types of identity have different aspects, so the focus of each is contemplated in sections 2.2.1 and 2.2.2 of the thesis's second chapter. The first paper, shown in Chapter 3, proposed a conceptual model presenting the antecedents of IT Identity⁴⁶ acquired due to the history of interactions in the social media platforms (the thesis's first specific objective).

The adaptation of Carter's model proposed in paper 1 included the dimensions related to the use of social media according to the field's literature under the context of the constructs of her original model, which are: "IT characteristics", "Experience," "Situational influences" and "Behaviors". It is important to point out that the proposal of Carter's model adaptation in this paper adopted as theoretical frameworks the theories of communication that touch on the main works related to both the definition and⁴⁷ studies of the antecedents and consequents of

⁴⁵ Cf. Figure 7, The Interconnected and Interrelated Nature of IT.

⁴⁶ Cf. Carter's (2012) original theoretical model in section 2.3 of paper 1

⁴⁷ Cf. section 2.1 of paper 1

the use of social media, the process of circular communication of Defleur, and the impression management of individuals to present themselves in the various platforms. Considering that for presentations on social media to be constructed in internal and external instances (HOGAN, 2010), the self-processes adherent to the research context were referenced in section 2.5 of paper 1. The difference between the self and the self-concept was also presented⁴⁸ to contextualize the reader about the effects that technology and the form of communication in social media (either synchronous or asynchronous) have on the way individuals see themselves, both as an object (self-concept) and the same (self). At first, the main social media characteristics that stimulate individuals' feelings of connectedness, belongingness, and privacy were presented and explained. Then, the two dimensions of presentation's development, impression manifestation, and internalization were presented with their related self-processes. Finally, in the third, "social media audience's evaluation" was shown with their dimensions and their relation to the internalization and manifestation of impressions.

After constructing and refining the model, the next step was to investigate the relationship between the antecedents proposed in paper one and the three dimensions of IT identity. Given that polarized behavior is one of the outcomes of using social media (GUPTA; JAIN; TIWARI, 2021), the participants' utterances related to this topic were coded according to their self-presentation when discussing political themes. This study's theoretical framework encompassed the self-processes of social media self-presentation (proposed in the thesis's first paper) and the IT Identity dimensions. Through a qualitative approach, a netnography was carried out with 29 individuals to understand the role of personality traits and the IT identity dimensions in view of the polarized behavior observed in their WhatsApp interactions. For this, the processes involved in the dimensions, impressions manifestation, and internalization (proposed in Paper 1) during the use of the platform were analyzed through content analysis, and through a questionnaire (validated in paper 3), the ITID levels of the nine most active participants of the group (i.e., those who were most involved in the heated polarized discussions).

Finally, the participants were separated into the highest and lowest means groups in each IT identity dimension. Among the findings, the most important for the general conclusion of the thesis were the indication that external elements (capacity that the media provides for self-presentation) combine to outline the way individuals show signs of polarization and adhering with greater intensity to the most extreme positions as a result of interaction in these

⁴⁸ Cf. section 2.1 of thesis's General Theoretical Background

virtual environments. In a second phase, interviews were carried out with 12 participants. It was decided to proceed with this phase to improve the trustworthiness as it properly allowed data triangulation. With the advances of information technology, these personalization algorithms (as they are commonly known) have been regularly redesigned to offer increasingly customized information and better handle the massive amount of data (BERMAN; KATONA, 2020; WINTER; MASLOWSKA; VOS, 2021). However, algorithms designed exclusively for raising engagement and creating (even if unintentionally) filter bubbles and echo chambers may also represent a constant menace to society's social fabric insofar they continue to stimulate polarizing behaviors.

In view of that, paper two findings may provide new elements to suggest that future research should focus on understanding how these bubbles are formed, the relationship between internal (effects on IT identity and personality traits) and external factors that lead to intense interaction in echo chambers, how this behavior is stimulated through the algorithms' reward system, about the role of content personalization algorithms, and the way how they are designed. These suggestions are also in line with the study of Hilbert *et al.* (2018). They call attention to the need for social media companies to design more socially responsible algorithms that consider the emotional content present in the recommendation systems. Hopefully, future algorithms should be able to estimate the potential effects on individuals' feelings when navigating social media environments — as the platforms are and will keep on being a never-ending source of eliciting in people feelings of relatedness and emotional energy, and, in many cases, of dependence.

Subsequently, paper 3 pursues the recommendations of future research exposed in Paper 2 and, through a quantitative approach, sought to measure the relationship between the dimensions of the IT identity and four NWW facets. In this regard, a recent study by Marzouki, Aldossari and Veltri (2021) investigated the appraisal mechanisms related to social media usage during the COVID-19 pandemic and found that it promoted positive perceptions about the stressors caused by the lockdown. The focus of the research was the computer-based office workers since many of them will work permanently in a hybrid way after the pandemic. Therefore, it is necessary to understand the internal processes that influence their behaviors when using ubiquitous technologies like social media and take advantage of how this enhanced comprehension could benefit the organization's higher management when designing their strategic planning.

MAIN RESULTS

The device's characteristics on which social media is being used can lead the user to a more introspective and reflective mode of interaction (for example, participating in forums or by reading, formulating, or answering questions **on** social media such as Quora⁴⁹). Thus, the process of IT identity development adopts elements corresponding to this type of identity (personal) ⁵⁰. On the other hand, other features encourage the user to engage in a more exhibitional experience (for example, on social media platforms such as Instagram, Facebook, and even so-called messengers such as WhatsApp and Telegram). Thus, demanding greater effort in the construction of presentations on social media. For this reason, it is argued in the first paper that the development of IT identity due to social media use also needs to incorporate elements of the social identity theory. In other respects, the use of social media on mobile devices (due to mobility and ease in accessing features such as audio and video) encourages users to engage in a more expansive type of interaction with regard to media richness. This relationship was mainly verified during the interviews of paper 2 in the second phase.

The consequences of the COVID-19 pandemic for the work environment [e.g., Spagnoli *et al.* (2020); Yang *et al.* (2021)] motivated this research since the lockdown measures obligated people worldwide to stay at home and work remotely. Although the New Ways of Working was already a solid research branch of organizational studies many years before the pandemic period, this fact precipitated the emergence of the so-called hybrid work, which many companies have been adopting even after the vaccination programs advanced worldwide (FAYARD; WEEKS, KHAN, 2021). Yang *et al.* (2021), in a longitudinal study involving 61.182 employees of Microsoft in the United States, found that the extensive adoption of remote work due to the pandemic caused a weakening of collaboration networks and made the individuals more siloed. With this in mind, to develop this paper, it was wondered about the role of the identification with social media in filling this gap caused by these adverse consequences of remote work. Several studies have investigated the positive influence of social media use on work performance (FAGNOT; PAQUETTE, 2010; CLIVE, 2011; AOUN; VATANASAKDAKUL, 2012; LEE *et al.*, 2013; OLIVEIRA; WATSON-MANHEIM, 2013; ORSATTI; RIEMER, 2015; MOQBEL; NAH, 2017).

The different identities (e.g., social, professional, and IT identity) are predicated on the interactional context. However, whereas physical and virtual social structures may influence the two firsts, the development of IT identity in social media depends heavily on virtual

⁴⁹ Quora is a collaborative social media based on questions and answers.

⁵⁰ Cf. Chapter 2, General Theoretical Background, section 2.2.1

interactions and how they affect individuals. Due to this fact, an investigation was carried out on the relationship between IT identity dimensions due to the use of social media and four of the main facets related to remote work, which are: (i) access to colleagues, (ii) organizational knowledge, (iii) flexibility in work relationships and (iv) management of output. This quantitative investigation builds on the duality theory. This theoretical framework argues that organizations should embrace solutions that can foster increased organizational performance while dealing with their negative and positive consequences. Specifically, about the paper's three, although some aspects related to the use of social media may lead to negative consequences, this article sought to demonstrate the need to analyze both aspects jointly. To illustrate this point, it was found that, while dependence in relation to social media may lead to adverse outcomes to achieve the work-life balance, hedonic use can also contribute to coping with the adverse outcomes of dependence. Similarly, while the frequency of daily use of social media was positively related to access to colleagues and information, when it overpassed the threshold of 6 to 10 daily access, a negative outcome was found between the relationship of access to colleagues and management of output.

Recently, in a Forbes council post, Pham (2021) defended that the debate about remote working effectiveness is being sided by the discussion about their consequences for the blurred work and home life, such as burnout and work-life balance. Paper 3 findings present evidence that sustains Pham's (2021) remark and emphasizes the need to investigate the hybrid working model's adverse and positive outcomes considering their overarching antecedents. Paper 3 is one of the first attempts to empirically investigate this assumption, given that social media is not necessarily inserted in the context of the organizational environment (contrarywise to ERP and BI systems). Nevertheless, most people make use of social media in everyday life, and the IT identity developed about the use of the platforms should be better understood in the organizational context.

RESEARCH ORIGINALITY

The originality of the research undertaken in this thesis initially lies in the proposition of the adaptation and expansion of Carter's original IT identity model (2012), aiming to incorporate the dimensions and concepts aligned with the nature of social media.⁵¹ First, the self-presentation was inserted under the context of Goffman's theatrical allegory (1959). The

⁵¹ Cf. paper 1 section 2 and 3

relationships between the characteristics of the media, the effects experienced by the users, and how they influence the construction of the presentations were listed. Then, due to the constitution of networks made possible by such media, the second element which caused the IT identity development process to be inserted into the traditional elements of the communication process (transmitter, receiver, and media). The second factor that demonstrates the originality of this thesis is the application of theory in an organizational context in a way that aims to present empirical evidence of how IT identity in relation to social media can impact the worker's behavior. Furthermore, especially at this moment, workers who carry out their activities primarily through digital resources had to adapt quickly to this new reality. Until December 2021, of the 28 articles on IT identity published in journals or conferences ⁵² since 2012, the investigation of this thesis is the only one so far that sought to operationalize the measurement of its reflective dimensions in relation to a study of the organizational area (New Ways of Working) that has been gaining increased importance due to the consequences of the COVID-19 pandemic for the organizational environment.

CONTRIBUTIONS FOR ACADEMIA AND PRACTITIONERS, RESEARCH LIMITATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

Regarding the theoretical contributions, the first thesis's paper provided a conceptual framework of the instances and dimensions involved in the development of IT identity by the use of social media. More specifically, it proposed adapting and expanding Carter's original model (therefore, keeping the original main instances, experience in the use of technology, its characteristics, and situational influences). However, it argued that it could be complemented with Goffman's presentation approach by studying IT Identity related to complex IT artifacts such as social media. The second paper empirically tested the relationship between presentations in one of the social media platforms (WhatsApp) and IT identity dimensions. Finally, the third paper measured the impact of IT identity dimensions due to the use of social media on the New Ways of Working. It aimed to assess how the IT identity due to social media use acquired by the computer-based office worker impacts their work outcomes. Because of the ongoing changes in the work settings precipitated by the COVID-19 pandemic, the relationship of the three IT identity dimensions and specific NWW facets have been more important to allow the employees to deliver outcomes during this period.

⁵² According to Carter's (2012) original proposition.

Paper 2 approached the polarized behavior of users' interactions as a starting point for codifying the presentation strategies used by each group participant. Although it focused on a social consequence of using social media (online polarization), its findings also have the potential to contribute to studies in the organizational area since certain personality traits like extraversion and conscientiousness have a positive relationship with employees' behaviors and motivation at work (JANSSENS *et al.*, 2019). Concerning academic implications, such findings can potentially contribute to the studies about the social media filter bubbles and echo chambers and their effects on online polarization. Social media platforms have evolved considerably since the foundation of companies like Facebook and Twitter. Over time, they incorporated new capabilities such as audio and video calls, hashtags and tagging, instant messengers, platforms' integration, and others (HONG; HU; BURTCHE, 2015; SANDERSON; FREDERICK; STOCZ, 2016). Specifically, one of the essential social media capabilities, algorithmic curation⁵³, reduces storage and data-processing costs, brings agility to communication, provides a better online experience, and prevents information overload (BOZDAG; TIMMERMANS, 2011; BOBOK, 2016; BERMAN, KATONA, 2020).

One of paper three's contributions is a validated questionnaire composed of 11 items that comprise the three reflective IT Identity dimensions. Since Carter developed the concept in 2012, researchers have been looking for a validated instrument to expand IT Identity's research. Future research may adapt this questionnaire for different cultural contexts and languages to expand IT identity studies. Another contribution of paper 3 was to bridge the study of IT identity to a thriving organizational branch (New Ways of Working). Since the hybrid work model is being adopted worldwide due to social distancing measures, it will be necessary to investigate further how employees adapt themselves to these new work settings. In addition, social media and many other ITs constantly surround people in their daily lives.

For this reason, IT identity may become an essential theoretical framework to understand the relationship between human behavior and organizational performance. In view of this argument, Table 42 builds on Kingma's (2019) work in which he showed the shifting in organizational logic from traditional to NWW ideology in several dimensions. In each dimension, in the last column are placed specific questions to address future research regarding the changes precipitated by the pandemic period and the IT identity acquired by using social media.

⁵³ Algorithmic curation is the use of social media engines designed to select, personalize, and rank information to offer an enhanced online experience while reducing information overload.

Table 42 - The Changes on Dimensions from Traditional to the NWW and their Implications for the Research of IT identity Acquired by Using Social Media

Dimension	From Traditional	To NWW	Future Research Questions Related to IT Identity Acquired by Using Social Media	Relationship between Theoretical Dimension and How Does it will Manifest
Dominance	Space-time	Technology	Does the IT identity acquired by using social media platforms reinforce the capacity to fulfill work tasks through technological solutions?	IT identity due to the use of social media will manifest as improved abilities to fulfill computer-based work tasks insofar as dominance changes from space-time to technology
Interaction	Physical	Mediated	Does the IT identity acquired by using social media platforms reinforce the capacity to work in a technology-mediated form?	IT identity due to the use of social media will manifest in enhanced organizational performance insofar as interactions change from physical to computer-mediated.
Knowledge	Acquiring	Sharing	Does the IT identity acquired by using social media platforms reinforce the capacity to share digital information at work?	IT identity due to the use of social media will manifest in enhanced knowledge sharing within organizations insofar as the organizational knowledge change from being acquired to being shared.
Sense-making	Conventions	Collective learning	Does the IT identity acquired by using social media platforms reinforce the capacity to learn collectively at work through digital solutions?	IT identity due to the use of social media will manifest in improved organizational learning insofar as the sense-making change from conventions to collective learning
Field of action	Organization	Network	Does the IT identity acquired by using social media platforms reinforce the capacity to work in a more connected environment?	IT identity due to the use of social media will manifest in greater flexibility for the workforce insofar the field of action moves from the organization to the network.
Relationships	Formal (hierarchical)	Informal (equivalence)	Does the IT identity acquired by using social media platforms reinforce the capacity to work in a more egalitarian environment?	IT identity due to the use of social media will manifest in more equal work relationships insofar organizational hierarchy changes from formal to informal
Coordination	Space	Time	Does the IT identity acquired by using social media platforms reinforce the capacity to work without time constraints (working time flexibility)?	IT identity due to the use of social media will manifest in improved coordination of working outcomes insofar organizational demands are being delivered according to the time and not to the space
Information storage	Paper	Database (digital)	Does the IT identity acquired by using social media platforms reinforce the capacity to work with digital content?	IT identity due to the use of social media will manifest in enhanced capacity to work with digital information insofar information store moves from paper to database.

Source: This Table Encompasses And Builds On Kingma (2019, P.386) And The It Identity Dimensions Proposed By Carter (2012).

Note: The author designed the two last columns from right to left.

In 2007, Benbasat and Barki (2007) proposed an extensive discussion about the use of the Technology Acceptance Model (TAM) on management information systems (MIS) studies. They criticized the focus of many researchers in adapting TAM to different contexts, which (in their words) “created an illusion of progress in knowledge accumulation”. Dimensions like performance, adaptation to technology, or perceived utility can be measured by established scales such as TAM, the original Unified Theory of Acceptance and Use of Technology (UTAUT), or the derived versions of those models. The shift in the focus from solely investigating the cognitive assessment that users make about their abilities or the benefits of using IT to understanding how an IT arouses feelings of relatedness, emotional energy, and dependence can potentially expand the boundaries on the research about the impact of IT on the organizational context.

Technology is constantly evolving, and it is inserted into all aspects of people`s lives. From the observations above, it is argued that traditional MIS frameworks will not be able to cover the nuanced aspects of human interaction with IT adequately. In other words, it is not only a question of accepting or not the technologies that surround individuals in the contemporary world but how they embrace these technologies` complexities. Moreover, which meanings they attribute to them in several quotidian aspects. In this regard, investigating the feelings aroused by the use of social media through the IT identity theory can widen the comprehension of the role of IT beyond its usual perceived utility for organizations. Even more, at this moment, when COVID-19 pandemic has been changing many aspects of the organizational environment and how people relate with technology to continuing working in the “New Normal” setting.

This thesis has limitations discussed in each paper and summarized in this section. For example, the first paper summed up many cognitive and motivational mechanisms which are vastly complex than the relations presented in the conceptual model. Nevertheless, it was not intended to be exhaustive and dissect every self-process. Keeping in mind that this is administrative-focused research, the model was designed according to the relevant literature to answer the research question and offer future researchers possible trails to be followed when investigating the antecedents and consequences of IT identity in more detail.

The second paper`s main limitation resides in its qualitative nature as it could not be generalized due to the small and homogenous sample. Despite this caveat, the longitudinal study allowed a deeper comprehension of the role of IT identity about social media in inducing online polarization (even if it cannot be fully responsible for this adverse outcome). Moreover,

given the qualitative approach, it was aimed to look for a deeper understanding of the phenomenon and not the generalization. This study's findings may be a flashing point to stimulate further quantitative studies aiming to measure the relationship between the personality traits, the IT identity dimensions, and their effects on inducing polarization by the use of social media. The third paper's main limitation regards the use of a non-probabilistic sample. Because of that, the findings cannot be generalized. However, focusing on a specific profile of users allowed to approach IT identity in a contemporary theme that needs to be explored, and it may be extended on a confirmatory phase (by the use of Covariance based structural equations modeling, therefore, using proper statistical software such as AMOS LISREL, SAS, EQS or Lavann, an R package).

REFERENCES

- AB HAMID, MR; SAMI, W; SIDEK, MH MOHMAD. Discriminant Validity Assessment: Use of Fornell & Larcker Criterion Versus HTMT Criterion. **Journal of Physics: Conference Series**, v. 890, n. 1, p. 1-5, 2017.
- ABDI, Ali A. Identity in the Philosophies of Dewey and Freire: Select Analyses. **Journal of Educational Thought/Revue de la Pensee Educative**, v. 35, n. 2, p. 181-200, Aug. 2001.
- ABOUZAHRA, Mohamed; YUAN, Yufei; TAN, Joseph PHD. The Role of Perceived Mobile Device Benefits and Emotional Attachment in Enhancing the Use of Mobile-Enabled Social Networks. SIGHCI, 2014, January 1.
- AGRAWAL, Narendra *et al.* Enabling Organizational Ideation with Cognitive Dexterity Using Social Media: An Exploratory Study. AMCIS, 2015, Puerto Rico. AIS eLibrary, August 13-15.
- AHMED, Ashir; SCHEEPERS, Helana; STOCKDALE, Rosemary. Social Media Research: A Review of Academic Research and Future Research Directions. **Pacific Asia Journal of the Association for Information Systems**, v. 6, n. 1, p. 21-37, March 27, 2014.
- ALAHMAD, Rasha. *et al.* The Impact of Enterprise Social Media Identity on Job Performance and Job Satisfaction. Americas Conference on Information Systems, 2018, New Orleans, LA, USA.
- ALAHMAD, Rasha; ROBERT, Lionel. Artificial Intelligence (AI) and IT Identity: Antecedents Identifying with AI Applications. AMCIS, 2020, Salt Lake City, Utah. August 12-16. p.13-15.
- ALBERT, Stuart; WHETTEN, David. A. Organizational Identity. **Research in organizational behavior**, v. 7, p. 263-295, 1985.
- ALI-HASSAN, Hossam; NEVO, Dorit. How Social Media Can Enhance Access to Information through Transactive Memory Development. **AIS Transactions on Human-Computer Interaction**, v. 8, n. 4, p. 185-212, 2016.
- ALI-HASSAN, Hossam; NEVO, Dorit; WADE, Michael. Linking Dimensions of Social Media Use to Job Performance: The Role of Social Capital. **The Journal of Strategic Information Systems**, v. 24, n. 2, p. 65-89, 2015.
- ALI, Ahsan *et al.* Improving Team Innovation Performance: Role of Social Media and Team Knowledge Management Capabilities. **Technology in Society**, v. 61, p. 101259, May

- 2020.
- ALLCOTT, Hunt; GENTZKOW, Matthew. Social Media and Fake News in the 2016 Election. **Journal of Economic Perspectives**, v. 31, n. 2, p. 211-235, Spr 2017.
- ALLEN, Kelly A *et al.* Social Media Use and Social Connectedness in Adolescents: The Positives and the Potential Pitfalls. **The Educational and Developmental Psychologist**, v. 31, n. 1, p. 18-31, 2014.
- ANTIN, Judd; CHURCHILL, Elizabeth F. Badges in Social Media: A Social Psychological Perspective. CHI 2011, 2011, Vancouver, BC, Canada. ACM. p.1-4.
- AOUN, Chadi; VATANASAKDAKUL, Savanid. Social Media in the Workplace: Key Drivers for Inclusive Innovation. AMCIS, 2012, Seattle, WA, USA. July 29, 2012.
- ARJALIES, Diane-Laure; KODEIH, Farah; RAYNARD, Mia. Professional Role Identity as a Filter for Institutional Complexity. Academy of Management Annual Meeting 2015, Vancouver, British Columbia, Canada. Academy of Management. p.12126.
- ARON, Arthur; ARON, Elaine N; SMOLLAN, Danny. Inclusion of Other in the Self Scale and the Structure of Interpersonal Closeness. **Journal of Personality and Social Psychology**, v. 63, n. 4, p. 596, Oct 1992.
- ARON, Arthur; ARON, Elaine N. Self-Expansion Motivation and Including Other in the Self. *In: (Ed.). Handbook of Personal Relationships: Theory, Research and Interventions, 2nd Ed.* Hoboken, NJ, US: John Wiley & Sons Inc, 1997. p.251-270.
- ARON, Arthur *et al.* Including Others in the Self. **European Review of Social Psychology**, v. 15, n. 1, p. 101-132, 2004.
- ARON, Arthur; NORMAN, Christina C.; ARON, ELAINE N. The Self-Expansion Model and Motivation. **Representative Research in Social Psychology**, v. 22, p. 1-13, 1998.
- ASHFORTH, Blake E; MAEL, Fred. Social Identity Theory and the Organization. **Academy of Management Review**, v. 14, n. 1, p. 20-39, Jan 1989.
- BACCARELLA, Christian V. *et al.* Social Media? It's Serious! Understanding the Dark Side of Social Media. **European Management Journal**, v. 36, n. 4, p. 431-438, 2018.
- BAGOZZI, Richard P; YI, Youjae. On the Evaluation of Structural Equation Models. **Journal of the academy of marketing science**, v. 16, n. 1, p. 74-94, 1988.
- BAGOZZI, Richard P; YI, Youjae; PHILLIPS, Lynn W. Assessing Construct Validity in Organizational Research. **Administrative science quarterly**, p. 421-458, 1991.
- BAIL, Christopher A *et al.* Exposure to Opposing Views on Social Media Can Increase Political Polarization. **Proceedings of the National Academy of Sciences of the United States of America**, v. 115, n. 37, p. 9216-9221, Sep. 11, 2018.
- BAJRACHARYA, SHRADDHA. **Defleur Model of Communication**. 2018. Available in: <https://www.businessstopia.net/communication/de-fleur-model-communication>. Accessed on: 20 Dec. 2021
- BAKER, Emily. **The Influences of Social Media: Depression, Anxiety, and Self-Concept**. 2019. (MSc). Department of Psychology Eastern Illinois University, Charleston, Illinois, USA.
- BAKOTIĆ, Danica. Relationship between Job Satisfaction and Organisational Performance. **Economic research-Ekonomska istraživanja**, v. 29, n. 1, p. 118-130, 2016.
- BALL-ROKEACH, Sandra .J.; DEFLEUR, Melvin .L. A Dependency Model of Mass-Media Effects. **Communication Research**, v. 3, n. 1, p. 3-21, 1976.
- BANDURA, Albert. Regulation of Cognitive Processes through Perceived Self-Efficacy. **Developmental psychology**, v. 25, n. 5, p. 729-735, Sep 1989.
- BARDIN, Laurence. **Análise de conteúdo**. Lisbon, Portugal: Edições 70, 2011.118p.
- BARRICK, Murray R.; MOUNT, Michael K. Select on Conscientiousness and Emotional Stability. *In: LOCKE, E. A. (Ed.). Handbook of Principles of Organizational Behavior: Indispensable Knowledge for Evidence-Based Management*. Chippenham,

- Wiltshire, UK: Antony Rowe Ltd, v.15, 2000. p.28.
- BAUDEWIJNS, Claudia; GERARDS, Ruud; DE GRIP, Andries. **New Ways of Working and Work Engagement. GSBE Research Memoranda**. Maastricht: Maastricht University 2015.
- BAUMEISTER, Roy F. A Self-Presentational View of Social Phenomena. **Psychological Bulletin**, v. 91, n. 1, p. 3-26, 1982.
- _____. The Self. *In*: GILBERT, Daniel. T.; FISKE, Susan. T., *et al.* (Ed.). **The Handbook of Social Psychology**. 4th ed. New York, NY, US: McGraw-Hill, v.1-2, 1998. cap. 15, p.680-740.
- _____. The Self. *In*: BAUMEISTER, R. F. e FINKEL, E. J. (Ed.). **Advanced Social Psychology: The State of the Science**. New York, NY, USA: Oxford University Press, Inc., 2010. cap. 5, p.139-175.
- _____. Self and Identity: A Brief Overview of What They Are, What They Do, and How They Work. **Annals of the New York Academy of Sciences**, v. 1234, n. 1, p. 48-55, Oct 2011.
- BAUMEISTER, Roy F.; HUTTON, Debra G.; TICE, Dianne M. Cognitive Processes During Deliberate Self-Presentation: How Self-Presenters Alter and Misinterpret the Behavior of Their Interaction Partners. **Journal of Experimental Social Psychology**, v. 25, n. 1, p. 59-78, Jan 1989.
- BAUMEISTER, Roy F.; LEARY, Mark R. The Need to Belong - Desire for Interpersonal Attachments as a Fundamental Human-Motivation. **Psychological Bulletin**, v. 117, n. 3, p. 497-529, May 1995.
- BECKER, Howard S. **Outsiders: Studies in the Sociology of Deviance**. Oxford, England: Free Press Glencoe, 1963. 179p.
- BECKER, Igor Furlanetto; SERJE, Schmidt; SCHREIBER, Dusan. O Novo Jogo Da Comunicação: A Força Dos Laços Fortes Nas Recomendações Em Redes Sociais. **Revista Global Manager**, v. 15, n. 2, p. 72-83, 2015.
- BENBASAT, Izak; BARKI, Henri. Quo Vadis TAM? **Journal of the association for information systems**, v. 8, n. 4, p. 7, 2007.
- BENNETT, James *et al.* Workplace Impact of Social Networking. **Property Management**, v. 28, n. 3, p. 138-148, 2010.
- BENNETT, Liz. Social Media, Academics' Identity Work and the Good Teacher. **International Journal for Academic Development**, v. 22, n. 3, p. 245-256, 2017.
- BERMAN, Ron; KATONA, Zsolt. Curation Algorithms and Filter Bubbles in Social Networks. **Marketing Science**, v. 39, n. 2, p. 296-316, Mar-Apr 2020.
- BERNBURG, Jón Gunnar. Labeling Theory. *In*: KROHN, Marvin. D. *et al.* (Ed.). **Handbook on Crime and Deviance**. Cham: Springer International Publishing, 2019. cap. Chapter 10, p.179-196. (Handbooks of Sociology and Social Research).
- BESSI, Alessandro. Personality Traits and Echo Chambers on Facebook. **Computers in Human Behavior**, v. 65, p. 319-324, Dec 2016.
- BIOCCA, Frank; HARMS, Chad; BURGOON, Judee K. Toward a More Robust Theory and Measure of Social Presence: Review and Suggested Criteria. **Presence Teleoperators and Virtual Environments**, v. 12, n. 5, p. 456-480, Oct 2003.
- BLOK, Merle M. *et al.* New Ways of Working: Does Flexibility in Time and Location of Work Change Work Behavior and Affect Business Outcomes? **Work**, v. 41 Suppl 1, n. 1, p. 2605-2610, 2012.
- BLOK, Merle; VAN DER MEULEN, F.; Dhondt, S. A Comparison between New Ways of Working and Sociotechnical Systems. *In*: (Ed.). **New Ways of Working Practices (Advanced Series in Management)**: Emerald Group Publishing Limited, 2016. p.145-162.

- BLUMER, Herbert. **Symbolic Interactionism: Perspective and Method**. University of California Press, 1986.
- BOGART, Leo; ORENSTEIN, Frank E. Mass media and community identity in an interurban setting. **journalism Quarterly**, v. 42, n. 2, p. 179-188, 1965.
- BOHLER, Jeff; DRAKE, John Richard. Building Trust through Social Networking. AMCIS, 2017, Boston, MA, USA. August 10, 2017.
- BOND, Bradley. J. Following Your "Friend": Social Media and the Strength of Adolescents' Parasocial Relationships with Media Personae. **Cyberpsychol Behav Soc Netw**, v. 19, n. 11, p. 656-660, Nov 2016.
- BOND, Robert. *et al.* A 61-Million-Person Experiment in Social Influence and Political Mobilization. **Nature**, v. 489, n. 7415, p. 295-8, Sep 13, 2012.
- BOROON, Layla; ABEDIN, Babak; ERFANI, Seyedezahra. Addiction to Social Network Site Use: An Information Technology Identity Perspective. ACIS 2019, 2019, Perth, Australia. opus.cloud.lib.uts.edu.au, 9-11 December.
- BOS, Jesse D. **Surviving the Office Jungle: The Moderating Effects of Personal Characteristics on the Relationship between New Ways of Working on the One Hand, and Job Satisfaction and Work Performance on the Other Hand**. Thesis (Masters). Faculty of Social & Behavioral Sciences, Leiden University, Leiden, NL, 2016.
- BOUDREAU, Marie Claude; SERRANO, Christina.; LARSON, Keri. IT-Driven Identity Work: Creating a Group Identity in a Digital Environment. **Information and Organization**, v. 24, n. 1, p. 1-24, Jan 2014.
- BOZDAG, Engin; TIMMERMANS, Job. Values in the Filter Bubble Ethics of Personalization Algorithms in Cloud Computing. 1st International Workshop on Values in Design—Building Bridges between RE, HCI and Ethics, 2011, Lisbon, Portugal. p.7-15.
- BOZEMAN, Dennis P; KACMAR, K. Michele. A Cybernetic Model of Impression Management Processes in Organizations. **Organizational Behavior and Human Decision Processes**, v. 69, n. 1, p. 9-30, Jan 1997.
- BRANINE, Mohamed. Part-Time Work and Job sharing in Health Care: Is the NHS a Family-Friendly Employer? **Journal of Health Organization and Management**, v. 17, n. 1, p. 53-68, 2003.
- BREEN, Lauren. The researcher 'in the middle': Negotiating the insider/outsider dichotomy. **The Australian community psychologist**, v. 19, n. 1, p. 163-174, 2007.
- BRENNER, Philip S.; SERPE, Richard T.; STRYKER, Sheldon. The Causal Ordering of Prominence and Salience in Identity Theory: An Empirical Examination. **Social Psychology Quarterly**, v. 77, n. 3, p. 231-252, Sep 2014.
- BRIGHT, Laura F.; KLEISER, Susan Bardi; GRAU, Stacy Landreth. Too Much Facebook? An Exploratory Examination of Social Media Fatigue. **Computers in Human Behavior**, v. 44, p. 148-155, 2015.
- BRITES, Maria José; AMARAL, Inês; CATARINO, Fernando. A Era Das "Fake News": O Digital Storytelling Como Promotor Do Pensamento Crítico. **Journal of Digital Media & Interaction**, v.1, n.1, p. 85-98, 2018.
- BROOKS, Stoney; LONGSTREET, Phil; CALIFF, Christopher. Social Media Induced Technostress and Its Impact on Internet Addiction: A Distraction-Conflict Theory Perspective. **AIS Transactions on Human-Computer Interaction**, v. 9, n. 2, p. 99-122, 2017.
- BROWN, Jonathon D. Self-Esteem and Self-Evaluation: Feeling Is Believing. *In*: SULLS, Jerry. (Ed.). **Psychological Perspectives on the Self: The Self in Social Perspective**: Psychology Press, v.4, 2014. p.27-58.

- BROWN, Rupert; CAPOZZA, Dora. **Social Identity Theory in Retrospect and Prospect**. London: Sage Publications. pp. 7-15, 2000.
- BRUNS, Axel.; HIGHFIELD, Tim.; BURGESS, Jean. The Arab Spring and Social Media Audiences: English and Arabic Twitter Users and Their Networks. **American Behavioral Scientist**, v. 57, n. 7, p. 871-898, Jul 2013.
- BUETTNER, Ricardo. Personality as a Predictor of Business Social Media Usage: An Empirical Investigation of Xing Usage Patterns. 20th Pacific Asia Conference on Information Systems (PACIS), 2016, Chiayi, Taiwan. June 27, 2016.
- BUI, Ngot Phu. **Labeling Actors and Uncovering Causal Accounts of Their States in Social Networks and Social Media**. 2016. Dissertation (PhD). College of Information Sciences and Technology, Pennsylvania State University, Pennsylvania, PA, USA. 125p.
- BURKE, Peter J. The Self: Measurement Requirements from an Interactionist Perspective. **Social Psychology Quarterly**, v. 43, n. 1, p. 18-29, 1980.
- BURKE, Peter J.; STETS, Jan E. Trust and Commitment through Self-Verification. **Social Psychology Quarterly**, v. 62, n. 4, p. 347-366, Dec 1999.
- BURKE, Peter J.; TULLY, Judy C. The Measurement of Role Identity. **Social forces**, v. 55, n. 4, p. 881-897, Jun. 1977.
- CALLERO, Peter. **The Political Self - Identity Resources for Radical Democracy**. New York: Kluwer Academic/Plenum Publ, 2003. 57-70.
- _____. Self, Identity, and Social Inequality. In: MCLEOD, Jane; LAWLER, Edward; SCHWALBE, Michael. (Ed.). **Handbook of the Social Psychology of Inequality**. Dordrecht: Springer, 2014. Chap. 12, p.273-294.
- CALLERO, Peter L. Role-identity salience. **Social psychology quarterly**, v. 48, n.3, p. 203-215, 1985.
- CAMPBELL, Jennifer D. *et al.* Self-Concept Clarity: Measurement, Personality Correlates, and Cultural Boundaries. **Journal of personality and social psychology**, v. 70, n. 1, p. 141-156, 1996.
- CAMPBELL, Jennifer D.; ASSANAND, Sunaina; DI PAULA, Adam. The Structure of the Self-Concept and Its Relation to Psychological Adjustment. **Journal of Personality**, v. 71, n. 1, p. 115-140, Feb 2003.
- CANEPA, Erick P. B. **New Ways of Working and Their Impact on Future Physical Work Spaces**. 2011. 180 (Masters). Faculty of Architecture and Fine Art, Norwegian University of Science and Technology, Trondheim, NU.
- CAO, Xiongfei *et al.* Exploring the Influence of Social Media on Employee Work Performance. **Internet Research**, v. 26, n. 2, p. 529-545, 2016.
- CARTER, Michelle. **Information Technology (It) Identity: A Conceptualization, Proposed Measures, and Research Agenda**. Dissertation (PhD). Clemson University, 291p, 2012.
- _____. It Identity: Developing Valid Measures through CFA-Based MTMM Analysis. Thirty-Fourth International Conference on Information Systems, 2013, Milan, Italy. AIS eLibrary, December 15. p.2398-2415.
- CARTER, Michelle; GROVER, Varun. Me, My Self, and I (T): Conceptualizing Information Technology Identity and Its Implications. **Management Information Systems Quarterly**, v. 39, n. 4, p. 931-957, Dec 2015.
- CARTER, Michelle; COMPEAU, Deborah; SCHMALZ, Marc. The Ambivalent Potential of It Identity: Me, Not-Me, and Conflicted Me in a Digital World. Twenty-third DIGIT Workshop, 2018, San Francisco, USA. December 2018.
- CARTER, Michelle; PETTER, Stacie; COMPEAU, Deborah. Identifying with IT in a Digital World. Fortieth International Conference on Information Systems, 2019, Munich, Germany.

- CARTER, Michelle *et al.* IT Identity: A Measure and Empirical Investigation of Its Utility to Is Research. **Journal of the Association for Information Systems**, v. 21, n. 5, p. 1313-1342, 2020.
- CARVALHO, Virgínia; BORGES, Livia; RÊGO, Denise. Interacionismo Simbólico: Origens, Pressupostos E Contribuições Aos Estudos Em Psicologia Social. **Psicologia: Ciência e Profissão**, v. 30, n. 1, p. 146-161, 2010.
- CAVUSOGLU, Huseyin; PHAN, Tuan Quang; CAVUSOGLU, Hasan. Privacy Controls and Content Sharing Patterns of Online Social Network Users: A Natural Experiment. ICIS, 2013, Milano, Italy. December 16.
- CHAMBERS, Deborah. Networked Intimacy: Algorithmic Friendship and Scalable Sociality. **European Journal of Communication**, v. 32, n. 1, p. 26-36, Feb 2017.
- CHARNG, Hong Wen.; PILIAVIN, Jane. A.; CALLERO, Peter. L. Role-Identity and Reasoned Action in the Prediction of Repeated Behavior. **Social Psychology Quarterly**, v. 51, n. 4, p. 303-317, Dec 1988.
- CHEN, Hsuan-Ting. Revisiting the Privacy Paradox on Social Media with an Extended Privacy Calculus Model: The Effect of Privacy Concerns, Privacy Self-Efficacy, and Social Capital on Privacy Management. **American Behavioral Scientist**, v. 62, n. 10, p. 1392-1412, Sep 2018.
- CHEN, Xiayu; WEI, Shaobo. The Impact of Social Media Use for Communication and Social Exchange Relationship on Employee Performance. **Journal of Knowledge Management**, v. 24, n. 6, p. 1289-1314, 2020.
- CHENG, Tan *et al.* Social Media Use and Employee Innovative Performance: Work Engagement as a Mediator. **Social Behavior & Personality**, v. 48, n. 1, p. 1-9, Jan 2020.
- CHENG, Zhi-Chao; GUO, Tian-Chao. The Formation of Social Identity and Self-Identity Based on Knowledge Contribution in Virtual Communities: An Inductive Route Model. **Computers in Human Behavior**, v. 43, p. 229-241, Feb 2015.
- CHENNAMANENI, Anitha; TANEJA, Aakash. Communication Privacy Management and Self-Disclosure on Social Media - a Case of Facebook. AMCIS 2015, 2015, Fajardo, Puerto Rico. AISELibrary, August 13-15.
- CHIN, Wynne W. How to Write up and Report PLS Analyses. *In: VINZI, Esposito et al.* (Ed.). **Handbook of Partial Least Squares**: Springer, 2010. p.655-690.
- CHOI, Daejin *et al.* Rumor Propagation Is Amplified by Echo Chambers in Social Media. **Scientific Reports**, v. 10, n. 1, p. 310, 2020.
- CHOU, Wen-ying Sylvania. *et al.* Web 2.0 for Health Promotion: Reviewing the Current Evidence. **American Journal of Public Health**, v. 103, n. 1, p. 9-18, Jan 2013.
- CHREIM, Samia.; WILLIAMS, Bernie. E.; HININGS, C. R. Interlevel Influences on the Reconstruction of Professional Role Identity. **Academy of Management Journal**, v. 50, n. 6, p. 1515-1539, Dec 2007.
- CHREIM, Samia. Social and Temporal Influences on Interpretations of Organizational Identity and Acquisition Integration. **The Journal of Applied Behavioral Science**, v. 43, n. 4, p. 449-480, 2007.
- CHUNG, Namho; HAN, HEEJEONG; Koo, Chulmo. Adoption of Travel Information in User-Generated Content on Social Media: The Moderating Effect of Social Presence. **Behaviour & Information Technology**, v. 34, n. 9, p. 902-919, Sep 2, 2015.
- CHUNG, S. Y.; CHO, H. C. Fostering Parasocial Relationships with Celebrities on Social Media: Implications for Celebrity Endorsement. **Psychology & Marketing**, v. 34, n. 4, p. 481-495, Apr 2017.
- CLIVE, Shepherd. Does Social Media Have a Place in Workplace Learning? **Strategic Direction**, v. 27, n. 2, p. 3-4, 2011.
- COBB-CLARK, Deborah A.; SCHURER, Stefanie. The Stability of Big-Five Personality

- Traits. **Economics Letters**, v. 115, n. 1, p. 11-15, 2012.
- COHEN, Jacob. **Statistical Power Analysis for the Behavioral Sciences**. 2. ed. New Jersey, USA: Lawrence Earlbaum Associates, 1988.
- COHEN, Jacob. Power Primer. **Psychological Bulletin**, v. 112, n. 1, p. 155-9, Jul 1992.
- COLE, Nicky Lisa. **Goffman's Front Stage and Back Stage Behavior**. 2018. Available in: <https://www.thoughtco.com/goffmans-front-stage-and-back-stage-behavior-4087971>. Accessed on: Dec. 21, 2020.
- COMSCORE. **2015 Brazil Digital Future in Focus**. 2015. Available in: <https://www.comscore.com/por/Insights/Apresentacoes-e-documentos/2015/2015-Brazil-Digital-Future-in-Focus>. Accessed on: Oct. 01, 2021.
- COOK, Dave; RUDNICKA, Anna; NEWBOLD, JOSEPH. **Work-Life Balance in a Pandemic: A Public Health Issue We Cannot Ignore**. 2021. Available in: <https://theconversation.com/work-life-balance-in-a-pandemic-a-public-health-issue-we-cannot-ignore-155492>. Accessed on: Sep. 27, 2021.
- COULDRY, Nick. Social Media: Human Life. **Social Media + Society**, v. 1, 05/11 2015.
- COSTA NETTO, Yves; MAÇADA, Antonio Carlos G. The Antecedents of IT Identity Construction through Social Media Usage. XLIII Encontro da ANPAD - EnANPAD 2019, 2019a, São Paulo, Brazil. October 02-05.
- _____. The Influence of Social Media Filter Bubbles and Echo Chambers on IT Identity Construction. European Conference on Information Systems, 2019b, Stockholm & Uppsala, Sweden. aisel.aisnet.org. p.1-14.
- COSTELLO, Leesa; MCDERMOTT, Marie-Louise; WALLACE, Ruth. Netnography: Range of Practices, Misperceptions, and Missed Opportunities. **International Journal of Qualitative Methods**, v. 16, n. 1, p. 1609406917700647, Apr 4, 2017.
- COURBET, Didier; FOURQUET-COURBET, Marie-Pierre. When a Celebrity Dies ... Social Identity, Uses of Social Media, and the Mourning Process among Fans: The Case of Michael Jackson. **Celebrity Studies**, v. 5, n. 3, p. 275-290, 2014.
- COVINGTON, Martin V. The Role of Self-Processes in Applied Social-Psychology. **Journal for the Theory of Social Behaviour**, v. 15, n. 3, p. 355-389, Oct 1985.
- CRAIG, Kevin; THATCHER, Jason Bennett; GROVER, Varun. The IT Identity Threat: A Conceptual Definition and Operational Measure. **Journal of Management Information Systems**, v. 36, n. 1, p. 259-288, Jan 2, 2019.
- CRAMER, Emily M.; SONG, Hayeon; DRENT, Adam M. Social Comparison on Facebook: Motivation, Affective Consequences, Self-Esteem, and Facebook Fatigue. **Computers in Human Behavior**, v. 64, p. 739-746, Nov 2016.
- CRESWELL, John W.; CLARK, Vicki L. Plano. **Designing and conducting mixed methods research**. 3. ed. Thousand Oaks, CA: Sage publications, 2018.
- CRESWELL, John W; CRESWELL, J. David. **Research Design: Qualitative, Quantitative, and Mixed Methods Approaches**. 4. California, USA: Sage Publications, 2017.
- CRIDDLE, Cristina. **Facebook Sued over Cambridge Analytica Data Scandal**. 28 October 2020. Available in: <https://www.bbc.com/news/technology-54722362>. Accessed on 12 May 2021.
- CRISP, Beth R. Belonging, Connectedness and Social Exclusion. **Journal of Social Inclusion**, v. 1, n. 2, p. 123-132, 2010.
- CROSSMAN, Ashley. **The Meaning and Purpose of the Dramaturgical Perspective**. 2019. Available in: <https://www.thoughtco.com/dramaturgical-perspective-definition-3026261>. Accessed on: Mar. 16, 2021.
- CURRIE, Candace *et al.* Social Determinants of Health and Well-Being among Young People. **Health Behaviour in School-aged Children (HBSC) study: international report from the**, v. 2010, p. 271, 2009.

- DAVIS, Jenny. L. Triangulating the Self: Identity Processes in a Connected Era. **Symbolic Interaction**, v. 37, n. 4, p. 500-523, Nov 2014.
- DAVIS, Katie. Young People's Digital Lives: The Impact of Interpersonal Relationships and Digital Media Use on Adolescents' Sense of Identity. **Computers in Human Behavior**, v. 29, n. 6, p. 2281-2293, Nov 2013.
- DAVIS, Mark H; FRANZOI, Stephen L. Private Self-Consciousness and Self-Disclosure. *In*: DERLAGA, V. J. e BERG, J. H. (Ed.). **Self-Disclosure Theory, Research, and Therapy**: Springer, 1987. p.59-79.
- DE LEEDE, Jan; HEUVER, Paddy. New Ways of Working and Leadership: An Empirical Study in the Service Industry. *In*: LEEDE, J. D. (Ed.). **New Ways of Working Practices**. Bingley, UK: Emerald Group Publishing Limited, v.16, 2016. p.49-71. (Advanced Series in Management).
- DE WIT, Lee; BRICK, Cameron; VAN DER LINDEN, Sander. **Are Social Media Driving Political Polarization?** , 2019. Available in: https://greatergood.berkeley.edu/article/item/is_social_media_driving_political_polarization. Accessed on: Nov. 27, 2020.
- DEANDREA, David C. Advancing Warranting Theory. **Communication Theory**, v. 24, n. 2, p. 186-204, May 2014.
- DEANDREA, David C.; CARPENTER, Christopher J. Measuring the Construct of Warranting Value and Testing Warranting Theory. **Communication Research**, v. 45, n. 8, p. 1193-1215, 2016.
- DEFLEUR, Melvin L.; BALL-ROKEACH, Sandra J. **Theories of Mass Communication**. 5th. Boston, Massachusetts, USA: Allyn & Bacon, Inc, 1990. 368.
- DEL VICARIO, Michela *et al.* Echo Chambers: Emotional Contagion and Group Polarization on Facebook. **Scientific Reports**, v. 6, p. 37825, Dec 1, 2016.
- DEMEROUTI, Evangelia *et al.* New Ways of Working: Impact on Working Conditions, Work-Family Balance, and Well-Being. *In*: KORUNKA, C. e HOONAKKER, P. (Ed.). **The Impact of ICT on Quality of Working Life**. Dordrecht, Netherlands: Springer, 2014. p.123-141.
- DERLEGA, Valerian J; BERG, John H. **Self-Disclosure: Theory, Research, and Therapy**. New York, NY, USA: Springer Science & Business Media, 2013.
- DOAS, Michelle Dellaria. Increasing Self-Awareness When Posting on Social Media Sites. **Journal of Nursing Education and Practice**, v. 7, n. 8, p. 101, 2017.
- DOBIAS, Amanda Nicole. **I've Got 99 Friends, but Is Taylor Swift One? An Examination of Effects of Social Media Interactions on Parasocial Relationships**. 2017. 55 (Master of Arts). Department of Communication, Colorado Springs, Colorado Springs.
- DONAHUE, Eileen M. *et al.* The Divided Self: Concurrent and Longitudinal Effects of Psychological Adjustment and Social Roles on Self-Concept Differentiation. **Journal of personality and social psychology**, v. 64, n. 5, p. 834-46, May 1993.
- DORUM, Kine; BARTLE, Craig; PENNINGTON, Martin. Social Media Encourages Sense of Belonging among Off-Campus University Students. *In*: (Ed.). **Cases on Formal and Informal E-Learning Environments: Opportunities and Practices**: IGI Global, 2013. cap. 4, p.68-80.
- DUGAN, Kimberly. B. Self, Identity, and Social Movements. **Contemporary Sociology-a Journal of Reviews**, v. 30, n. 6, p. 588-589, Nov 2001.
- DUNN, Robert Andrew. Self, Identity, and Difference: Mead and the Poststructuralists. **Sociological Quarterly**, v. 38, n. 4, p. 687-705, Fal 1997.
- DUNN, Robert Andrew. Identity Theories and Technology. *In*: LUPPICINI, R. (Ed.). **Handbook of Research on Technoself: Identity in a Technological Society**. Hershey, PA, USA: IGI Global, 2013. chap. 2, p.26-44.

- DUQUE, Luiz Carlos *et al.* New Ways of Working and the Physical Environment to Improve Employee Engagement. **Sustainability**, v. 12, n. 17, p. 1-18, Sep 2020.
- DUTTON, William. H. *et al.* The Internet and Access to Information About Politics: Searching through Filter Bubbles, Echo Chambers, and Disinformation. In: GRAHAM, M. and DUTTON, W. H. (Ed.). **Society and the Internet: How Networks of Information and Communication Are Changing Our Lives**. 2nd. Oxford, UK: Oxford University Press, 2019. Chap. 13, p.228-247.
- DUTTON, William H. *et al.* **Social Shaping of the Politics of Internet Search and Networking: Moving Beyond Filter Bubbles, Echo Chambers, and Fake News**. SSRN Electronic Journal, Working Paper No. 2944191, 2017. Available in: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2944191. Accessed on: December 21, 2020.
- DUVAL, Shelley; WICKLUND, Robert A. Effects of Objective Self-Awareness on Attribution of Causality. **Journal of Experimental Social Psychology**, v. 9, n. 1, p. 17-31, 1973.
- EDOSOMWAN, Simeon *et al.* The History of Social Media and Its Impact on Business. **Journal of Applied Management and entrepreneurship**, v. 16, n. 3, p. 79-91, 2011.
- ELLEMERS, Nicole; SPEARS, Russel.; DOOSJE, Bertjan. Self and Social Identity. **Annual Review of Psychology**, v. 53, p. 161-186, 2002.
- ELLISON, Nicole; HEINO, Rebecca; GIBBS, Jennifer. Managing Impressions Online: Self-Presentation Processes in the Online Dating Environment. **Journal of Computer-Mediated Communication**, v. 11, n. 2, p. 415-441, Jan 2006.
- ELLISON, Nicole; STEINFELD, Charles; LAMPE, Cliff. The Benefits of Facebook “Friends:” Social Capital and College Students’ Use of Online Social Network Sites. **Journal of computer-mediated communication**, v. 12, n. 4, p. 1143-1168, Jul 2007.
- ELO, Satu *et al.* Qualitative Content Analysis: A Focus on Trustworthiness. **SAGE Open**, v. 4, n. 1, p. 215824401452263, 2014.
- EMERY, Lydia F.; WALSH, Courtney; SLOTTER, Erica B. Knowing Who You Are and Adding to IT. **Social Psychological and Personality Science**, v. 6, n. 3, p. 259-266, Apr 2015.
- ERNST, Claus-Peter; PFEIFFER, Jella; ROTHLAUF, Franz. Hedonic and Utilitarian Motivations of Social Network Site Usage. In: (Ed.). **Factors Driving Social Network Site Usage**: Springer Gabler, 2015. p.11-28.
- ESCHMANN, Rob *et al.* Bigger Than Sports: Identity Politics, Colin Kaepernick, and Concession Making in #Boycottnike. **Computers in Human Behavior**, v. 114, p. 106583, 2021.
- ESKOLA, Anne. Knowledge Work and New Ways of Working. In: ESKOLA, A. (Ed.). **Navigating through Changing Times: Knowledge Work in Complex Environments**. London, UK: Routledge, 2017. p.316.
- ESMAEILZADEH, Pouyan. How IT Identity Affects Individuals’ Personal Health Devices (PHDs) Use Behaviors? An Empirical Study. **Information & Management**, v. 58, n. 1, p. 103313, 2020.
- ESTRADA, Sheryl. **Remote Work Is Popular, but ‘Moments That Matter’ Happen Onsite, Say Top Executives**. 2021. Available in: <https://fortune.com/2021/10/03/remote-work-is-popular-but-moments-that-matter-happen-onsite-say-top-executives/amp/>. Accessed on: Oct. 04, 2021.
- ETTER, Michael *et al.* Measuring Organizational Legitimacy in Social Media: Assessing Citizens’ Judgments with Sentiment Analysis. **Business & Society**, v. 57, n. 1, p. 60-97, Jan 2018.
- FAGNOT, Isabelle; PAQUETTE, Scott. Social Media Use and Employee Attitudes Towards

- Information Security. IFIP 8.2, 2010, December 7, 2010.
- FAUL, Franz *et al.* G* Power 3: A Flexible Statistical Power Analysis Program for the Social, Behavioral, and Biomedical Sciences. **Behavior research methods**, v. 39, n. 2, p. 175-191, May 2007.
- FAYARD, Anne-Laure; WEEKS, JOHN; KHAN, MAHWESH. *Designing the Hybrid Office: From Workplace to "Culture Space"* 2021. Available in: <https://hbr.org/2021/03/designing-the-hybrid-office>. Accessed on: Oct. 13, 2021.
- FENIGSTEIN, Allan; SCHEIER, Michael F; BUSS, Arnold H. Public and Private Self-Consciousness - Assessment and Theory. **Journal of Consulting and Clinical Psychology**, v. 43, n. 4, p. 522-527, 1975.
- FIESLER, Christian; MECKEL, Miriam; RANZINI, Giulia. Professional Personae-How Organizational Identification Shapes Online Identity in the Workplace. **Journal of Computer-Mediated Communication**, v. 20, n. 2, p. 153-170, Mar 2015.
- FLAXMAN, Seth; GOEL, Sharad; RAO, Justin M. Filter Bubbles, Echo Chambers, and Online News Consumption. **Public opinion quarterly**, v. 80, n. S1, p. 298-320, 2016.
- FLEMING, Stephen M. **Know Thyself: The Science of Self-Awareness**. New York, NY: Basic Books, 2021. 304p.
- FONCHA, John. W. Who Am I: Identity Construction of Otherness on a Social Media. **Mediterranean Journal of Social Sciences**, v. 5, n. 23, p. 1805-1812, 2014.
- FORNELL, Claes; LARCKER, David F. Structural Equation Models with Unobservable Variables and Measurement Error - Algebra and Statistics. **Journal of Marketing Research**, v. 18, n. 3, p. 382-388, 1981.
- FOUQUAERT, Thibault; MECHANT, Peter. Making Curation Algorithms Apparent: A Case Study of 'Instawareness' as a Means to Heighten Awareness and Understanding of Instagram's Algorithm. **Information, Communication & Society**, p. 1-21, Feb 24, 2021.
- FRENZEL, Lena Viktoria. Media Richness and Message Complexity as Influencers of Social Media Engagement. 2017. (Masters). Faculty of Communications, California State University, Fullerton.
- FU, Shaoxiong *et al.* Social Media Overload, Exhaustion, and Use Discontinuance: Examining the Effects of Information Overload, System Feature Overload, and Social Overload. **Information Processing & Management**, v. 57, n. 6, p. 102307, Nov 2020.
- FUCHS, Christian. **Social Media: A Critical Introduction**. London, UK: Sage, 2017.
- FULLWOOD, Chris; JAMES, Billie May; CHEN-WILSON, Chao-Hwa. Self-Concept Clarity and Online Self-Presentation in Adolescents. **Cyberpsychology, Behavior, and Social Networking**, v. 19, n. 12, p. 716-720, Dec 2016.
- GAJENDRAN, Ravi S.; HARRISON, David A. The Good, the Bad, and the Unknown About Telecommuting: Meta-Analysis of Psychological Mediators and Individual Consequences. **Journal of applied psychology**, v. 92, n. 6, p. 1524-1541, Nov 2007.
- GAO, Yang *et al.* Adapt to Changes or Not? The Mediating Effect of Individual Adaptability between Social Media and Task Performance. 49th Hawaii International Conference on Information Systems, 2016, IEEE. p.2126-2135.
- GARCIA-MORALES, Victor Jesus; MARTÍN-ROJAS, Rodrigo; LARDÓN-LÓPEZ, María Esmeralda. Influence of Social Media Technologies on Organizational Performance through Knowledge and Innovation. **Baltic Journal of Management**, v. 13, n. 3, p. 345-367, 2018.
- GAZZALEY, Adam; ROSEN, Larry D. **The Distracted Mind: Ancient Brains in a High-Tech World**. Cambridge, MA, USA: MIT Press, 2016.
- GELLER, Valerie; SHAVER, Phillip. Cognitive Consequences of Self-Awareness. **Journal of Experimental Social Psychology**, v. 12, n. 1, p. 99-108, 1976.
- GERARDS, Ruud; DE GRIP, Andries; BAUDEWIJNS, Claudia. Do New Ways of Working

- Increase Work Engagement? **Personnel Review**, v.47, n.2, p. 517-534, 2018.
- GERARDS, Ruud; DE GRIP, Andries; WEUSTINK, Arnoud. Do New Ways of Working Increase Informal Learning at Work? **Personnel Review**, v.50, n.4, p. 1200-1215
- GERARDS, Ruud; VAN WETTEN, Sanne; VAN SAMBEEK, Cecile. New Ways of Working and Intrapreneurial Behaviour: The Mediating Role of Transformational Leadership and Social Interaction. **Review of Managerial Science**, Sep 22, 2020.
- GERBING, David W.; ANDERSON, James C. An Updated Paradigm for Scale Development Incorporating Unidimensionality and Its Assessment. **Journal of Marketing Research**, v. 25, n. 2, p. 186-192, May 1988.
- GERHART, Natalie; TORRES, Russell; NEGAHBAN, Arash. **Combatting Fake News: An Investigation of Individuals' Information Verification Behaviors on Social Networking Sites**. HICCS, Boston, MA, USA: 2017.
- GIBBS, Jennifer; ELLISON, Nicole; HEINO, Rebecca. Self-Presentation in Online Personals: The Role of Anticipated Future Interaction, Self-Disclosure, and Perceived Success in Internet Dating. **Communication Research**, v. 33, n. 2, p. 152-177, Apr 2006.
- GIOIA, Dennis A.; HAMILTON, A. L. Great Debates in Organizational Identity Study. In: MICHAEL G. PRATT; MAJKEN SCHULTZ, *et al.* (Ed.). **The Oxford Handbook of Organizational Identity**. Oxford: Oxford University Press, 2016.
- GIOIA, Dennis A. *et al.* Organizational Identity Formation and Change. **The Academy of Management Annals**, v. 7, n. 1, p. 123-193, Jun 1, 2013.
- GIOIA, Dennis A.; SCHULTZ, Majken; CORLEY, Kevin G. Organizational Identity, Image, and Adaptive Instability. **Academy of Management Review**, v. 25, n. 1, p. 63-81, Jan 2000.
- GLEN, Stephanie. **Homogeneity, Homogeneous Data & Homogeneous Sampling**. 2021. Available in: <https://www.statisticshowto.com/homogeneity-homogeneous/#>. Accessed on: Oct. 11, 2021.
- GOERTZ, Gary. **Multimethod Research, Causal Mechanisms, and Case Studies**. Princeton University Press, 2017.
- GOFFMAN, Erving. **The Presentation of Self in Everyday Life**. Garden City, New York: Doubleday, 1959. 255 p.
- GOLDBERG, Lewis R. The Development of Markers for the Big-Five Factor Structure. **Psychological assessment**, v. 4, n. 1, p. 26, 1992.
- GOLDBERG, Lewis R *et al.* The International Personality Item Pool and the Future of Public-Domain Personality Measures. **Journal of Research in Personality**, v. 40, n. 1, p. 84-96, Feb 2006.
- GOLDEN, Timothy D. The Role of Relationships in Understanding Telecommuter Satisfaction. **Journal of Organizational Behavior**, v. 27, n. 3, p. 319-340, May 2006.
- GONG, Xiang; CHEN, Chongyang; LEE, Matthew K.O. What Drives Problematic Online Gaming? The Role of IT Identity, Maladaptive Cognitions, and Maladaptive Emotions. **Computers in Human Behavior**, v. 110, n. 106386, p. 1-14, 2020.
- GONZALES, A. L.; HANCOCK, J. T. Mirror, Mirror on My Facebook Wall: Effects of Exposure to Facebook on Self-Esteem. **Cyberpsychology, Behavior, Social Network**, v. 14, n. 1-2, p. 79-83, Jan-Feb 2011.
- GOSWAMI, Suparna *et al.* Using Online Social Networking to Enhance Social Connectedness and Social Support for the Elderly. International Conference on Information Systems, 2010, St. Louis, Missouri, USA. Association for Information Systems (AIS), December 12-15. p.1705-1714.
- GRAETZ, Fiona; SMITH, Aaron. Duality Theory and Organizing Forms in Change Management. **Journal of Change Management**, v. 9, p. 9-25, 2009.
- GRAHAM, John; SHIER, Micheal. Intersecting Personal Identity and Professional Role:

- Impact on Social Worker Subjective Well-Being. **Journal of Baccalaureate Social Work**, v. 19, n. 1, p. 133-150, 2014.
- GRAHAM, Stephen. Beyond the 'Dazzling Light': From Dreams of Transcendence to the 'Remediation' of Urban Life: A Research Manifesto. **New Media & Society**, v. 6, n. 1, p. 16-25, Feb 2004.
- GRANOVETTER, Mark. The Strength of Weak Ties: A Network Theory Revisited. **Sociological theory**, v. 1, p. 201-233, 1983.
- GRUBE, Jean. A.; PILIAVIN, Jane. A. Role Identity, Organizational Experiences, and Volunteer Performance. **Personality and Social Psychology Bulletin**, v. 26, n. 9, p. 1108-1119, Sep 2000.
- GÜNDÜZ, Uğur. The Effect of Social Media on Identity Construction. **Mediterranean Journal of Social Sciences**, v. 8, n. 5, p. 85-92, 2017.
- GUPTA, Samrat; JAIN, Gaurav; Tiwari, Amit Anand. Investigating the Dynamics of Polarization in Online Discourse During Covid-19 Pandemic. Conference on e-Business, e-Services and e-Society, 2021, Springer. p.704-709.
- HAFEZIEH, Najmeh; ESHRAGHIAN, Farjam. **Affordance Theory in Social Media Research: Systematic Review and Synthesis of the Literature**. 25th European Conference on Information Systems (ECIS 2017). Guimarães, Portugal: 3155-3166 p. 2017.
- HAIR, Joseph F. *et al.* **Fundamentos De Métodos De Pesquisa Em Administração**. Porto Alegre, Brasil: Bookman, 2005.
- HAIR, Joseph F. *et al.* An Updated and Expanded Assessment of PLS-SEM in Information Systems Research. **Industrial Management & Data Systems**, v. 117, n. 3, p. 442-458, 2017.
- HAIR, Joseph F. *et al.* **A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)**. Sage Publications, 2016.
- HAIR, Joseph F. *et al.* **A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)**. 2nd. Thousand Oaks, California, USA: Sage Publishing, 2017.
- HAIR, Joseph F. *et al.* **Advanced Issues in Partial Least Squares Structural Equation Modeling**. Sage Publications, 2017.
- HAKOBYAN, Zaruhi; KOULOVATIANOS, Christos. **Populism and Polarization in Social Media without Fake News: The Vicious Circle of Biases, Beliefs and Network Homophily**. Working Paper. Available in: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3435817 Accessed on: Oct. 13, 2021, 2019.
- HALFORD, Susan. Hybrid Workspace: Re-Spatialisations of Work, Organisation and Management. **New Technology, Work and Employment**, v. 20, n. 1, p. 19-33, Mar 2005.
- HAMELEERS, Michael. Augmenting Polarization Via Social Media? A Comparative Analysis of Trump's and Wilders' Online Populist Communication and the Electorate's Interpretations Surrounding the Elections. **Acta Politica**, v. 55, p. 331-350, 2018.
- HANSEN, Derek; SHNEIDERMAN, Ben; SMITH, Marc A. **Analyzing Social Media Networks with NodeXL: Insights from a Connected World**. Burlington, Massachusetts: Morgan Kaufmann, 2010.284p.
- HARMAN, Harry H. **Modern Factor Analysis**. Chicago, IL, USA: University of Chicago Press, 1976.
- HARRIS, Elspeth; BARDEY, Aurore. Do Instagram Profiles Accurately Portray Personality? An Investigation into Idealized Online Self-Presentation. **Frontiers in Psychology**, v. 10, p. 871, 2019.
- HARTER, Susan. **The Construction of the Self: A Developmental Perspective**. New York,

- NY, USA: Guilford Press, 1999.
- HE, Qiwei *et al.* Predicting Self-Monitoring Skills Using Textual Posts on Facebook. **Computers in Human Behavior**, v. 33, p. 69-78, 2014/04/01/ 2014.
- HENDRICKX, Frank. Regulating New Ways of Working: From the New 'Wow'to the New 'How'. **European Labour Law Journal**, v. 9, n. 2, p. 195-205, Jun 2018.
- HENRY, Alastair; THORSEN, Cecilia. Engagement with Technology: Gaming, Immersion and Sub-Optimal Experiences. **Technology in Language Teaching & Learning**, v. 1, n. 2, p. 52-67, 2019.
- HENSELER, Jörg; RINGLE, Christian M; SARSTEDT, Marko. A New Criterion for Assessing Discriminant Validity in Variance-Based Structural Equation Modeling. **Journal of the Academy of Marketing Science**, v. 43, n. 1, p. 115-135, Jan 2015.
- HENSELER, Jörg; RINGLE, Christian M.; SARSTEDT, Marko. Testing Measurement Invariance of Composites Using Partial Least Squares. **International Marketing Review**, v. 33, n. 3, p. 405-431, 2016.
- HENSELER, Jörg; RINGLE, Christian M; SINKOVICS, Rudolf R. The Use of Partial Least Squares Path Modeling in International Marketing. *In: (Ed.). New Challenges to International Marketing*: Emerald Group Publishing Limited, 2009. p.277-319.
- HILBERT, Martin *et al.* Communicating with Algorithms: A Transfer Entropy Analysis of Emotions-Based Escapes from Online Echo Chambers. **Communication Methods and Measures**, v. 12, n. 4, p. 260-275, 2018.
- HILL, Jill. New Ways of Working: How Will They Link with Existing Services? **Journal of Diabetes Nursing**, v. 13, n. 4, p. 138-139, 2009.
- HINKIN, Timothy R. A Brief Tutorial on the Development of Measures for Use in Survey Questionnaires. **Organizational Research Methods**, v. 1, n. 1, p. 104-121, Jan 1998.
- HOCEVAR, Kristin Page; FLANAGIN, Andrew J; METZGER, Miriam J. Social Media Self-Efficacy and Information Evaluation Online. **Computers in Human Behavior**, v. 39, p. 254-262, Oct 2014.
- HOFF, TIMOTHY. Covid-19 and the Study of Professionals and Professional Work. **Journal of Management Studies**, p. 10.1111/joms.12694, 2021.
- HOGAN, Bernie. The Presentation of Self in the Age of Social Media: Distinguishing Performances and Exhibitions Online. **Bulletin of Science, Technology & Society**, v. 30, n. 6, p. 377-386, 2010.
- HOGAN, Bernie; QUAN-HAASE, Anabel. Persistence and Change in Social Media. **Bulletin of Science, Technology & Society**, v. 30, n. 5, p. 309-315, 2010.
- HOGG, Michael. A. Social Identity and the Psychology of Groups. *In: LEARY, Mark. R. e TANGNEY, June. P. (Ed.). Handbook of Self and Identity*. New York, NY, US: The Guilford Press, 2012. p.502-519.
- _____. Social Identity Theory. *In: MCKEOWN, Shelley; HAJI, Reeshma, FERGUSON, Neil. (Ed.). Understanding Peace and Conflict Through Social Identity Theory: Contemporary Global Perspectives*. Cham, Switzerland: Springer International Publishing, 2016. p.3-17.
- HOGG, Michael. A.; TERRY, Deborah. J. Social Identity and Self-Categorization Processes in Organizational Contexts. **Academy of Management Review**, v. 25, n. 1, p. 121-140, Jan 2000.
- HOGG, Michael. A.; TERRY, Deborah. J.; WHITE, Katherine. M. A Tale of Two Theories: A Critical Comparison of Identity Theory with Social Identity Theory. **Social Psychology Quarterly**, v. 58, n. 4, p. 255-269, Dec 1995.
- HOGG, Michael A; ABRAMS, Dominic; BREWER, Marilyn B. Social Identity: The Role of Self in Group Processes and Intergroup Relations. **Group Processes & Intergroup Relations**, v. 20, n. 5, p. 570-581, Sep 2017.

- HOLMES, David. **Communication Theory: Media, Technology and Society**. Sage Publications, 2005.
- HONG, Seoyeon *et al.* Do You Filter Who You Are?: Excessive Self-Presentation, Social Cues, and User Evaluations of Instagram Selfies. **Computers in Human Behavior**, v. 104, p. 106159, 2020.
- HONG, Ni; HONG, Yili; BURTCH, Gordon. Anonymity and Language Usage: A Natural Experiment of Social Network Integration. ICIS, 2015, Fort Worth, Texas. Dec. 13, 2015.
- HONGLADAROM, Soraj. Personal Identity and the Self in the Online and Offline World. **Minds and Machines**, v. 21, n. 4, p. 533-548, Nov 2011.
- _____. **Online Self: Externalism, Friendship and Games**. 1. Switzerland: Springer International Publishing, 2016. 171p.
- HOORENS, Vera. The Social Consequences of Self-Enhancement and Self-Protection. *In*: ALICKE, Mark D. *et al* (Ed.). **The Handbook of Self-Enhancement and Self-Protection**. New York, US: Guilford Publications, 2011. p.235-257.
- HSIAO, Chia-CHUN; WANG, PEI-WEN. Relationships among Creative Role Identity, Work Motivation, Instructional Skill for Creativity, and Creative Instructional Behavior. **Journal of Research in Education Sciences**, v. 61, n. 2, p. 185-211, Jun 2016.
- HU, Shangui; GU, Jibao; ZHANG, Shulin. Social Media Usage, Self-Efficacy and Cultural Intelligence: A Longitudinal Empirical Research in China. WHICEB, 2017, Wuhan, China. p.261-271.
- HUANG, Ronggui. **Package 'Rqda'**. 2018. Available in: <http://rqda.r-forge.r-project.org/>. Accessed on: May 14, 2021.
- HUBER, Joan. Symbolic Interaction as a Pragmatic Perspective: The Bias of Emergent Theory. **American Sociological Review**, v. 38, n. 2, p. 274-284, 1973.
- IPIP. **International Personality Item Pool: A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences**. 2020. Available in: <http://ipip.ori.org/>. Accessed on: Jan. 22, 2021.
- IPSOS. **Mundo Dividido**. 2018. Available in: <https://www.ipsos.com/pt-br/mundo-dividido>. Accessed on: Jan. 10, 2021.
- ISARANON, Y. The Role of Facebook Affirmation Towards Ideal Self-Image and Self-Esteem. **Journal of Behavioral Science**, v. 14, n. 1, p. 46-62, Jan 2019.
- JAAKONMÄKI, Roope; MÜLLER, Oliver; VOM BROCKE, Jan. The Impact of Content, Context, and Creator on User Engagement in Social Media Marketing. Hawaii International Conference on System Sciences, 2017, Hawaii, USA. January 4.
- JANSSENS, Heidi *et al.* Do personality traits determine work engagement? Results from a Belgian study. **Journal of occupational and environmental medicine**, v. 61, n. 1, p. 29-34, 2019.
- JANZE, Christian; RISIUS, Marten. Automatic Detection of Fake News on Social Media Platforms. **PACIS 2017 Proceedings**, July 1, 2017.
- JASON, Milne. Towards a Model of Identity and Role Exit. **Sociation Today**, v. 8, n. 2, 2011.
- JEMINE, Grégory; DUBOIS, Christophe; PICHAULT, François. **Legitimizing New Ways of Working: Discursive and Material Dimensions of a Transformation Project**. Amsterdam, Netherlands: orbi.uliege.be 2018.
- JIA, Jianyao. *et al.* Influence of Social Media Use at Work on Construction Managers' Work Performance: The Knowledge Seeker's Perspective. **Engineering, Construction and Architectural Management**, Dec 25, 2020.
- JIANG, L. Crystal.; BAZAROVA, Natalie. N.; HANCOCK, Jeffrey. T. The Disclosure-Intimacy Link in Computer-Mediated Communication: An Attributional Extension of the Hyperpersonal Model. **Human Communication Research**, v. 37, n. 1, p. 58-77, Jan

- 2011.
- JIANG, Shaohai; NGIEN, Annabel. The Effects of Instagram Use, Social Comparison, and Self-Esteem on Social Anxiety: A Survey Study in Singapore. **Social Media+ Society**, v. 6, n. 2, p. 1-10, Apr 2020.
- JOHNSON, Eric. *Why Has the Great Work-from-Home Experiment Been So Successful?* , December 11, 2020. Available in:
<https://www.forbes.com/sites/forbestechcouncil/2020/12/11/why-has-the-great-work-from-home-experiment-been-so-successful/?sh=3cfc446b28c7>. Accessed on: Jan. 06, 2020.
- JOHNSON, John. The 'Self-Disclosure' and 'Self-Presentation' Views of Item Response Dynamics and Personality Scale Validity. **Journal of Personality and Social Psychology**, v. 40, n. 4, p. 761-769, 04/01 1981.
- JOHNSON, Vess. Member Retention in Social Networking Sites. **AMCIS 2012 Proceedings**, July 29, 2012.
- JOHNSON, Adam N. Self-Disclosure in Computer-Mediated Communication: The Role of Self-Awareness and Visual Anonymity. **European Journal of Social Psychology**, v. 31, n. 2, p. 177-192, Mar-Apr 2001.
- JUDGE, Timothy A; EREZ, Amir. Interaction and Intersection: The Constellation of Emotional Stability and Extraversion in Predicting Performance. **Personnel Psychology**, v. 60, n. 3, p. 573-596, 2007.
- KAPLAN, Andreas; MAZUREK, Grzegorz. Social Media: State of the Art and Research Agenda. In: MIERZEJEWSKA, Bozena; JUNG, Jaemim, ALBARRAN, Alan B. (Ed.). **Handbook of Media Management and Economics**. London, United Kingdom: Routledge, 2018. p.272-286.
- KAPLAN, Andreas. M.; HAENLEIN, Michael. Users of the World, Unite! The Challenges and Opportunities of Social Media. **Business Horizons**, v. 53, n. 1, p. 59-68, Jan-Feb 2010.
- KASHIAN, Nicole *et al.* Self-Disclosure and Liking in Computer-Mediated Communication. **Computers in Human Behavior**, v. 71, p. 275-283, 2017/06/01/ 2017.
- KASPERIUNIENE, Judita.; ZYDZIUNAITE, Vilma. A Systematic Literature Review on Professional Identity Construction in Social Media. **Sage Open**, v. 9, n. 1, p. 1-11, Feb. 4, 2019.
- KAUFMAN, David; SAUVE, Louise. Digital Gaming by Older Adults: Can It Enhance Social Connectedness? 2019, Cham. Springer International Publishing. p.167-176.
- KELLY, J. A. The New " Covid-19" Home Office Worker: Evolving Computer-Human Interactions and the Perceived Value of Workplace Technology. **Technium Soc. Sci. J.**, v. 13, n. 1, p. 575-581, 2020.
- KERPEN, Carrie. *How Has Social Media Changed Us?* April 21, 2016. Available in:
<https://www.forbes.com/sites/carriekerpen/2016/04/21/how-has-social-media-changed-us/#742434fe5dfc>. Accessed on: Mar. 03, 2021.
- KIETZMANN, Jan H. *et al.* Unpacking the Social Media Phenomenon: Towards a Research Agenda. **Journal of public affairs**, v. 12, n. 2, p. 109-119, 2012.
- KIM, Dong Hoo; SEELY, Natalee Kate; JUNG, Jong-Hyuok. Do You Prefer, Pinterest or Instagram? The Role of Image-Sharing Sns and Self-Monitoring in Enhancing Ad Effectiveness. **Computers in Human Behavior**, v. 70, p. 535-543, 2017.
- KIM, Inchan; MIRANDA, Shaila. How Do Social Media Increase Firm Performance? Entrainment of Innovation to Contention. AMCIS, 2013, Chicago, IL, USA. May 27, 2013.
- KIM, Jin-Young. A Study of Social Media Users' Perceptual Typologies and Relationships to Self-Identity and Personality. **Internet Research**, v. 28, n. 3, p. 767-784, 2018.

- KIM, Yonghwan; WANG, Yuan; OH, Jeyoung. Digital Media Use and Social Engagement: How Social Media and Smartphone Use Influence Social Activities of College Students. **Cyberpsychology, Behavior, and Social Networking**, v. 19, n. 4, p. 264-269, Apr 1 2016.
- KINCAID, D. Lawrence. **The Convergence Model of Communication**. Honolulu, HW: East-West Communication Institute. 1979. (Report)
- KINGMA, Sytze. New Ways of Working (NWW): Work Space and Cultural Change in Virtualizing Organizations. **Culture and Organization**, v. 25, n. 5, p. 383-406, Oct 20, 2019.
- KLINE, Rex B. **Principles and practice of structural equation modeling**. 3.ed. New York, NY: Guilford, 2011.
- KLOSOWSKI, Thorin. **How Your Boss Can Use Your Remote-Work Tools to Spy on You**. 2021. Available in: <https://www.nytimes.com/wirecutter/blog/how-your-boss-can-spy-on-you/>. Accessed on: January 20, 2022.
- KNIFFIN, Kevin M. *et al.* Covid-19 and the Workplace: Implications, Issues, and Insights for Future Research and Action. **American Psychologist**, v. 76, n. 1, p. 63-77, Jan 2021.
- KOOHIKAMALI, Mehrdad; KIM, Dan. Factors Influencing Emotional Attachment to Social Network Apps. AMCIS 2016, San Diego, CA. August 11, 2016.
- KOSCIELNIAK, H. Key Performance Indicators of Social Media in Enterprise Management. **Polish Journal of Management Studies**, v. 18, n. 2, p. 176-184, 2018.
- KOSSEK, Ellen Ernst; LEE, Mary Dean. Implementing a Reduced-Workload Arrangement to Retain High Talent: A Case Study. **The Psychologist-Manager Journal**, v. 11, n. 1, p. 49-64, 2008.
- KOHTAMÄKI, Marko; THORGREN, Sara; WINCENT, Joakim. Organizational Identity and Behaviors in Strategic Networks. **Journal of Business & Industrial Marketing**, v. 31, n. 1, p. 36-46, 2016.
- KOUFTEROS, Xenophon A. Testing a Model of Pull Production: A Paradigm for Manufacturing Research Using Structural Equation Modeling. **Journal of Operations Management**, v. 17, n. 4, p. 467-488, 1999.
- KOZINETS, Robert. Netnography 2.0. *In*: BEK, R. W. (Ed.). **Handbook of Qualitative Research Methods in Marketing**. Northampton, Massachusetts, USA: Edward Elgar Publishing Limited, 2006. p.129-142.
- _____. Management Netnography: Axiological and Methodological Developments in Online Cultural Business Research. *In*: CASSEL, Catherine; CUNLIFFE, Ann L.; GRANDY, Gina. (Ed.). **The Sage Handbook of Qualitative Business and Management Research Methods**. London, United Kingdom: Sage Publications Limited, 2015.
- _____. **Netnography: Doing Ethnographic Research Online**. Cornwall, UK: Sage, 2010.
- _____. **Netnography: The Essential Guide to Qualitative Social Media Research**. SAGE Publications Limited, 2019.
- KOZINETS, Robert V; GAMBETTI, Rossella. **Netnography Unlimited: Understanding Technoculture Using Qualitative Social Media Research**. New York, NY: Routledge, 2021. 325p.
- KRÄMER, Nicole C; HAFERKAMP, Nina. Online Self-Presentation: Balancing Privacy Concerns and Impression Construction on Social Networking Sites. *In*: (Ed.). **Privacy Online**: Springer, 2011. p.127-141.
- KRÄMER, Nicole C.; WINTER, Stephan. Impression Management 2.0: The Relationship of Self-Esteem, Extraversion, Self-Efficacy, and Self-Presentation within Social Networking Sites. **Journal of Media Psychology: Theories, Methods, and Applications**, v. 20, n. 3, p. 106-116, 2008.
- KRASNOVA, Hanna; VELTRI, Natasha F.; GÜNTHER, Oliver. Self-Disclosure and Privacy

- Calculus on Social Networking Sites: The Role of Culture. **Business & Information Systems Engineering**, v. 4, n. 3, p. 127-135, 2012.
- KRAUS, Michael W.; CHEN, Serena. Relational Self-Verification through Self-Presentation: Implications for Perceptions of One's Honesty and Authenticity. **Self and Identity**, v. 13, n. 1, p. 45-57, 2012.
- KRUEGER, Joachim; HECK, Patrick; ASENDORPF, Jens. Self-Enhancement: Conceptualization and Assessment. **Collabra Psychology**, v. 3, n. 1, p. 1-11, 2017.
- KULAVUZ-ONAL, Derya. Using Netnography to Explore the Culture of Online Language Teaching Communities. **Calico journal**, v. 32, n. 3, p. 426-448, 2015.
- LAAJAJ, Rachid *et al.* Challenges to Capture the Big Five Personality Traits in Non-Weird Populations. **Science advances**, v. 5, n. 7, p. eaaw5226, 2019.
- LAROS, Jacob Arie *et al.* Validity Evidence of Two Short Scales Measuring the Big Five Personality Factors. **Psicologia: Reflexão e Crítica**, v. 31, 2018.
- LATIF, Kashmala *et al.* Social Comparison as a Double-Edged Sword on Social Media: The Role of Envy Type and Online Social Identity. **Telematics and Informatics**, v. 56, p. 101470, 2021.
- LEARY, Mark R; KOWALSKI, Robin M. Impression Management: A Literature Review and Two-Component Model. **Psychological Bulletin**, v. 107, n. 1, p. 34, 1990.
- LEARY, Mark R. **Self-Presentation: Impression Management and Interpersonal Behavior**. Madison, WI, USA: Brown & Benchmark Publishers, 1995. xv, 246-xv, 246.
- LEARY, Mark R.; COX, Cody B. Belongingness Motivation: A Mainspring of Social Action. *In: (Ed.)*. **Handbook of Motivation Science**. New York, NY, US: Guilford Press, 2008. p.27-40.
- LECLERCQ-VANDELANNOITTE, A. Interrelationships of Identity and Technology in IT Assimilation. **European Journal of Information Systems**, v. 23, n. 1, p. 51-68, Jan 2014.
- LEE, Chei Sian *et al.* Use of Social Media in the Workplace. PACIS, 2013, Jeju Island, Korea. June 18, 2013.
- LEE, Danielle Ka Lai; BORAH, Porismita. Self-Presentation on Instagram and Friendship Development among Young Adults: A Moderated Mediation Model of Media Richness, Perceived Functionality, and Openness. **Computers in Human Behavior**, v. 103, p. 57-66, 2020.
- LEE, Richard M.; ROBBINS, Steven B. The Relationship between Social Connectedness and Anxiety, Self-Esteem, and Social Identity. **Journal of Counseling Psychology**, v. 45, n. 3, p. 338-345, Jul 1998.
- LEE, Richard; ROBBINS, Steven. Measuring Belongingness - the Social Connectedness and the Social Assurance Scales. **Journal of Counseling Psychology**, v. 42, n. 2, p. 232-241, Apr 1995.
- LEEDE, Jan DE. **New Ways of Working Practices: Antecedents and Outcomes**. Bingley, United Kingdom: Emerald Group Publishing Limited, 2016. 175.
- LEFTHERIOTIS, Ioannis; GIANNAKOS, Michail. Using Social Media for Work: Losing Your Time or Improving Your Work? **Computers in Human Behavior**, v. 31, p. 134-142, Feb 2014.
- LEFTHERIOTIS, Ioannis; GIANNAKOS, Michail N.; PAPPAS, Ilias O. Social Media Use for Work: Does Work Experience Really Matter? Mediterranean Conference on Information Systems, 2016, Paphos, Cyprus. AIS eLibrary, 4-6 September. p.45.
- LENGEL, Robert H.; DAFT, Richard L. The Selection of Communication Media as an Executive Skill. **Academy of Management Perspectives**, v. 2, n. 3, p. 225-232 1988.
- LEVINSON, Nanette; COGBURN, Derrick L; VODANOVICH, Shahper. Introduction to the Minitrack on Social Media: Culture, Identity, and Inclusion. Hawaii International

- Conference on System Sciences, 2018, Hawaii, USA. IEEE. p.2202.
- LIN, Ruoyun; UTZ, Sonja. The Emotional Responses of Browsing Facebook: Happiness, Envy, and the Role of Tie Strength. **Computers in Human Behavior**, v. 52, p. 29-38, 2015.
- LIN, Xialing; SPENCE, Patric R. Identity on Social Networks as a Cue: Identity, Retweets, and Credibility. **Communication Studies**, v. 69, n. 5, p. 461-482, 2018.
- LINCOLN, Yvonna S; GUBA, Egon G. **Naturalistic Inquiry**. Thousand Oaks, CA: Sage Publications, 1985. 416p.
- LINDENAU, JULIANA DAL-RI; GUIMARÃES, LUCIANO SANTOS PINTO. Calculando O Tamanho De Efeito No SPSS. **Clinical & Biomedical Research**, v. 32, n. 3, 2012.
- LIU, Chung-Tzer; GUO, Yi Maggie. The Role of Sense of Belonging in Social Media Usage: A Tale of Two Types of Users. **Asia Pacific Journal of Information Systems**, v. 25, n. 2, p. 403-422, 2015.
- LOI, Daria. Shared Work Environments as Ecologies: New Ways of Working and Designing. Techné -5th European Academy of Design Conference, 2003, Barcelona, Spain.
- LOMAS, Natasha. **Facebook's Secret Settlement on Cambridge Analytica Gags Uk Data Watchdog**. January 26, 2021. Available in: <https://techcrunch.com/2021/01/26/facebooks-secret-settlement-on-cambridge-analytica-gags-uk-data-watchdog/>. Accessed on: May 12, 2021.
- LONGSTREET, Phil; BROOKS, Stoney; GONZALEZ, Ester S. Internet Addiction: When the Positive Emotions Are Not So Positive. **Technology in Society**, v. 57, p. 76-85, 2019.
- LOPEZ-CHAU, Asdrúbal *et al.* Analyzing Polarization through Social Media with Artificial Intelligence: The Mexican Presidential Election in 2018. 20th Annual International Conference on Digital Government Research, 2019, Dubai, United Arab Emirates. June 18–20, 2019.
- LOUNSBURY, John W. *et al.* Identity and personality: The big five and narrow personality traits in relation to sense of identity. **Identity: An International Journal of Theory and Research**, v. 7, n. 1, p. 51-70, 2007.
- LUPINACCI, Ludmila. 'Absentmindedly Scrolling through Nothing': Liveness and Compulsory Continuous Connectedness in Social Media. **Media, Culture & Society**, v. 43, n. 2, p. 273-290, Mar 2020.
- MACEDO, Isabel Maria. Predicting the Acceptance and Use of Information and Communication Technology by Older Adults: An Empirical Examination of the Revised Utaut2. **Computers in Human Behavior**, v. 75, p. 935-948, Oct 2017.
- MACHADO, Jorge; MISKOLCI, Richard. Das Jornadas de junho à cruzada moral: o papel das redes sociais na polarização política brasileira. **Sociologia & Antropologia**, v. 9, p. 945-970, 2019.
- MACQUEEN, K. M.; MCLELLAN, E.; KAY, K.; MILSTEIN, B. Codebook development for team-based qualitative analysis. In K. Krippendorff & M. A. Bock (Eds.), **The content analysis reader**. Thousand Oaks, CA: Sage, p. 211–19. 2009.
- MAGHRABI, R. O.; OAKLEY, R. L.; NEMATI, H. R. The Impact of Self-Selected Identity on Productive or Perverse Social Capital in Social Network Sites. **Computers in Human Behavior**, v. 33, p. 367-371, Apr 2014.
- MALHOTRA, Naresh K. **Pesquisa De Marketing: Uma Orientação Aplicada**. Porto Alegre, Brasil: Bookman, 2012.
- MARABELLI, Marco; NEWELL, Susan; GALLIERS, Robert D. The Materiality of Impression Management in Social Media Use: A Focus on Time, Space and Algorithms. International Conference on Information Systems, 2016, Dublin, Ireland. Association for Information Systems December 11-14.
- MARKS, Joseph *et al.* Epistemic Spillovers: Learning Others' Political Views Reduces the

- Ability to Assess and Use Their Expertise in Nonpolitical Domains. **Cognition**, v. 188, p. 74-84, 2019.
- MARSHALL, Martin N. Sampling for qualitative research. **Family practice**, v. 13, n. 6, p. 522-526, 1996
- MARZOUKI, Yousri; ALDOSSARI, Fatimah Salem; VELTRI, Giuseppe A. Understanding the Buffering Effect of Social Media Use on Anxiety During the Covid-19 Pandemic Lockdown. **Humanities and Social Sciences Communications**, v. 8, n. 1, p. 47, 2021.
- MASLOW, Abraham. Self-Actualization and Beyond. Conference on the Training of Counselors of Adults, 1965, Chatham, MA, USA. May 22-28.
- MATTHEWS, Gerald. Personality and Information Processing: A Cognitive-Adaptive Theory. **Handbook of personality theory and assessment**, v. 1, p. 56-79, 2008.
- MATTHEWS, Lucy. Applying Multigroup Analysis in PLS-SEM: A Step-by-Step Process. *In: LATAN, Hengky. e NOONAN, Richard. (Ed.). **Partial Least Squares Path Modeling***. Cham, Switzerland: Springer, 2017. p.219-243.
- MATTHEWS, Lucy; HAIR, Joseph F.; MATTHEWS, Ryan. PLS-SEM: The Holy Grail for Advanced Analysis. **Marketing Management Journal**, v. 28, n. 1, 2018.
- MATTINGLY, Brent A.; LEWANDOWSKI, Gary W. Expanding the Self Brick by Brick. **Social Psychological and Personality Science**, v. 5, n. 4, p. 484-490, May 2014.
- MAZUR, Elizabeth.; LI, Yidi. Identity and Self-Presentation on Social Networking Web Sites: A Comparison of Online Profiles of Chinese and American Emerging Adults. **Psychology of Popular Media Culture**, v. 5, n. 2, p. 101-118, Apr 2016.
- MCCALL, George; SIMMONS, Jerry. **Identities and Interactions: An Examination of Human Associations in Everyday Life**. New York, USA: Free Press, 1978. 288p.
- MCCONNELL, Elizabeth *et al.* "Everybody Puts Their Whole Life on Facebook": Identity Management and the Online Social Networks of LGBTQ Youth. **International Journal of Environmental Research and Public Health**, v. 15, n. 6, Jun 2018.
- MCINTYRE, Kevin P. *et al.* Workplace Self-Expansion: Implications for Job Satisfaction, Commitment, Self-Concept Clarity, and Self-Esteem among the Employed and Unemployed. **Basic and Applied Social Psychology**, v. 36, n. 1, p. 59-69, 2014.
- MCKINSEY. **The Future of Work after Covid-19**.2021. (Report)
- MCLUHAN, Marshall. **Understanding Media: The Extension of Man**. Cambridge, Massachusetts, USA: The MIT Press, 1994. 365.
- MCQUAIL, Denis; DEUZE, Mark. **McQuail's Mass Communication Theory**. 17th. London: SAGE Publications, 2020. 688p.
- MCSHANE, Steven; GLINOW, Mary Ann Von. **Organizational Behavior**. McGraw-Hill Education, 2017.
- MELONASHI, E. Social Media and Identity: Understanding Identity Communication and Creation through Social Media. *In: **Multigenerational Online Behavior and Media Use***, IGI Global, 2019, p. 1365-1386.
- MENDONÇA, José Ricardo Costa. **O Gerenciamento De Impressões Como Meio De Influência Social Nas Organizações: Uma Perspectiva Dramatúrgica**. 2004. 213 (PhD). Departamento de Ciências Administrativas, Tese (Doutorado em Administração– Universidade Federal do Rio Grande do Sul) Porto Alegre.
- MERUNKOVA, LUCIE; SLERKA, JOSEF. Goffman's Theory as a Framework for Analysis of Self Presentation on Online Social Networks. **Masaryk UJL & Tech.**, v. 13, p. 243, 2019.
- MESSINGSCHLAGER, Tanja; HOLTZ, Peter. Filter Bubbles Und Echo Chambers. *In: APPEL, Markus. (Ed.). **Die Psychologie Des Postfaktischen: Über Fake News, „Lügenpresse“, Clickbait & Co..*** . Berlin, Heldeliberger: Springer, 2019. p.91-102.
- MIKALEF, Patrick; PATELI, Adamantia. Social Media for Open Innovation: A Study of

- Adoption Determinants. PACIS 2017, 2017, Langkawi, Malaysia. July 19, 2017.
- MIRANDA, Shaila M.; YOUNG, Amber; YETGIN, Emre. Are Social Media Emancipatory or Hegemonic? Societal Effects of Mass Media Digitization in the Case of the Sopa Discourse. **Management Information Systems Quarterly**, v. 40, n. 2, p. 303-329, June 1, 2016.
- MOGHAVVEMI, Sedigheh. Media Richness Theory for Social Media: Research, Opportunities and Challenges. *In*: SULAIMAN, A. e NAGSHBANDI, M. M. (Ed.). **Social Media, Dynamism, Issues, and Challenges**. Singapore: Partridge, 2014. cap. 7, p.122-149.
- MOORE, Kelly; MCELROY, James C. The Influence of Personality on Facebook Usage, Wall Postings, and Regret. **Computers in Human Behavior**, v. 28, n. 1, p. 267-274, Jan 2012.
- MOSKALENKO, Sophia; MCCAULEY, Clark. Qanon: Radical Opinion Versus Radical Action. **Perspectives on Terrorism**, v. 15, n. 2, 2021.
- MOQBEL, Murad A.; AFTAB, Fizza. Employees' Social Networking Site Use Impact on Job Performance: Evidence from Pakistan. **AIS Transactions on Replication Research**, v. 1, n. 1, p. 1-11, December 8, 2015.
- MOQBEL, Murad; KOCK, Ned. Unveiling the Dark Side of Social Networking Sites: Personal and Work-Related Consequences of Social Networking Site Addiction. **Information & Management**, v. 55, n. 1, p. 109-119, 2018.
- MOQBEL, Murad; NAH, Fiona. The Role of Knowledge Sharing Via Organizational Social Media in the Workplace. AMCIS, 2017, Boston, MA, USA. August 10, 2017.
- MOQBEL, Murad; NEVO, Saggi; KOCK, Ned. Organizational Members' Use of Social Networking Sites and Job Performance: An Exploratory Study. **Information Technology & People**, v. 26, n. 3, p. 240-264, 2013.
- MORAIS, Greicilelle M; SANTOS, Valdeci F; GONÇALVES, Carlos A. Netnography: Origins, Foundations, Evolution and Axiological and Methodological Developments and Trends. **The Qualitative Report**, v. 25, n. 2, p. 441-455, 2020.
- MORGAN, David L. Pragmatism as a Paradigm for Social Research. **Qualitative Inquiry**, v. 20, n. 8, p. 1045-1053, 2014.
- MORIN, Alain; RACY, Famira. Dynamic Self-Processes. *In*: RAUTHMANN, John. (Ed.). **Handbook of Personality Dynamics and Processes**. Amsterdam, Netherlands: Elsevier, 2018.
- MORRIS, Merrill; OGAN, Christine. The Internet as Mass Medium. **Journal of Computer-Mediated Communication**, v. 1, n. 4, p. 39-50, Win 1996.
- MOSAFER, H.; SARABADANI, J. Identity in the Digital Age: A Review of Information Technology Identity (ITID Research in Information Systems. HICCS, 2021, Hawaii.
- NADKARNI, Ashwini.; HOFMANN, Stefan. Why Do People Use Facebook? **Personality and Individual Differences**, v. 52, n. 3, p. 243-249, 2012.
- NARULA, Uma. **Handbook of Communication Models, Perspectives, Strategies**. New Delhi, Delhi, India: Atlantic Publishers & Distributors (P) Limited, 2006.
- NETIZEN. *Card Sorting: How Many Test Users Is Enough?* ,2021. Available in: <https://blog.netizenexperience.com/card-sorting-how-many-number-test-users>. Accessed on: Jan. 23.
- NEWPORT, CAL. *Is Going to the Office a Broken Way of Working?* , 2021. Available in: <https://www.newyorker.com/culture/office-space/is-going-to-the-office-a-broken-way-of-working>. Accessed on: Sep. 27, 2021.
- NGAI, Eric W. T; TAO, Spencer S.C.; MOON, Karen K. L. Social Media Research: Theories, Constructs, and Conceptual Frameworks. **International Journal of Information Management**, v. 35, n. 1, p. 33-44, Feb 2015.

- NIESSEN, Cornelia; SWAROWSKY, Christine; LEIZ, Markus. Age and Adaptation to Changes in the Workplace. **Journal of Managerial Psychology**, v. 25, n. 4, p. 356-383, 2010.
- NKWE, Nugi; COHEN, Jason. Impact of Social Network Sites on Psychological and Behavioural Outcomes in the Work-Place: A Systematic Literature Review. ECIS, 2017, Guimarães, Portugal. AIS eLibrary, June 10. p.2051-2068.
- NOWELL, Lorelli S. et al. Thematic analysis: Striving to meet the trustworthiness criteria. **International Journal of Qualitative Methods**, v. 16, n. 1, p. 1609406917733847, 2017.
- NUNALLY, Jum C; BERNSTEIN, Ira H. **Psychometric Theory**. New York, NY, USA: McGraw-Hill, 1978. 736p.
- O'REILLY, Tim. **What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software**. 2005. Available in: <https://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html>. Accessed on: May 14, 2021.
- OH, Onook; KWON, Kyounghee Hazel; RAO, H. Raghav. An Exploration of Social Media in Extreme Events: Rumor Theory and Twitter During the Haiti Earthquake 2010. ICIS, 2010, St. Louis, MO, USA. January 1.
- OLEARNIK, Henryk. Role of Mass Media and Culture in Support of Threatened Ethnic Identity. In: **Environmental Social Psychology**. Springer, Dordrecht, 1988. p. 246-258.
- OLIVEIRA, Gustavo Henrique Maultasch de; WATSON-MANHEIM, Mary Beth. Use of Social Media in the Workplace: Contradictions and Unintended Consequences. AMCIS, 2013, Chicago, Illinois, USA. AIS eLibrary, May 27, 2013.
- ONDERDIJK, Kelsey E. et al. Livestream Experiments: The Role of Covid-19, Agency, Presence, and Social Context in Facilitating Social Connectedness. **Frontiers in Psychology**, v. 12, n. 1741, p. 647929, 2021-May-24 2021.
- ORSATTI, Jo; RIEMER, Kai. Identity-Making: A Multimodal Approach for Researching Identity in Social Media. European Conference on Information Systems, 2015, Münster, Germany. AIS eLibrary, May 29.
- ORTELLADO, Pablo; SOLANO, Esther; MORETTO, Marcio. Uma Sociedade Polarizada? In: Jinkings I, Doria K and Cleto M (eds) **Por Que Gritamos Golpe? Para Entender o Impeachment e a Crise Política No Brasil**. São Paulo: Boitempo, 2016, 194 p.
- OSGOOD, Charles Egerton et al. **Cross-Cultural Universals of Affective Meaning**. University of Illinois Press, 1975.
- OSGOOD, Charles Egerton; SUCI, George J; TANNENBAUM, Percy H. **The Measurement of Meaning**. University of Illinois Press, 1957.
- QUIRDI, Mariam El et al. Social Media Conceptualization and Taxonomy: A Lasswellian Framework. **Journal of Creative Communications**, v. 9, n. 2, p. 107-126, 2014.
- PALVALIN, Miikka. **Knowledge Work Performance Measurement in the New Ways of Working Context**. 2019. 190 (Masters). Faculty of Engineering and Natural Sciences, Tampere University, Tampere, Finland.
- PAN, Zhao et al. Who Do You Think You Are? Common and Differential Effects of Social Self-Identity on Social Media Usage. **Journal of Management Information Systems**, v. 34, n. 1, p. 71-101, 2017.
- PANYASORN, Jessada.; PANTELI, Niki.; POWELL, Philip. Creating IT Identity for Adoption and Use: The Case of Lotus Notes. Proceedings of the 14th European Conference on Information Systems, ECIS 2006, 2006.
- PAPACHARISSI, Zizi; RUBIN, A. M. Predictors of Internet Use. **Journal of Broadcasting & Electronic Media**, v. 44, n. 2, p. 175-196, Spr 2000.
- PARK, Chala et al. Formation of Weak Ties in Social Media. **The Journal of the Korea**

- Contents Association**, v. 14, n. 4, p. 97-109, 2014.
- PATTON, Michael Quinn. **Qualitative research & evaluation methods: Integrating theory and practice**. 3.ed. Thousand Oaks, CA: Sage publications, 2015.
- PAULHUS, Delroy L. Interpersonal and Intrapyschic Adaptiveness of Trait Self-Enhancement: A Mixed Blessing? **Journal of personality and social psychology**, v. 74, n. 5, p. 1197-208, May 1998.
- PEDERSEN, Mina Young; SMETS, Sonja; ÅGOTNES, Thomas. Analyzing Echo Chambers: A Logic of Strong and Weak Ties. *In*: BLACKBURN, Patrick.;LORINI, Emiliano; GUO, Meyiun. 7th International Workshop, LORI 2, 2019, Chongqing, China. October 18–21, 2019. p.183-198.
- PEDHAZUR, Elazar J.; SCHMELKIN, Liora P. **Measurement, Design, and Analysis: An Integrated Approach**. Psychology Press, 2013.
- PETERS, Pascale; KRAAN, Karolus; ECHELTEL, P Van. Floreren Onder Condities Van Het Nieuwe Werken: Minder Burn-out, Meer Toewijding? **Tijdschrift voor Arbeidsvraagstukken**, v. 29, n. 3, p. 304-321, 2013.
- PETRUNIK, Michael. The Rise and Fall of " Labelling Theory": The Construction and Destruction of a Sociological Strawman. **Canadian Journal of Sociology**, v. 5, n. 3, p. 213-233, 1980.
- PHAM, Quyen. **The Future of Work: Remote, Hybrid and in-Office**. 2021. Available in: <https://www.forbes.com/sites/forbesbusinessdevelopmentcouncil/2021/08/19/the-future-of-work-remote-hybrid-and-in-office/?sh=5928064d6168>. Accessed on: Oct. 23, 2021.
- PIRES, Pedro Motta Ravacci; MELO, Mirian de Lourdes Noronha Motta; RODRIGUES, Henrique Geraldo. As Influências Da Modalidade De Home Office Nas Conversas Informais, Nas Organizações, Durante a Pandemia De Covid-19. **Research, Society and Development**, v. 9, n. 11, p. e74291110485,2020.
- PODSAKOFF, Philip M. *et al.* Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. **Journal of applied psychology**, v. 88, n. 5, p. 879, Oct 2003.
- PRASETYA, Hafizh A; MURATA, Tsuyoshi. A Model of Opinion and Propagation Structure Polarization in Social Media. **Computational Social Networks**, v. 7, n. 1, p. 1-35, 2020.
- PRIYANKA, Garg; SALONI, Pahuja. Social Media: Concept, Role, Categories, Trends, Social Media and Ai, Impact on Youth, Careers, Recommendations. *In*: SHIRIN, A. e VANDANA, A. (Ed.). **Managing Social Media Practices in the Digital Economy**. Hershey, PA, USA: IGI Global, 2020. cap. chapter 8, p.172-192. (Advances in Marketing, Customer Relationship Management, and E-Services).
- PROUDFOOT, Jeffrey G *et al.* Saving Face on Facebook: Privacy Concerns, Social Benefits, and Impression Management. **Behaviour & Information Technology**, v. 37, n. 1, p. 16-37, 2018.
- PURCHASE, Sharon.; ROSA, Raymond. D.; SCHEPIS, Daniel. Identity Construction through Role and Network Position. **Industrial Marketing Management**, v. 54, p. 154-163, Apr 2016.
- PWC. **It's Time to Reimagine Where and How Work Will Get Done**. 2021. Available in: <https://www.pwc.com/us/en/library/covid-19/us-remote-work-survey.html>. Accessed on: Sep. 25, 2021.
- QUALTRICS, I. **Qualtrics**. Provo, UT, USA 2013.
- QUINONES, Cristina; KAKABADSE, Nada Korak. Self-Concept Clarity and Compulsive Internet Use: The Role of Preference for Virtual Interactions and Employment Status in British and North American Samples. **Journal of Behavioral Addictions**, v. 4, n. 4, p. 289-298, 2015.

- QUIRK, Michael J. Dewey's Version of Pragmatism. **Molloy College, Philosophy Department, Sophia Project**. Available in: http://www.sophia-project.org/uploads/1/3/9/5/13955288/quirk_dewey1.pdf. Accessed on: Sep. 10, 2003, 2000.
- RADER, Emilee; GRAY, Rebecca. Understanding User Beliefs About Algorithmic Curation in the Facebook News Feed. 33rd Annual ACM Conference on Human Factors in Computing Systems, 2015, Seoul, Republic of Korea. ACM. p.173-182.
- RAHMAN, Zoha *et al.* Mediating Impact of Fan-Page Engagement on Social Media Connectedness and Followers Purchase Intention. **Online Information Review**, v. 42, n. 7, p. 1082-1105, 2018.
- RAMASWAMY, Venkatram *et al.* An Empirical Pooling Approach for Estimating Marketing Mix Elasticities with Pims Data. **Marketing Science**, v. 12, n. 1, p. 103-124, 1993.
- RENARD, Karine *et al.* The Impact of New Ways of Working on Organizations and Employees: A Systematic Review of Literature. **Administrative Sciences**, v. 11, n. 2, p. 38, Jun 2021.
- REPORT, DIGITAL. **Global Digital Report 2019**. 2019. Available in: <https://wearesocial.com/global-digital-report-2019>. Accessed on: Jan. 21.
- RHODES, Samuel Callahan. **Echo Chambers and Misinformation: How Social Media Use Conditions Individuals to Believe Fake News**. 2019. Dissertation (Doctor of Philosophy). Washington State
- ROBERTS, Brent W *et al.* A Systematic Review of Personality Trait Change through Intervention. **Psychological Bulletin**, v. 143, n. 2, p. 117, 2017.
- ROBINSON, Laura. The Cyberself: The Self-Ing Project Goes Online, Symbolic Interaction in the Digital Age. **New Media & Society**, v. 9, n. 1, p. 93-110, 2016.
- ROCHA DE MACEDO, Lídia Suzana; DA COSTA DA SILVEIRA, Amanda. Self: Um Conceito Em Desenvolvimento. **Paidéia**, v. 22, n. 52, p. 281-289, 2012.
- RODGERS, Beth L.; COWLES, Kathleen V. The Qualitative Research Audit Trail: A Complex Collection of Documentation. **Research in Nursing & Health**, v. 16, n. 3, p. 219-226, 1993.
- RODRIGUES, Cassiano Terra. O Desenvolvimento Do Pragmatismo Segundo Dewey. **Cognitio-Estudos: revista eletrônica de filosofia**, v. 5, n. 2, p. 198-203, 2008.
- ROGERS, Carl Ransom. A Theory of Therapy, Personality, and Interpersonal Relationships: As Developed in the Client-Centered Framework. *In*: KOCH, S. (Ed.). **Psychology: A Study of a Science Study I. Conceptual and Systematic Volume 3: Formulations of the Person and the Social Context**. New York, USA: McGraw-Hill New York, v.3, 1959. p.184-256.
- ROTENBERG, Mordechai. Self-Labeling: A Missing Link in the 'Societal Reaction' theory of Deviance. **The Sociological Review**, v. 22, n. 3, p. 335-354, 1974.
- RUOSTELA, Jenna *et al.* 'New Ways of Working' as a Tool for Improving the Performance of a Knowledge-Intensive Company. **Knowledge Management Research & Practice**, v. 13, n. 4, p. 382-390, Nov 2015.
- RYAN, Tracii *et al.* How Social Are Social Media? A Review of Online Social Behaviour and Connectedness. **Journal of Relationships Research**, v. 8, p. 1-8, 2017.
- SAEZ-MATEU, Ferran. Democracy, Screens, Identity, and Social Networks: The Case of Donald Trump's Election. **American Behavioral Scientist**, v. 62, n. 3, p. 320-334, Mar 2018.
- SALDAÑA, Johnny. **The Coding Manual for Qualitative Researchers**. 2.ed. Thousand Oaks, CA: Sage Publications, 2013. 329p.
- SALO, Markus; PIRKKALAINEN, Henri; KOSKELAINEN, Tiina. Technostress and Social Networking Services: Explaining Users' Concentration, Sleep, Identity, and Social

- Relation Problems. **Information Systems Journal**, v. 29, n. 2, p. 408-435, Mar 2019.
- SANDERSON, Jimmy; FREDERICK, Evan; STOCZ, Mike. When Athlete Activism Clashes with Group Values: Social Identity Threat Management Via Social Media. **Mass Communication & Society**, v. 19, n. 3, p. 301-322, 2016.
- SAPUTRA, Meidi; SIDDIQ, Imamul Huda Al. Social Media and Digital Citizenship: The Urgency of Digital Literacy in the Middle of a Disrupted Society Era. **International Journal of Emerging Technologies in Learning (IJET)**, v. 15, n. 7, p. 156-161, 2020.
- SARDÁ, Thais *et al.* Understanding Online Anonymity. **Media, Culture & Society**, v. 41, n. 4, p. 557-564, May 2019.
- SARSTEDT, Marko. Revisiting Hair *et al.* Multivariate Data Analysis: 40 Years Later. *In:* (Ed.). **The Great Facilitator**: Springer, 2019. p.113-119.
- SARSTEDT, Marko; HENSELER, Jörg; RINGLE, CHRISTIAN M. Multigroup Analysis in Partial Least Squares (PLS) Path Modeling: Alternative Methods and Empirical Results. *In:* (Ed.). **Measurement and Research Methods in International Marketing**: Emerald Group Publishing Limited, 2011. p.195-218.
- SARSTEDT, Marko; RINGLE, Christian M. Treating Unobserved Heterogeneity in Pls Path Modeling: A Comparison of FIMIX-PLS with Different Data Analysis Strategies. **Journal of Applied Statistics**, v. 37, n. 8, p. 1299-1318, 2010.
- SARSTEDT, Marko; RINGLE, Christian M; HAIR, Joseph F. Treating Unobserved Heterogeneity in Pls-Sem: A Multi-Method Approach. *In:* (Ed.). **Partial Least Squares Path Modeling**: Springer, 2017. p.197-217.
- SARSTEDT, Marko; SCHWAIGER, Manfred; RINGLE, Christian M. Determining the Number of Segments in FIMIX-PLS. Proceedings of the 2009 annual conference of the academy of Marketing Science, 2009.
- SAVCI, Mustafa; AYSAN, Ferda. Technological Addictions and Social Connectedness: Predictor Effect of Internet Addiction, Social Media Addiction, Digital Game Addiction and Smartphone Addiction on Social Connectedness. **Düşünen Adam: Journal of Psychiatry & Neurological Sciences**, v. 30, n. 3, p. 202-216, Sep 2017.
- SAVOLI, Azadeh.; BHATT, Mamta. The Impact of It Identity on Users' Emotions: A Conceptual Framework in Health-Care Setting. Twenty-third Americas Conference on Information Systems, 2017, Boston, USA. aisel.aisnet.org.
- SCHEIBE, Karl E.; BARRETT, Frank J. The Dramaturgical Approach to Social Psychology: The Influence of Erving Goffman. *In:* (Ed.). **The Storied Nature of Human Life: The Life and Work of Theodore R. Sarbin**. Cham, Switzerland: Springer International Publishing, 2017. cap. 8, p.187-200.
- SCHLOSSER, Ann E. Self-Disclosure Versus Self-Presentation on Social Media. **Current Opinion in Psychology**, v. 31, p. 1-6, 2020/02/01/ 2020.
- SCHMALZ, Marc; CARTER, Michelle; LEE, Jin Ha. It's Not You, It's Me: Identity, Self-Verification, and Amazon Reviews. **ACM SIGMIS Database: the DATABASE for Advances in Information Systems**, v. 49, n. 2, p. 79-92, 2018.
- SCHNEIDER, Benjamin *et al.* Which Comes First: Employee Attitudes or Organizational Financial and Market Performance? **Journal of Applied Psychology**, v. 88, n. 5, p. 836, Oct 2003.
- SCHULTZ, P. Wesley; TABANICO, Jennifer. Self, Identity, and the Natural Environment: Exploring Implicit Connections with Nature. **Journal of Applied Social Psychology**, v. 37, n. 6, p. 1219-1247, Jun 2007.
- SCHULTZE, Ulrike. **How Social Media Shapes Identity** 17 Feb. 2019 2015. Available in: <https://www.youtube.com/watch?v=CSpyZor-Byk>. Accessed on: 17 Feb. 2019.
- SCHULTZE, Ulrike; BROOKS, Jo Ann M. An Interactional View of Social Presence: Making the Virtual Other "Real". **Information Systems Journal**, v. 29, n. 3, p. 707-737,

- May 2019.
- SCOTT, Graham G.; FULLWOOD, Chris. Does Recent Research Evidence Support the Hyperpersonal Model of Online Impression Management? **Current Opinion in Psychology**, v. 36, p. 106-111, Dec 2020.
- SEDIKIDES, Constantine; ALICKE, Mark. The Five Pillars of Self-Enhancement and Self-Protection. *In*: RYAN, R. M. (Ed.). **Handbook of Motivation**. 2nd. New York, NY: Oxford University Press, 2018.
- SEIDMAN, Gwendolyn. Self-Presentation and Belonging on Facebook: How Personality Influences Social Media Use and Motivations. **Personality and Individual Differences**, v. 54, n. 3, p. 402-407, Feb 2013.
- SERPE, Richard T; STRYKER, Sheldon. The Symbolic Interactionist Perspective and Identity Theory. *In*: SCHWARTZ, Seth J; LUYCKX, Koen; VIGNOLES, Vivian L (Ed.). **Handbook of Identity Theory and Research**. New York, NY, USA: Springer, 2011. p.225-248.
- SEYLE, D. Conor; SWANN, William B. Being Oneself in the Workplace: Self-Verification and Identity in Organizational Contexts. *In*: BARTEL, Caroline. A.; BLADER, Steven; WRZESNIEWSKI, Amy (Ed.). **Identity and the Modern Organization**. New York, NY, USA: Psychology Press, 2007. p.201-222.
- SHANAHAN, TYLER; TRAN, TRANG P.; TAYLOR, ERIK C. Getting to Know You: Social Media Personalization as a Means of Enhancing Brand Loyalty and Perceived Quality. **Journal of Retailing and Consumer Services**, v. 47, p. 57-65, Mar 2019.
- SHANNON, Claude E. The Mathematical Theory of Communication. **The Bell System technical journal**, v. 27, n. 3, p. 379-423, 1948.
- SHAVELSON, Richard J; HUBNER, Judith J; STANTON, George C. Self-Concept: Validation of Construct Interpretations. **Review of educational research**, v. 46, n. 3, p. 407-441, 1976.
- SHEPHERD, Clive. Does Social Media Have a Place in Workplace Learning? **Strategic direction**, 2011.
- SHI, Yao; BOOTH, Ruby E; SIMON, Judith C. The Iterative Effect of It Identity on Employee Cybersecurity Compliance Behaviors. Americas Conference on Information Systems, 2017, Boston, Massachusetts, USA. AIS eLibrary. p.18.
- SHORT, John; WILLIAMS, EderyN; CHRISTIE, Bruce. **The Social Psychology of Telecommunications**. New York, NY: Wiley, 1976.
- SINCLAIR, Tara J.; GRIEVE, Rachel. Facebook as a Source of Social Connectedness in Older Adults. **Computers in Human Behavior**, v. 66, p. 363-369, 2017.
- SINGER, Benjamin D. Mass society, mass media and the transformation of minority identity. **The British Journal of Sociology**, v. 24, n. 2, p. 140-150, 1973.
- SIUDIKIENĖ, Daiva. Nacionalinio Identiteto Raiškos Socialiniuose Tinkluose. **Informacijos mokslai**, v. 64, p. 19-34, 2013.
- SKINNER, David.; MAY, Vanessa.; ROLLOCK, Nicola. Self-Identity and Its Discontents: Sociology in the 1990s. **Sociology-the Journal of the British Sociological Association**, v. 50, n. 6, p. 13-23, Dec 2016.
- SLAGTER, Meindert. Het Nieuwe Werken Ontrafeld. Over Bricks, Bytes & Behavior. **Journal of Social Intervention: Theory and Practice**, v. 20, n. 4, p. 118-121, 2011.
- SLATTERY, Martin. **Labelling Theory**. Spain: Nelson Thornes Ltd, 2003. 134-9.
- SMITH, Aaron; SUTHERLAND, Fiona; GILBERT, David. Duality Theory. *In*: SMITH, Aaron; SUTHERLAND, Fiona; GILBERT, David (Ed.), **Reinventing Innovation Designing the Dual Organization**, London. UK: Palgrave Macmillan, 2017. p.35-53.
- SNYDER, Mark. Self-Monitoring of Expressive Behavior. **Journal of Personality and Social Psychology**, v. 30, n. 4, p. 526-537, 1974.

- SNYDER, Mark. **Public Appearances, Private Realities: The Psychology of Self-Monitoring**. New York, NY, US: W H Freeman/Times Books/ Henry Holt & Co, 1987. 266.
- SPAGNOLI, Paola *et al.* Workaholism and Technostress During the Covid-19 Emergency: The Crucial Role of the Leaders on Remote Working. **Frontiers in Psychology**, v. 11, 2020.
- SPARKS, Paul; GUTHRIE, Carol. Self-Identity and the Theory of Planned Behavior: A Useful Addition or an Unhelpful Artifice? **Journal of Applied Social Psychology**, v. 28, n. 15, p. 1393-1410, Aug 15, 1998.
- SPARKS, Paul; SHEPHERD, Richard. Self-Identity and the Theory of Planned Behavior: Assessing the Role of Identification with "Green Consumerism". **Social Psychology Quarterly**, v. 55, n. 4, p. 388-399, 1992.
- SPITZER, Steven. Labeling the Deviant Act: Toward a General Theory of Deviant Behavior. Annual meeting of the American Sociological Association, 1972, New Orleans, LA, US.
- SPOHR, Dominic. Fake News and Ideological Polarization: Filter Bubbles and Selective Exposure on Social Media. **Business Information Review**, v. 34, n. 3, p. 150-160, 2017.
- SPONCIL, Megan; GITIMU, Priscilla. Use of Social Media by College Students: Relationship to Communication and Self-Concept. **Journal of Technology Research**, v. 4, p. 1-13, 2013.
- SPROULL, Lee; KIESLER, Sara; KIESLER, Sara B. **Connections: New ways of working in the networked organization**. MIT Press, 1991.
- STALLER, Naomi; RANDLER, Christoph. **Changes in Sleep Schedule and Chronotype Due to Covid-19 Restrictions and Home Office**. *Somnologie*, v. 25, n.2, p. 131-137, 2021.
- STATCOUNTER. *Social Media Stats Brazil*. 2021. Available in: <https://gs.statcounter.com/social-media-stats/all/brazil>. Accessed on: January 28.
- STATISTA. *Brazil: Frequency of Whatsapp Use 2019*. 2020. Available in: <https://www.statista.com/statistics/1076956/brazil-frequency-whatsapp-usage/>. Accessed on: Jan. 2020.
- STETS, Jan. E., BURKE, Peter. J. Identity Theory and Social Identity Theory. **Social Psychology Quarterly**, v. 63, n. 3, p. 224-237, Sep 2000.
- STETS, Jan, BURKE, Peter. A Sociological Approach to Self and Identity. *In: LEARY, Mark. e TANGNEY, June P. (Ed.). Handbook of Self and Identity*. New York, USA.: Guilford Press, 2003. p.128-152.
- STETS, Jan; MCCAFFREE, Kevin. The Moral Identity and Immoral Behavior. *In: STETS, J. E. e SERPE, R. T. (Ed.). Identities in Everyday Life*. Oxford, England, UK: Oxford University Press Inc, 2019. p.137-166.
- STETS, Jan; SERPE, Richard. Identities in Everyday Life. *In: (Ed.). Identities in Everyday Life*, 2019. chap. 1, p.3-14.
- STEVENSON, Robert Louis. **The Strange Case of Dr. Jekyll and Mr. Hyde**. London, UK: Longmans, Green. and Co, 1886.
- STOKES, Jennifer.; PRICE, Bianca. Social Media, Visual Culture and Contemporary Identity. IMSCI 2017 - 11th International Multi-Conference on Society, Cybernetics and Informatics, Proceedings, 2017. p.159-163.
- STOLWIJK, Carlijn. **Working Apart Together (Wat Relationship): New Ways of Working and Organizational Commitment and Job Satisfaction, and the Moderating Effects of Employee Territoriality, Task Dependency and Leadership Support**. 2015. (Masters). Psychology, Leiden University, Leiden, NL.
- STRYKER, Robin; SERPE, Richard; POWELL, Brian. Structural Symbolic Interaction and Identity Theory: Current Achievements and Challenges for the Future. *In: SERPE,*

- Richard. T, *et al.* (Ed.). **Identity and Symbolic Interaction**. Cham, Switzerland: Springer, 2020. Chapter 14, p.365-385.
- STRYKER, Sheldon; SERPE, Richard. T. Commitment, Identity Salience, and Role Behavior: Theory and Research Example. *In:* (Ed.). **Personality, Roles, and Social Behavior**. New York, NY: Springer, 1982. p.199-218.
- STRYKER, Sheldon. Identity Salience and Role Performance: The Relevance of Symbolic Interaction Theory for Family Research. **Journal of Marriage and the Family**, p. 558-564, 1968.
- _____. From Mead to a Structural Symbolic Interactionism and Beyond. **Annual Review of Sociology**, v. 34, n. 1, p. 15-31, 2008.
- SUN, Christine Yunn-Yu; GOSCHNICK, Steve. Formation and Control of Identity: In a Social Media World. *In:* (Ed.). **Innovative Methods, User-Friendly Tools, Coding, and Design Approaches in People-Oriented Programming**, 2018. chapter 9, p.286-323. (Advances in Computer and Electrical Engineering).
- SUTHERLAND, Fiona; SMITH, Aaron C. T. Duality Theory and the Management of the Change–Stability Paradox. **Journal of Management & Organization**, v. 17, n. 4, p. 534-547, 2011.
- SWAIN, Vedant Das *et al.* Social Media and Ubiquitous Technologies for Remote Worker Wellbeing and Productivity in a Post-Pandemic World. 2020 IEEE Second International Conference on Cognitive Machine Intelligence (CogMI), 2020, 28-31 Oct. 2020. p.121-130.
- SWANN, William B.; STEIN-SEROUSSI, Alan; GIESLER, R. Brian. Why People Self-Verify. **Journal of Personality and Social Psychology**, v. 62, n. 3, p. 392-401, 1992.
- SWANN, William B. To Be Adored or to Be Known? The Interplay of Self-Enhancement and Self-Verification. *In:* SORRENTINO, Richard. M; HIGGINS, E. Tory (Ed.). **Handbook of Motivation and Cognition: Foundations of Social Behavior, Vol. 2**. 1. New York, NY, USA: Guilford Press, 1990. p.408-448.
- SWANN, William B.; READ, Stephen J. Self-Verification Processes: How We Sustain Our Self-Conceptions. **Journal of Experimental Social Psychology**, v. 17, n. 4, p. 351-372, 1981.
- SYKES, Tracy ANN; VENKATESH, Viswanath. Explaining Post-Implementation Employee System Use and Job Performance: Impacts of the Content and Source of Social Network Ties. **Management Information Systems Quarterly**, v. 41, n. 3, p. 917-936, September 1, 2017.
- TAJFEL, Henri; TURNER, John. The Social Identity Theory of Intergroup Behavior. *In:* JOST, J. T. e SIDANIUS, J. (Ed.). **Key Readings in Social Psychology**. New York, NY, US: Psychology Press, 2004. p.275-293.
- TAJFEL, Henri. Social Identity and Intergroup Behaviour. **Social Science Information Sur Les Sciences Sociales**, v. 13, n. 2, p. 65-93, 1974.
- TEN BRUMMELHUIS, Lieke *et al.* Do New Ways of Working Foster Work Engagement? **Psicothema**, v. 24, n. 1, p. 113-120, 2012.
- TER HOEVEN, Claartje.L.; VAN ZONEN, Ward. Flexible Work Designs and Employee Well-Being: Examining the Effects of Resources and Demands. **New Technology, Work and Employment**, v. 30, n. 3, p. 237-255, 2015.
- THATCHER, Sherry. M. B.; ZHU, Xiumei. M. Changing Identities in a Changing Workplace: Identification, Identity Enactment, Self-Verification, and Telecommuting. **Academy of Management Review**, v. 31, n. 4, p. 1076-1088, Oct 2006.
- THE CONVERSATION. **Mapping Brazil's Political Polarization Online**. 2018. Available in: <https://theconversation.com/mapping-brazils-political-polarization-online-96434>. Accessed on: January 28, 2020.

- THE ECONOMIST. *The Facebook Scandal Could Change Politics as Well as the Internet*. Mar. 22, 2018 2018. Available in: <https://www.economist.com/united-states/2018/03/22/the-facebook-scandal-could-change-politics-as-well-as-the-internet>. Accessed on: Ju. 25, 2021.
- TREPTE, Sabine; DIENLIN, Tobias; REINECKE, Leonard. Risky Behaviors: How Online Experiences Influence Privacy Behaviors. In: BIRGIT STARK; OLIVER QUIRING, *et al.* (Ed.). **Von Der Gutenberg-Galaxis Zur Google-Galaxis. From the Gutenberg Galaxy to the Google Galaxy**. Berlin, Germany: UVK verlag, 2014.
- TSENG, Fan-Chen *et al.* Media Richness, Social Presence and Loyalty to Mobile Instant Messaging. **Industrial Management & Data Systems**, v. 119, n. 6, p. 1357-1373, Jul 8, 2019.
- TU, Chih-Hsiung. On-Line Learning Migration: From Social Learning Theory to Social Presence Theory in a Cmc Environment. **Journal of Network and Computer Applications**, v. 23, n. 1, p. 27-37, Jan 2000.
- TURKLE, Sherry. **Life on the Screen: Identity in the Age of the Internet**. New York, NY: Simon & Schuster, 1995.
- TURNER, John. C. Social Comparison and Social Identity - Some Prospects for Intergroup Behavior. **European Journal of Social Psychology**, v. 5, n. 1, p. 5-34, 1975.
- TYLER, James M.; KEARNS, Peter O.; MCINTYRE, Miranda M. Effects of Self-Monitoring on Processing of Self-Presentation Information. **Social Psychology**, v. 47, n. 3, p. 174-178, May 2016.
- UTZ, Sonja; MUSCANELL, Nicole. Social Media and Social Capital: Introduction to the Special Issue. **Societies**, v. 5, n. 2, p. 420-424, Jun 2015.
- VACCA, Raffaele. Structure in Personal Networks: Constructing and Comparing Typologies. **Network Science**, v. 8, n. 2, p. 142-167, 2020.
- VALKENBURG, Patti M.; PETER, Jochen. Online Communication among Adolescents: An Integrated Model of Its Attraction, Opportunities, and Risks. **Journal of Adolescent Health**, v. 48, n. 2, p. 121-127, 2011.
- VAN BEL, Daniel T. *et al.* Social Connectedness: Concept and Measurement. **Intelligent Environments**, v. 2, p. 67-74, 2009.
- VAN HECK, Eric. *New Ways of Working: Microsoft's 'Mobility' office*. RSM Discovery-Management Knowledge, 2010. Available in: https://repub.eur.nl/pub/39942/Insight_NewWays_2010.pdf. Accessed on: September 23, 2021.
- VAN ZOONEN, Ward; SIVUNEN, Anu; RICE, Ronald E. Boundary Communication: How Smartphone Use after Hours Is Associated with Work-Life Conflict and Organizational Identification. **Journal of Applied Communication Research**, v. 48, n. 3, p. 372-392, 2020.
- VANDENBOSCH, Laura; EGGERMONT, Steven. The Interrelated Roles of Mass Media and Social Media in Adolescents' Development of an Objectified Self-Concept: A Longitudinal Study. **Communication Research**, v. 43, n. 8, p. 1116-1140, Dec 2016.
- VINNEY, Cynthia. *Understanding the Big Five Personality Traits*. September 27, 2018 2018a. Available in: https://www.thoughtco.com/big-five-personality-traits-4176097?utm_campaign=wilat&utm_medium=email&utm_source=cn_nl&utm_content=16633435&utm_term=onetapTWT. Accessed on: Dec. 11, 2019.
- _____. *What Is Self-Concept in Psychology?*, 2018b. Available in: <http://thoughtco.com/self-concept-psychology-4176368>. Accessed on: Dec. 20, 2020.
- VITHAYATHIL, JOSEPH; DADGAR, MAJID; OSIRI, JOHN. **Social Media Usage and Shopping Preferences: An Empirical Investigation**. Hawaii International Conference on System Sciences 2017 (HICSS-50). Hawaii 2017.

- VON GAUDECKER, Hans-Martin *et al.* **Labour Supply in the Early Stages of the Covid-19 Pandemic: Empirical Evidence on Hours, Home Office, and Expectations.**2020. (Report)
- VORVOREANU, Mihaela *et al.* Social Media Literacy: Integrating Online Identity Management into Engineering and Technology Education. 2011 ASEE Annual Conference & Exposition, 2011, Vancouver, BC. peer.asee.org, June 26-29.
- WALTHER, Joseph. B. Social Information Processing Theory. *In:* BRAITHWAITE, Dawn. O.; SCHRODT, Paul (Ed.). **Engaging Theories in Interpersonal Communication: Multiple Perspectives.** Thousand Oaks, CA, US: Sage Publications, Inc, 2008. p.391-404.
- WALTHER, Joseph B.; PARKS, Malcolm. Cues Filtered out, Cues Filtered *In:* Computer-Mediated Communication and Relationships. *In:* MILLER, G. R. (Ed.). **The Handbook of Interpersonal Communication.** Thousand Oaks, CA, USA: Sage, v.3, 2002. p.529-563.
- WALTHER, Joseph B. Selective Self-Presentation in Computer-Mediated Communication: Hyperpersonal Dimensions of Technology, Language, and Cognition. **Computers in Human Behavior**, v. 23, n. 5, p. 2538-2557, Sep 2007.
- _____. Computer-Mediated Communication. **Communication Research**, v. 23, n. 1, p. 3-43, 2016.
- WALTHER, Joseph B. *et al.* Self-Generated Versus Other-Generated Statements and Impressions in Computer-Mediated Communication a Test of Warranting Theory Using Facebook. **Communication Research**, v. 36, n. 2, p. 229-253, Apr 2009.
- WANG, Yen-Yao; WANG, Tawei; CALANTONE, Roger. **Momentum in Social Media and Offline Car Sales after Automobile Recalls.** Proceedings of ICIS 2016, Dublin, Ireland, 2016.
- WANG, Shuting. A.; PANG, Min-Seok.; PAVLOU, Paul. A. Cure or Poison? Impact of Identity Verification on the Creation of Fake Posts on Social Media. ICIS 2017, 2018, Seoul, South Korea. December 10th-13th.
- WANG, Tien *et al.* Antecedents of Emotional Attachment of Social Media Users. **The Service Industries Journal**, v. 36, n. 9-10, p. 438-451, 2016.
- WANG, Wenli; SKOVIRA, Robert J. Authenticity and Social Media. Twenty-third Americas Conference on Information Systems, 2017, Boston, Massachusetts, USA. AIS eLibrary Publications, August 10.
- WANG, Yen-Yao; WANG, Tawei; CALANTONE, Roger. **Momentum in Social Media and Offline Car Sales after Automobile Recalls.** American Conference on Information Systems, San Diego, California, 2016.
- WARKENTIN, Darcy *et al.* Warrants and Deception in Computer-Mediated Communication. ACM Conference on Computer Supported Cooperative Work, 2010, Savannah, Georgia, USA. ACM. p.9-12.
- WATTENBERG, Martin; VIÉGAS, Fernanda B. The word tree, an interactive visual concordance. **IEEE transactions on visualization and computer graphics**, v. 14, n. 6, p. 1221-1228, 2008.
- WEBB, William M. *et al.* Interaction between Self-Monitoring and Manipulated States of Self-Awareness. **Journal of Personality and Social Psychology**, v. 56, n. 1, p. 70-80, Jan 1989.
- WEHRLE, Katja; FASBENDER, Ulrike. Self-Concept. *In:* ZEIGLER-HILL, Virgil; SHACKELFORD, Todd K. (Ed.). **Encyclopedia of Personality and Individual Differences.** Cham, Switzerland: Springer, 2018. p.1-5.
- WERTS, Charles E.; LINN, Robert L.; JÖRESKOG, Karl G. Intraclass Reliability Estimates - Testing Structural Assumptions. **Educational and Psychological Measurement**, v. 34,

- n. 1, p. 25-33, 1974.
- WESTLEY, Bruce H.; MACLEAN JR, Malcolm S. A Conceptual-Model for Communications-Research. **Journalism Quarterly**, v. 34, n. 1, p. 31-38, 1957.
- WESTWOOD, Ryan. *Do You 'Like' Social Media in the Workplace?* Forbes, March 5, 2015. Available in: <https://www.forbes.com/sites/ryanwestwood/2015/03/05/hit-like-if-you-agree-with-social-media-in-the-workplace/#1c32a4f1341b>. Accessed on: Jan. 28, 2021.
- WHETTEN, David A. Albert and Whetten Revisited: Strengthening the Concept of Organizational Identity. **Journal of Management Inquiry**, v. 15, n. 3, p. 219-234, Sep 2006.
- WHITLEY, Edgar A.; GAL, Uri; KJAERGAARD, Annemette. Who Do You Think You Are? A Review of the Complex Interplay between Information Systems, Identification and Identity. **European Journal of Information Systems**, v. 23, n. 1, p. 17-35, January 01, 2013.
- WILSON, David; PROUDFOOT, Jeffrey. Saving Face on Facebook: Impression Management as Motivation to Use Social Networks. AMCIS, 2014, Savannah, GA, USA. June 3.
- WINTER, Stephan; MASLOWSKA, Ewa; VOS, Anne L. The Effects of Trait-Based Personalization in Social Media Advertising. **Computers in Human Behavior**, v. 114, p. 106525, Jan 2021.
- WOLFSFELD, Gadi; SEGEV, Elad; SHEAFER, Tamir. Social Media and the Arab Spring: Politics Comes First. **The International Journal of Press/Politics**, v. 18, n. 2, p. 115-137, Apr 2013.
- WOLLEBÆK, Dag *et al.* Anger, Fear, and Echo Chambers: The Emotional Basis for Online Behavior. **Social Media + Society**, v. 5, n. 2, p. 1-14, 2019.
- WU, Chia-Huei; PARKER, Sharon K; DE JONG, Jeroen PJ. Need for Cognition as an Antecedent of Individual Innovation Behavior. **Journal of Management**, v. 40, n. 6, p. 1511-1534, Sep 2014.
- WU, Jing; PINSONNEAULT, Alain. Enhancing Peripheral Vision through Social Media Use: A Social Network Perspective. Seventeenth Americas Conference on Information Systems, 2011, Detroit, Michigan, USA. August 7.
- WUERSCH, Lucia; NEHER, Alain. **Covid-19 and Work Ethics in Home Office Settings. Virtual conversations-Business ethics during a pandemic: ABEN responds to Covid-19.** Jul. 17, 2020.
- YANG, Chia-Chen; HOLDEN, Sean M.; CARTER, Mollie D. K. Social Media Social Comparison of Ability (but Not Opinion) Predicts Lower Identity Clarity: Identity Processing Style as a Mediator. **Journal of Youth and Adolescence**, v. 47, n. 10, p. 2114-2128, Oct 2018.
- YANG, Longqi *et al.* The Effects of Remote Work on Collaboration among Information Workers. Nature Human Behaviour, 2021.
- YAU, Amy; MARDER, Ben; O'DONOHUE, Stephanie. The Role of Social Media in Negotiating Identity During the Process of Acculturation. **Information Technology & People**, v. 33, n. 2, p. 554-575, 2019.
- YIM, Moonjung; GOMEZ, Ricardo; CARTER, Michelle. Facebook's "Free Basics" and Implications for Development: It Identity and Social Capital. 50th Hawaii International Conference on System Sciences, 2017, Hawaii. aisel.aisnet.org.
- YIN, Chunxiao; ZHANG, Xiaofei; LIU, Libo. Reposting Negative Information on Microblogs: Do Personality Traits Matter? **Information Processing & Management**, v. 57, n. 1, p. 102106, 2020.
- YOUNG, Kirsty. Managing Online Identity and Diverse Social Networks on Facebook.

- Webology**, v. 10, n. 2, p. 1-18, 2013.
- YU, Lingling *et al.* Excessive Social Media Use at Work: Exploring the Effects of Social Media Overload on Job Performance. **Information Technology & People**, v. 31, n. 6, p. 1091-1112, 08/20 2018.
- YU, Xianqi *et al.* Modeling User Intrinsic Characteristic on Social Media for Identity Linkage. **ACM Transactions on Social Computing**, v. 1, n. 3, p. 39-50, 2018.
- ZHANG, Xi *et al.* Enhancing Creativity or Wasting Time?: The Mediating Role of Adaptability on Social Media-Job Performance Relationship. Pacific Asia Conference on Information Systems (PACIS), 2015, Singapore. AIS Electronic Library (AISeL). p.230.
- ZHANG, Zhenduo *et al.* Information Quality, Media Richness, and Negative Coping: A Daily Research During the Covid-19 Pandemic. **Personality and Individual Differences**, v. 176, Jul 2021.
- ZHAO, Yuxiang Chris *et al.* Affordances for Information Practices: Theorizing Engagement among People, Technology, and Sociocultural Environments. **Journal of Documentation**, v. 77, n. 1, p. 229-250, 2021.
- ZIENKOWSKI, Jan *et al.* Reshaping the Logics of Office Work. Work Related Subjectivity and Discourse in Environments Implementing So-Called New Ways of Working. ECREA 2018, 2018, Lugano, Switzerland. 31/10/2018-03/11/2018.
- _____. Les Logiques Interprétatives Managériales Des Nouvelles Manières De Travailler: Ambiguïtés Et Silences Dans Les Critiques Des Nwow (New Ways of Working). Org&Co 2019: Le côté obscur de la communication des organisations, 2019, Bordeaux, France.
- ZYWICA, Jolene; DANOWSKI, James. The Faces of Facebookers: Investigating Social Enhancement and Social Compensation Hypotheses; Predicting Facebook™ and Offline Popularity from Sociability and Self-Esteem, and Mapping the Meanings of Popularity with Semantic Networks. **Journal of Computer-Mediated Communication**, v. 14, n. 1, p. 1-34, Dec 2008.

APPENDIX A - LITERATURE REVIEW STRATEGY PROTOCOL⁵⁴

Title: The Development of IT Identity Due to Social Media Use: The Antecedents and Impact on The Computer-Based Office Work During The Covid-19 Pandemic

1. INTRODUCTION

This protocol shows the literature review strategy to evaluate the literature related to the IT identity concept as it was proposed by Carter (2012) and relevant literature about identity and social media.

2. OBJECTIVE OF THE REVIEW

Identify state of the art in the literature of IT identity and social media and previous (i.e., before Carter's IT identity conceptualization) literature about social media (or social network) and identity.

3. REVIEW STRATEGY

The studies selection was carried out according to the sources of previous studies, keywords, the range of publication period, and the inclusion and exclusion criteria.

4. LIST OF SELECTED REPOSITORIES AND JOURNALS

Web of Science	https://apps.webofknowledge.com/
Scopus	https://www.scopus.com
Google Scholar	https://scholar.google.com/
EBSCOhost	https://www.ebsco.com/products/ebscohost-research-platform
Emerald	https://www.emeraldgrouppublishing.com/
Science Direct	https://www.sciencedirect.com/
AISelLibrary	https://aisel.aisnet.org/

4.1 "BASKET" OF EIGHT TOP IS JOURNALS

The review strategy was carried out by the analysis of the following journals:

- European Journal of Information Systems
- Information Systems Journal
- Information Systems Research
- Journal of the Association for Information Systems
- Journal of Information Technology
- Journal of Management Information Systems
- Journal of Strategic Information Systems
- MIS Quarterly

4.2 IS JOURNALS THAT PUBLISHED PAPERS ABOUT IDENTITY AND BEHAVIOR

- Information and Organization
- Information Technology & People
- The Information Society

⁵⁴ The thesis general background and the three papers adopted the semi-systematic approach to compose the literature review. Cf. Snyder, H. Literature review as a research methodology: An overview and guidelines. *Journal of business research*, v. 104, p.333-339, 2019.

- Computers in Human Behavior

5. REVIEW RESEARCH METHODS

The review strategy was carried out by the analysis of the following elements:

- Keywords
- Title
- Abstract

6. KEYWORDS

Social Media
Social Network
Identity
Information Technology
IT identity

7. REVIEW PROCEDURES

Inclusion Criteria (IC)

- Conceptual and empirical papers about IT identity.
- Conceptual and empirical papers about the relationship of identity and social media
- Conceptual and empirical papers about the relationship of identity and social network(s).
- Relevant books and papers of the adjacent study areas (e.g., sociology, psychology, and communication) that could support the conceptual model proposition (paper 1).

Exclusion Criteria (EC)

- Duplicate papers
- Unfinished papers
- Not peer-reviewed papers
- Not fully available papers

8. REVIEW SELECTION PROCESSES

Preliminary Process (PP)

1. Apply the Query
2. Selection according to the inclusion and exclusion criteria
3. Evaluation according to the titles and abstracts.
4. Reading of the Introduction, Methodology, and Conclusion
5. Selection and validation with Masters, PhD students and PhDs

9. CHECKLIST

ID	QUALITY CRITERIA	ANSWER
PQ1A	Where has the paper been published?	
PQ1B	Who published the paper?	
PQ2A	At which journal was the paper published?	
PQ2B	Are the paper's results clearly shown?	
PQ2C	Does the paper approach IT identity according to Carter's conceptualization?	

PQ3A Does the paper approach identity and social media according to the behavioral aspect?

10. STRATEGY FOR EXTRACTING AND SUMMARIZING RESULTS

The following data should be extracted:

1. Article Title
2. Name of authors
3. Year
4. Institution
5. Country
6. Journal title
7. Qualification of the Journal – Q1-Q4 – if Q3 or Q4 justify
8. DOI
9. Research database
10. Scope of application
11. Considered area of application (first/second/third instance)
12. Results presented

APPENDIX B – CARD SORTING RESULTS (PORTUGUESE)



Prezados senhores(as). Obrigado por participar dessa pesquisa. Por gentileza, relacione os conceitos apresentados no lado esquerdo com os respectivos grupos apresentados nas caixas do lado direito (**basta puxar e soltar**). Essa atividade deve durar cerca de **dez minutos**. As suas respostas vão contribuir para a minha pesquisa de tese de doutorado sobre a formação da identidade de TI e em relação às mídias sociais. Muito obrigado pela sua ajuda.

Yves Costa Netto

Itens	Características das Mídias Sociais	Sentimentos vivenciados durante o uso das mídias sociais	Mecanismos internos usados na construção (pelo transmissor) da apresentação nas mídias sociais	Mecanismos internos usados na avaliação (pelo receptor) da apresentação dos indivíduos nas mídias sociais
Percepção pelo receptor de que o transmissor modificou suas informações.				
Sensação de pertencimento (a um grupo)				
Sensação de conectividade				
Velocidade de resposta				
Percepção pelo receptor de que o transmissor ocultou a fonte real da informação transmitida.				
Auto-verificação				
Volume da informação				
Percepção pelo receptor de que o transmissor restringiu o acesso às informações (dados que possam o (a) identificar, informações pessoais, etc)				
Auto-exposição				
Variedade da informação				
Auto-consciência				
Auto-valorização				
Auto-monitoramento				
Sensação de privacidade				

Table 43 - Cards Grouped by Percentage (N=15)

Cards	Categorias	Características das mídias sociais	Sentimento vivenciados durante o uso das mídias sociais	Mecanismos internos utilizados para a avaliação da apresentação dos indivíduos nas mídias sociais	Mecanismos internos utilizados na construção da apresentação dos indivíduos nas mídias sociais
	Variedade da informação	93,33%	6,67%	0,00%	0,00%
	Volume da informação	100,00%	0,00%	0,00%	0,00%
	Velocidade de resposta	100,00%	0,00%	0,00%	0,00%
	Sensação de conectividade	6,67%	93,33%	0,00%	0,00%
	Sensação de pertencimento (a um grupo)	6,67%	93,33%	0,00%	0,00%
	Sensação de privacidade	13,33%	73,33%	6,67%	6,67%
	Auto-exposição	13,33%	13,33%	66,67%	6,67%
	Auto-valorização	6,67%	20,00%	66,67%	6,67%
	Auto-consciência	0,00%	13,33%	86,67%	0,00%
	Auto-monitoramento	6,67%	6,67%	86,67%	0,00%
	Auto-verificação	6,67%	0,00%	80,00%	13,33%
	Percepção pelo receptor de que o transmissor ocultou a fonte real da informação transmitida.	0,00%	6,67%	6,67%	86,67%
	Percepção pelo receptor de que o transmissor restringiu o acesso às informações (dados que possam o (a) identificar, informações pessoais, etc)	0,00%	6,67%	13,33%	80,00%
	Percepção pelo receptor de que o transmissor modificou suas informações.	0,00%	6,67%	6,67%	86,67%

Source: Research Data (2021)

Qualtrics platform

Available in: <https://bit.ly/31cUvHT>

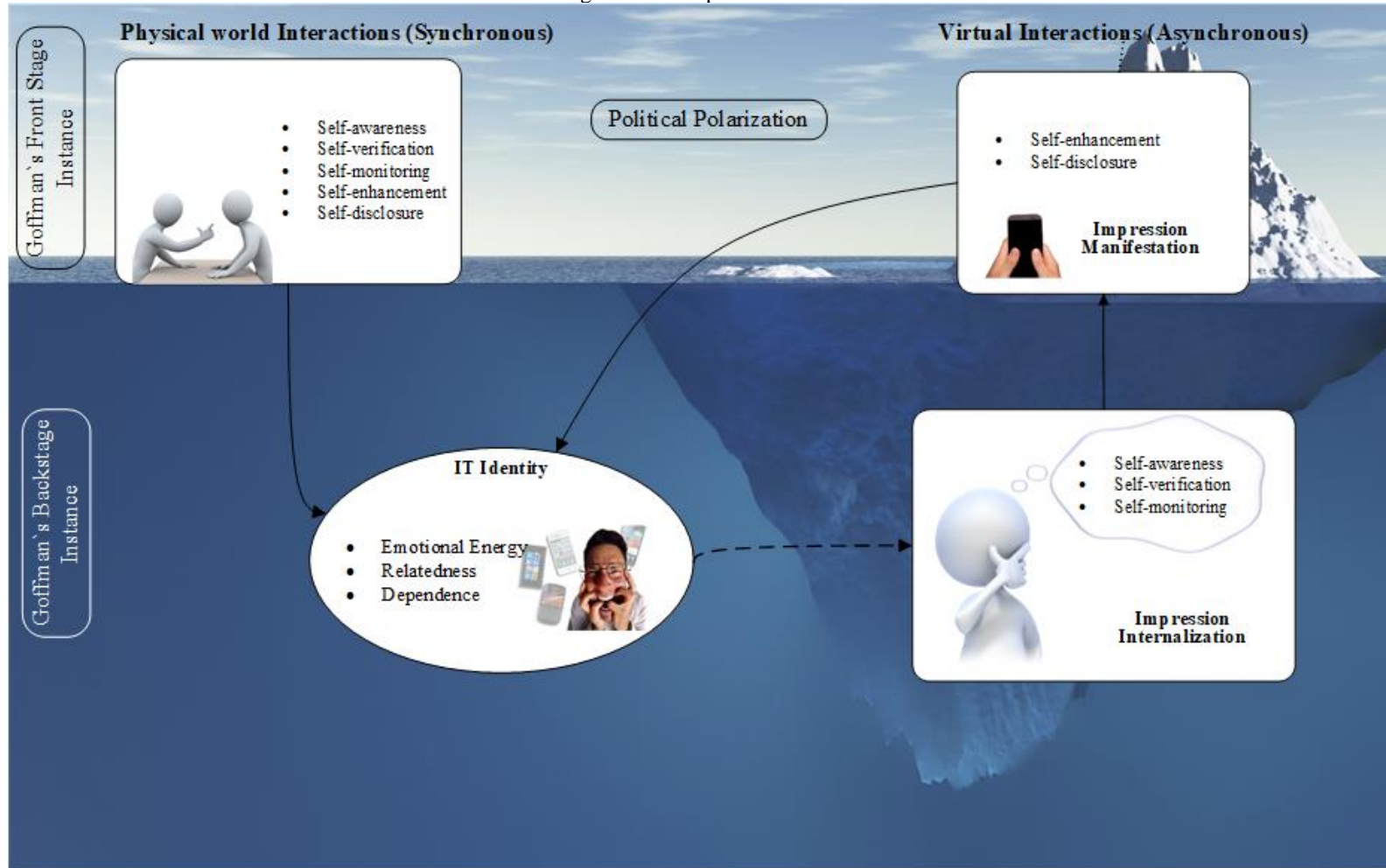
Analysis of items that presented percentages of answers with a success rate below 70%

Considering that two of the cards presented answers with a success rate below 70%, as an additional way to reduce the researcher's bias, respondents were asked why they chose such classes for the cards. One of them replied as follows: "*Enhancement seems more like a feeling, i.e., I feel valued for using social media*". On the other hand, a respondent who also classified the same card incorrectly said that she feels that enhancing is a way of presenting herself, or, in her words, "*I enhance how I present myself on social media.*", " A third respondent stated that he believed it would be a trait because he thought about the way influencers use it to monetize their image.

Regarding self-disclosure, the distribution of the percentage error rate was 13.33% (both for the group characteristics of social media and for the group feelings experienced during the use of social media). One of the respondents declared that he thought it would be a characteristic because social media allowed individuals to disclose themselves to the rest. This respondent is a PhD in the area of social communication. Considering the bias of his area of knowledge, it is speculated that this factor may have influenced the error. One possible explanation is that the origin of the theory (self-disclosure) is the area of psychology. In the meantime, its use has spread vastly in studies involving the media, and more recently, in those related to communication in social media.

APPENDIX C - GRAPHICAL ABSTRACT

Figure 29 - Graphical Abstract



Source: The Author (2021)

Note. The dotted line indicates an indirect relationship between IT identity and the instance Impression Internalization (proposed in the thesis's first paper).

**APPENDIX D - IT IDENTITY DIMENSIONS QUESTIONNAIRE
(Portuguese)**

Social Media IT Identity

Afinidade

O uso do WhatsApp se tornou parte do meu dia a dia. REL1

Eu domino o uso do WhatsApp. Por exemplo, sei criar grupos, adicionar contatos, amigos, colocar meu status, fazer chamadas de áudio e vídeo, ajustar configurações de privacidade e segurança etc.). REL3

Eu costumo ensinar amigos e parentes como usar o WhatsApp. REL4

Dependência

Sinto que estou perdendo os acontecimentos de amigos e grupos quando não acesso o WhatsApp por um longo período. DEP2

Em eventos sociais (jantares, reuniões de família, passeios) costumo acessar várias vezes o WhatsApp. DEP3

Sinto que a minha rotina é integrada ao uso do WhatsApp. DEP10

Energia Emocional

Me sinto entusiasmado usando as minhas mídias sociais preferidas. EE3

Quando interajo no WhatsApp me sinto mais confiante EE4

Eu me sentiria triste se o WhatsApp encerrasse suas atividades. EE5

Eu fico animado (a) quando penso em acessar o WhatsApp. EE7

Eu fico animado (a) quando penso em compartilhar algo no WhatsApp. EE9

APPENDIX E - DESCRIPTIVE STATISTICS OF HEAVY AND LIGHT WHATSAPP USERS' GROUPS

Table 44 - Heavy and Light WhatsApp Users' Groups: Means, Standard Deviations and Variances

WhatsAppFreq.Access	N	Minimum	Maximum	Mean	Standard Deviation	Variance
Heavy Users						
DEP2	6	2	7	4.33	1.751	3.067
DEP3	6	2	7	4.33	1.751	3.067
DEP10	6	2	6	3.67	1.862	3.467
EE3	6	5	7	6.00	0.632	0.400
EE4	6	1	6	4.17	1.835	3.367
EE5	6	4	6	5.00	0.894	0.800
EE7	6	4	6	5.17	0.753	0.567
EE9	6	2	6	4.17	1.835	3.367
REL1	6	1	6	4.50	2.074	4.300
REL3	6	1	6	3.17	1.835	3.367
REL4	6	1	5	4.00	1.673	2.800
Score Valid N (listwise)	6					
Light Users						
DEP2	4	1	5	3.75	1.893	3.583
DEP3	4	1	6	4.00	2.160	4.667
DEP10	4	2	5	3.00	1.414	2.000
EE3	4	6	6	6.00	0.000	0.000
EE4	4	1	6	3.75	2.062	4.250
EE5	4	5	7	6.00	0.816	0.667
EE7	4	5	6	5.50	0.577	0.333
EE9	4	5	6	5.75	0.500	0.250
REL1	4	2	6	5.00	2.000	4.000
REL3	4	2	6	4.25	1.708	2.917
REL4	4	1	6	3.50	2.380	5.667
Score Valid N (listwise)	4					

Source: Research Data (2021)

Table 45 - Mann-Whitney U Test and Wilcoxon W Results

	DEP2	DEP3	DEP10	EE3	EE4	EE5	EE7	EE9	REL1	REL3	REL4
Mann-Whitney U	10.500	11.500	10.000	12.000	10.500	5.000	9.000	5.500	9.500	7.500	11.500
Wilcoxon W	20.500	21.500	20.000	22.000	20.500	26.000	30.000	26.500	30.500	28.500	21.500
Z	-0.331	-0.108	-0.461	0.000	-0.347	-1.565	-0.707	-1.489	-0.600	-0.987	-0.114
Asymp. Sig. (s-tailed)	0.741	0.914	0.645	1.000	0.728	0.118	0.480	0.137	0.548	0.324	0.909
Exact Sig [2*(1-tailed Sig)]	,762 ^b	,914 ^b	,762 ^b	1,000 ^b	,762 ^b	,171 ^b	,610 ^b	,171 ^b	,610 ^b	,352 ^b	,914 ^b

Source: Research Data (2021)

APPENDIX F - INDEPENDENT SAMPLES TEST

Table 46 - Levene's Test for Equality of Variances

Levene's Test for Equality of Variances			t-test for Equality of Means							
			t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Inferior	Superior	
DEP2	Equal variances assumed	0.004	0.950	0.500	8	0.630	0.583	1.166	-2.104	3.271
	Equal variances not assumed			0.492	6.191	0.640	0.583	1.186	-2.298	3.464
DEP3	Equal variances assumed	0.055	0.820	0.270	8	0.794	0.333	1.236	-2.517	3.184
	Equal variances not assumed			0.257	5.564	0.806	0.333	1.295	-2.897	3.564
DEP10	Equal variances assumed	3.200	0.111	0.605	8	0.562	0.667	1.102	-1.875	3.209
	Equal variances not assumed			0.642	7.739	0.539	0.667	1.038	-1.741	3.075
EE3	Equal variances assumed	1.600	0.242	0.000	8	1.000	0.000	0.323	-0.744	0.744
	Equal variances not assumed			0.000	5.000	1.000	0.000	0.258	-0.664	0.664
EE4	Equal variances assumed	0.034	0.858	0.336	8	0.746	0.417	1.241	-2.446	3.279
	Equal variances not assumed			0.327	6.001	0.755	0.417	1.274	-2.701	3.534
EE5	Equal variances assumed	0.229	0.645	-1.789	8	0.111	-1.000	0.559	-2.289	0.289
	Equal variances not assumed			-1.826	7.023	0.110	-1.000	0.548	-2.294	0.294
EE7	Equal variances assumed	0.060	0.812	-0.746	8	0.477	-0.333	0.447	-1.364	0.697
	Equal variances not assumed			-0.791	7.711	0.453	-0.333	0.422	-1.312	0.645
EE9	Equal variances assumed	6.902	0.030	-1.655	8	0.137	-1.583	0.957	-3.790	0.623
	Equal variances not assumed			-2.005	6.051	0.091	-1.583	0.790	-3.512	0.345
REL1	Equal variances assumed	0.068	0.801	-0.379	8	0.715	-0.500	1.321	-3.546	2.546
	Equal variances not assumed			-0.382	6.758	0.714	-0.500	1.310	-3.621	2.621
REL3	Equal variances assumed	0.206	0.662	-0.938	8	0.375	-1.083	1.154	-3.745	1.579
	Equal variances not assumed			-0.954	6.931	0.372	-1.083	1.136	-3.775	1.608
REL4	Equal variances assumed	1.969	0.198	0.393	8	0.704	0.500	1.271	-2.430	3.430
	Equal variances not assumed			0.364	4.978	0.731	0.500	1.372	-3.032	4.032

Source: Research Data (2021)

APPENDIX G - INDIVIDUAL SEMI-STRUCTURED INTERVIEW PROTOCOL (Portuguese)

Por favor, descreva como você se sente ao conversar no grupo [NOME OMITIDO] do WhatsApp assuntos relacionados a política. A partir das perguntas apresentadas, fale sobre qualquer sensação que venha a sua cabeça.

Características do WhatsApp e a Auto Apresentação no Grupo

1. Como você percebe a forma com que interage com os demais no grupo [NOME OMITIDO] do WhatsApp? Mais tímido(a) que em interações presenciais? Menos tímido(a)? Mais falante? Mais irônico(a)? Fale um pouco sobre a sua percepção.
2. Sondar: Por que você acha isso? Por que acha que a conversa em um ambiente virtual permite a você se apresentar dessa forma?
3. Em relação ao ambiente do grupo [NOME OMITIDO] do WhatsApp, ele te deixa mais ou menos a vontade em falar sobre o seu dia a dia, suas ideias, desejos, assuntos pessoais, etc?
4. O quanto a intimidade com os demais integrantes do grupo faz com que se sinta mais à vontade para falar sobre assuntos pessoais e revelar informações sobre o seu dia a dia? Caso as interações que ocorrem no grupo fossem todas realizadas presencialmente, como você se sentiria em relação aos demais? Mais próximo, menos próximo, por que?
5. Durante uma discussão política, como você reage quando um colega apresenta um artigo de jornal, revista, site de notícias que apresenta uma informação alinhada à sua preferência política? Fale um pouco sobre como se sente a respeito.
6. Sondar: O quanto esses compartilhamentos contribuem para forma com que você defende suas preferências ao interagir no grupo?
7. O quanto à possibilidade em se expressar de forma assíncrona no WhatsApp permite com que você escolha a forma com que deseja se expressar? Essa característica te faz se sentir mais à vontade para falar sobre assuntos pessoais e revelar informações sobre o seu dia a dia?
8. Sondar: Por que você acha isso? A que atribui essa diferença (caso tenha respondido que há diferença).

9. Quais características do WhatsApp estimulam você a se engajar nas discussões políticas (ex: velocidade na interação com os demais, privacidade, facilidade em interagir através de dispositivos móveis, etc)?
10. Como você define a forma como costuma discutir política pessoalmente em relação às discussões realizados no grupo [NOME OMITIDO] do WhatsApp (ex: tranquilo, moderado, mais radical, etc)?
11. Você costuma refletir antes de emitir uma opinião sobre política que acredita que irá entrar em conflito com colegas no WhatsApp? É comum isso acontecer?

•**Resultado esperado 1** –Understand the participants' perceptions about the feelings elicited by WhatsApp characteristics and how they influence their presentations when interacting in the group.

Identidade de TID desenvolvida pelo Uso do WhatsApp e o Comportamento Polarizado

12. Você acredita que as discussões mais acaloradas sobre política no WhatsApp seriam iguais se no momento da discussão estivesse frente a frente com os colegas de visões políticas diferentes?
13. Sondar: Por que você acha isso? A que atribui essa diferença? (caso tenha respondido que há diferença).
14. Você se lembra como eram as discussões políticas pela Internet antes de mídias sociais como o WhatsApp se tornarem populares?
15. Em relação ao WhatsApp, fale sobre a importância dessa mídia social para a sua vida pessoal, o seu trabalho. Como você se sentiria caso não pudesse mais usá-lo (ou outros aplicativos semelhantes) e tivesse que se interagir com os colegas do grupo por meios como o telefone, o SMS, e-mail e outros predecessores de mídias como o WhatsApp? (dependência)
16. Vou citar três adjetivos, fale se as características do WhatsApp o fazem sentir:
17. Confiante? Sim, não e por que?
18. Entusiasmado(a)? Sim, não e por que?
19. Energizado(a), revigorado (a)? Sim, não e por que?
20. Em relação a afirmação: eu sinto que tenho uma sensação de conexão com o WhatsApp (com a tecnologia). Você concorda, discorda e por que?

E pra finalizar, você gostaria de dizer algo mais sobre algum ponto que conversamos durante a entrevista? Alguma ideia que lhe despertou indagações?

- **Resultado esperado 2** - Understand if and how self-presentations in WhatsApp could be associated with feelings of relatedness, dependence, and emotional energy in the group's participants

- **Resultado esperado 3** – Understand why some participants express themselves more often about their political preferences in a hostile way during discussions in the WhatsApp group (in relation to how they express themselves in face-to-face interactions).

APPENDIX H - INTERVIEW CONSENT AGREEMENT (Portuguese)

Prezado(a) participante:

Sou estudante do curso de doutorado do Programa de Pós-Graduação da Escola de Administração da Universidade Federal do Rio Grande do Sul (PPGA/EA/UFRGS) na área de Gestão de Sistemas e Tecnologias da Informação. Estou realizando uma pesquisa sob orientação da Prof^a Dr.^a Raquel Janissek-Muniz, cujo objetivo é compreender o desenvolvimento da Identidade de TI devido ao uso de mídias sociais e avaliar seu impacto para o trabalho de escritório baseado em tecnologia durante o período da pandemia de COVID-19. Sua participação envolve uma entrevista, que será gravada se assim você permitir, e que tem a duração aproximada de 40 minutos. A participação nesse estudo é voluntária e se você decidir não participar, ou quiser desistir de continuar em qualquer momento, tem absoluta liberdade de fazê-lo.

Mesmo não tendo benefícios diretos em participar, indiretamente você estará contribuindo para a compreensão do fenômeno estudado e para a produção de conhecimento científico. Os dados que você fornecerá serão utilizados exclusivamente para o presente estudo, e os resultados desta pesquisa serão tornados públicos através da tese a ser defendida junto ao PPGA/EA/UFRGS, e em periódicos científicos.

Nessa pesquisa, sua identidade não será revelada em nenhum momento. Caso tenha alguma dúvida em relação à essa pesquisa, por favor, não hesite em entrar em contato pelo telefone (21) 997198468 ou pelo e-mail, yves.netto@fgv.br.

Atenciosamente,

Yves Wanderley Estanislau da Costa Netto
Matrícula: 00220155
Porto Alegre - RS, ____/ ____/ ____
Local Data

Consinto em participar deste estudo e declaro ter sido devidamente informado(a) e esclarecido(a) pelo aluno sobre os objetivos da pesquisa, os procedimentos envolvidos nessa pesquisa e ter recebido uma cópia deste termo de consentimento.

Nome:
_____, ____/ ____/ ____
Local Data

APPENDIX I - CODEBOOK TABLE

The following codebook was designed with the elements recommended by Saldaña (2013). In the first phase, it was employed the emotion coding technique. Table 47 shows the codebook table used during the content analysis of group participants' interactions.

Table 47 - Codebook Table: Chat Log

Primary Category	Secondary Categories	Description	Authors/Year	Inclusion Criteria	Typical Exemplars	Codes
Self-Presentation Description: The individual's effort to control the impressions that others assign to him or her during social interactions (BAUMEISTER; HUTTON, 1987).	Self-disclosure	The act of revealing thoughts or experiences for other people.	Derlega and Berg (2013); Gibbs et al. (2006); Jiang et al. (2011)	When individuals expressed spontaneous information, intimate thoughts, or experiences not necessarily related to the context of the ongoing discussion	"My son doesn't want to go to social events with me anymore". "Thanks, I forwarded this message to my brother, who is an amateur sailor".	<ul style="list-style-type: none"> • Open • Gregarious • Sharing information • Excited to debate • Strong sense of patriotism
	Self-monitoring	The observance of the effects of individuals' actions.	Snyder (1974); Tyler <i>et al.</i> (2016); He <i>et al.</i> (2014)	When individuals previously showed concerns about the effects of their opinions in the group	"I thought you didn't like irony. Can I be ironic again?"	<ul style="list-style-type: none"> • Reflexive • Cautious • Modesty
	Self-awareness	The ability of the individuals to be aware of and understand behaviors, emotions, and feelings.	Geller and Shaver (1976); Doas (2017); Wicklund (1975)	When individuals demonstrated understanding of others' concerns related to the discussions' consequences.	"Q, I agree that it is very sad. But in my opinion, arming people won't make a safer country. On the contrary, it will increase violence. Because everyday situations will be able to have a much more tragic end."	<ul style="list-style-type: none"> • Cooperative • Agreeable • Parsimonious • Polite

Primary Category	Secondary Categories	Description	Authors/Year	Inclusion Criteria	Typical Exemplars	Codes
	Self-enhancement	The effort that individuals make to be perceived by their positive traits and maintain high levels of self-esteem	Hoorens (2011); Paulhus (1998); Swann, (1990)	When individuals manifested in a derogatory manner against other group members aiming to reinforce their self-esteem and or self-presentation.	"Funny! I didn't see any of that happen. Did you sleep during that psychiatry class where it's said, "Never rave along with a delusional?"	<ul style="list-style-type: none"> • Presumptuousness • Arrogance • Intransigency • Irony
	Self-verification	The need for individuals to be perceived by others according to their self-concept.	Swann and Read (1981); Swann (1990); Burke and Stets (1999); Kraus and Chen (2012)	When individuals used other participants opinions or third-party information to reinforce their opinions and self-presentation	"Thanks for sharing. I agree with several points, but I disagree when she eases off about the cuts of previous years, in item 2."	<ul style="list-style-type: none"> • Compliant • Inquisitive
Polarized Behavior*	Partisanship 1	-	Kim (2018)	Utterances are associated with positive emotions for the right-wing and hostile against left-wing supporters	-	-
	Partisanship 2	-	Kim (2018)	Utterances are associated with positive emotions for the left-wing and hostile against the right-wing supporters	-	-

Source: The Author (2021)

Note. *Polarized behavior was not counted as evidence but assumed as the trigger to begin to code individuals' presentations during this specific type of discussion.

In the second phase of data collection, participants’ utterances were coded following holistic/In Vivo Code (SALDAÑA, 2013). Table 48 shows the codebook table used during the content analysis of group participant’s interviews.

Table 48 - Codebook Table: Interviews

Relationships	Expected Outcomes	Codes
WhatsApp Characteristics and Self-presentation	<ul style="list-style-type: none"> • Understand the group participants' perceptions about how the feelings elicited by WhatsApp characteristics and how they influence their presentations when interacting in the group. • Understand how self-presentations in WhatsApp indicates feelings of relatedness, dependence, and emotional energy in the group’s participants 	<ul style="list-style-type: none"> • “Because we are in front of the screen.” • “Reach people whom I need to talk.” • “Subjects and persons” • “I tend to be more ironic.” • “It helps to reinforce previous opinions.” • ““Impersonality that WhatsApp brings” • “Easiness to interact.” • “Feedback speed” • “Afraid of data breach” • WhatsApp simplicity makes me feel more connected” • “WhatsApp impersonality changes my behavior online” • “See the others’ expression”
IT identity and Polarized Behavior	<ul style="list-style-type: none"> • Understand why some participants express themselves more often about their political preferences in a hostile way during discussions in the WhatsApp group (in relation to how they express themselves in face-to-face interactions). 	<ul style="list-style-type: none"> • Lack of social cues can lead to misinterpretations.” • “I feel a sense of connection with the technology” • Connectedness makes feel dependent on WhatsApp” • “I think the world was cut in half” • “The need for feedback speed made us dependent on WhatsApp” • “WhatsApp revolutionized the communication”. • It stimulates me. But in a good and a bad way” • “I feel enthusiastic because when I feel closer to the others”

Source: The Author (2021)

APPENDIX J – AUDIT TRAIL: CATEGORIES AND STAGES

In December of 2021, it was decided to carry out an audit trail to detect possible inconsistencies through the research phases. It was invited an PhD in the administration area who was not related to any phase of the study. After checking the data, the auditor validated the decisions taken to answer the research question. Table 49 shows the audit trail, designed according to the six classes and the five stages defined in the Halpern audit trail algorithm (LINCOLN; GUBA, 1985).

Table 49 - Audit Trail Categories: Outcomes, Details, and Years of Collect

Categories	Outcomes	Details	Year of Collect\Process
Raw data	Chatlog	158 days and 816 coded manifestations	2019
	Fieldnotes	12 pages	2019-2021
	Survey results	Nine complete responses	2019
	Interviews	12 participants, 7hs 26minutes length	2021
Data reduction and analysis notes	Chatlog data tabulation	Separation by participants (29)	2019-2020
	Interviews data tabulation	Separation by participants (12)	2021
Data reconstruction and synthesis products	Read through the data to obtain a sense of it all	Revised by an external participant (Ph.D.)	2019-2021
	Data transcribed (Chatlog)	Tools: Word, Excel	2019-2020
	Data transcribed (Interviews)	Tools: Word, Excel	2021
Process notes	Definition of Methodological Procedures (section 3) Trustworthiness notes (section 3.7)	Described procedures, strategies, and rationale for decisions of collect and analysis	2019-2021
		Described steps of credibility, dependability, and confirmability	
Materials related to intentions and dispositions	Description of research motivation and expectations	Appendix G Individual Semi-Structured Interview Protocol	2019-2021
Preliminary development information	Explanation about using different methods for collection and analysis) and decisions about the instruments used in each phase.	Pre-validated Survey	2019-2021

Source: The Author (2021)

Table 50 depicts the audit trail stages.

Table 50 - Audit Process Stages: Steps and Dates

Stages	Steps	Date
Preentry	Initial talks with the potential auditor. She asked questions about the research and felt comfortable accepting to audit it	December, 12, 2021
Formal Agreement	The first version of the paper was made available to the auditor. She read and returned her first impressions.	December 13-15, 2021
Determination of trustworthiness.	The auditor checked the steps and decisions made during the whole research period. After some reasoning, she recommended including a few items to improve confirmability. In this phase, she accessed field notes, interviews, and chatlogs transcriptions. After the clarification of some doubts about data triangulation, a few more adjusts were recommended	December 28, 2021 – January, 10, 2022
Closure.	After a virtual meeting via Teams, the auditor gave the final feedback about the decisions taken by the auditee.concerning the methodological procedures	January,11, 2022

Source: The Author (2021)

APPENDIX K - SURVEY QUESTIONNAIRE (Portuguese)**Perguntas de Triagem e Afinidade**

Qual a sua idade?

Qual o seu gênero? Masculino () Feminino () Outro ()

Qual o seu grau de instrução? () Ensino Fundamental () Ensino Médio () Graduação ()
Especialização () Pós-Graduação

Em qual cidade você reside? _____

Qual a sua profissão? _____

Em relação ao seu trabalho, atualmente:

- () Trabalho em uma organização (pública, privada ou do terceiro setor)
- () Sou aposentado
- () Tenho o meu próprio negócio

Qual o seu regime de trabalho atual?

- () Nas instalações físicas da organização em tempo integral
- () Em *home office* em tempo integral
- () Misto (vou até as instalações físicas da organização conforme a necessidade)

Há quantos anos você trabalha na sua atual organização ou dirige o seu próprio empreendimento?

Menos de um ano () De 1 a 5 anos () De 6 a 10 anos () De 11 a 15 anos () Mais de 15 anos () Sou aposentado (a) ()

Classifique em ordem de importância (1 a 3) as suas principais motivações para o uso das mídias sociais?

- () Diversão
- () Trabalho

Comunicação com Família e Amigos

Dentre as seis mídias sociais abaixo, classifique por ordem (de 1 a 6) conforme a frequência de utilização diária.

Facebook ()

Instagram ()

LinkedIn ()

Twitter ()

WhatsApp ()

Youtube ()

Em qual tipo de equipamento você costuma usá-la com mais frequência?

Laptops (computadores portáteis)

Computadores de mesa (Desktops)

Smartphones

Tablets

Instruções: Responda de acordo com seus hábitos de uso referente às mídias sociais mais utilizadas por você. Considere como mídias sociais tanto as chamadas "redes sociais" (Facebook, Instagram e Twitter) como os "mensageiros" (WhatsApp e Telegram).

Intensidade no Uso de Mídias Sociais

Você mantém a notificação das suas mídias sociais ativadas (WhatsApp, Facebook, Instagram etc.)?

Sim ()

Não ()

Desligo enquanto estou trabalhando ()

Com que frequência você verifica e responde as mensagens de amigos, grupos e comunidades, curte posts, fotos, etc?

() Até 5 vezes () de 6 a 10 vezes () de 11 a 20 vezes () mais de 20 vezes

Com que frequência você usa suas mídias sociais no ambiente de trabalho?

Nenhuma, 1 a 5, 5 a 10 vezes, >10.

No último mês, aproximadamente quantos minutos por dia você utilizou suas mídias sociais?

Menos de 30, até 60, até 120, mais de 120.

De quantos grupos ou comunidades você faz parte ou na(s) suas mídias sociais preferidas?

0-5, 6-10, 11-20, mais de 20

Instruções: Nesse bloco são apresentadas assertivas sobre o uso de mídias sociais. Por favor, leia atentamente cada afirmação e escolha a que corresponder com maior exatidão a sua percepção sobre as que mais você utiliza. Sendo 1 **Discordo Totalmente** e 7 **Concordo Totalmente**.

IT Identity Due to the Use of Social Media

Built from Carter and Grover (2015)

Afinidade

O uso das minhas mídias sociais preferidas se tornou parte do meu dia a dia. REL1

Eu domino o uso de mídias sociais. Por exemplo, sei criar grupos, adicionar contatos, amigos, colocar meu status, fazer chamadas de áudio e vídeo, ajustar configurações de privacidade e segurança etc). REL3

Eu costumo ensinar amigos e parentes como usar as minhas mídias sociais preferidas. REL4

Dependência

Sinto que estou perdendo os acontecimentos de amigos e grupos quando não acesso as mídias sociais por um longo período. DEP2

Em eventos sociais (jantares, reuniões de família, passeios) costumo acessar várias vezes as mídias sociais. DEP3

Sinto que a minha rotina é integrada ao uso das minhas mídias sociais preferidas. DEP10

Energia Emocional

Me sinto entusiasmado usando as minhas mídias sociais preferidas. EE3

Quando interajo nas mídias sociais (redes sociais⁵⁵) me sinto mais confiante EE4

Eu me sentiria triste se as minhas mídias sociais preferidas encerrassem suas atividades. EE5

Eu fico animado (a) quando penso em acessar minhas mídias sociais preferidas. EE7

Eu fico animado (a) quando penso em compartilhar algo nas minhas mídias sociais preferidas.

EE9

⁵⁵ In Brazil, most people do not differentiate the terms “social media” of “social network”. Therefore, it was stated both of terms. However, in one of closed ended questions, it was asked the respondents to consider social media messenger apps as WhatsApp or video-based platforms as YouTube in the same category.

Instruções: Na sequência são apresentadas assertivas sobre aspectos relacionados a forma com que desempenhamos nossas funções de trabalho. Responda de acordo com a sua modalidade atual de trabalho (na empresa, home office ou de forma mista). Em uma escala de 1 a 7 marque a opção que melhor corresponder à sua resposta. Sendo 1 **Discordo Totalmente** e 7 **Concordo Totalmente**.

As Facetas das Novas Formas de Trabalho

Adapted from Gerards, De Grip and Baudewijns (2018); Duque *et al.* (2020); Gerards, Van Wetten and Van Sambeek (2020)

Eu sou capaz de determinar a maneira como trabalho. MO1

Eu sou capaz de determinar o ritmo que entrego minhas demandas de trabalho. MO2

O meu (minha) supervisor (a) não interfere na forma com que eu trabalho. MO3

Tenho pleno acesso a todas as informações necessárias para realizar o meu trabalho através dos equipamentos da organização. AI1

Tenho pleno acesso a todas as informações necessárias para realizar o meu trabalho no meu computador, smartphone e/ou tablet. AI2

Tenho facilidade em acessar todas as informações, dados, aplicativos para desempenhar meu trabalho a qualquer hora e em qualquer lugar. AI3

Consigo fazer contato com colegas da minha equipe de trabalho rapidamente. AC1

Consigo fazer contato com funcionários de outros departamentos/unidades rapidamente. AC2

Consigo fazer contato com meu(s) gestor(es) rapidamente. AC3

Eu tenho a capacidade de adaptar o meu trabalho de acordo com a minha fase de vida e desejos pessoais. FWR1

Consigo separar minhas atividades pessoais das demandas de trabalho. FWR2

As minhas demandas de trabalho não interferem nas minhas atividades pessoais. FWR4

Eu costumo trabalhar por mais tempo do que as horas definidas da minha jornada de trabalho. FWR5

APPENDIX L - MICOM ANALYSIS RESULTS

Table 51 - MICOM Analysis: Work Regimen Hybrid vs. Remote Work

STEP 2	Original Correlation	Correlation Permutation Mean	5.00%	Permutation p-Values						
Access to Colleagues	0.995	0.995	0.984	0.33						
Access to Organizational Knowledge	0.983	0.995	0.984	0.042						
Dependence	0.877	0.825	0.327	0.425						
Emotional Energy	0.945	0.9	0.548	0.403						
Flexibility in Working Relations	0.992	0.996	0.988	0.133						
Management of Output	0.965	0.975	0.922	0.241						
Relatedness	0.123	0.839	0.485	0.01						
STEP 3	Mean - Original Difference (Hybrid - Remote Work)	Mean - Permutation Mean Difference (Hybrid - Remote Work)	2.50%	97.50%	Permutation p-Values	Variance - Original Difference (Hybrid - Remote Work)	Variance - Permutation Mean Difference (Hybrid - Remote Work)	2.50%	97.50%	Permutation p-Values
	Mean - Original Difference (Hybrid - Remote Work)	Mean - Permutation Mean Difference (Hybrid - Remote Work)	2.50%	97.50%	Permutatio n p-Values	Variance - Original Difference (Hybrid - Remote Work)	Variance - Permutation Mean Difference (Hybrid - Remote Work)	2.50%	97.50 %	Permutatio n p-Values
Access to Colleagues	-0.726	-0.004	-0.334	0.328	-	1.104	0.004	-0.518	0.516	-
Access to Organizational Knowledge	-0.322	-0.003	-0.336	0.326	0.057	0.301	0.001	-0.585	0.583	0.321
Dependence	-0.062	-0.002	-0.33	0.328	0.731	0.136	0	-0.461	0.451	0.551
Emotional Energy	0.1	-0.002	-0.333	0.327	0.563	-0.266	0.003	-0.42	0.427	0.227
Flexibility in Working Relations	0.034	-0.001	-0.343	0.332	0.84	-0.033	0.002	-0.427	0.434	0.886
Management of Output	-0.364	-0.001	-0.328	0.342	0.032	0.242	-0.005	-0.622	0.609	0.437
Relatedness	-0.153	-0.003	-0.335	0.334	0.373	0.414	-0.001	-0.56	0.572	0.158

Source: Research Data (2021)

Table 52 - MICOM Analysis: Hedonic Use vs. Work-Oriented Use

STEP 2	Original Correlation	Correlation Permutation Mean	5.00%	Permutation p-Values
Access to Colleagues	0.998	0.996	0.985	0.568
Access to Organizational Knowledge	0.996	0.995	0.985	0.403
Dependence	0.957	0.824	0.314	0.794
Emotional Energy	0.946	0.893	0.53	0.431
Flexibility in Working Relations	1.000	0.996	0.987	0.939
Management of Output	0.965	0.975	0.919	0.23
Relatedness	0.952	0.833	0.463	0.747

STEP 3	Mean - Original Difference (Hedonic - Work Use)	Mean - Permutation Mean Difference (Hedonic - Work Use)	2.50%	97.50%	Permutation p-Values	Variance - Original Difference (Hedonic - Work Use)	Variance - Permutation Mean Difference (Hedonic - Work Use)	2.50%	97.50%	
	Mean - Original Difference (Hedonic - Work Use)	Mean - Permutation Mean Difference (Hedonic - Work Use)	2.50%	97.50%	Permutation p-Values	Variance - Original Difference (Hedonic - Work Use)	Variance - Permutation Mean Difference (Hedonic - Work Use)	2.50%	97.50%	
Access to Colleagues	-0.022	0.002	-0.325	0.348	0.904	0.084	0.004	-0.508	0.511	0.746
Access to Organizational Knowledge	0.01	-0.002	-0.338	0.331	0.954	-0.044	0.014	-0.556	0.607	0.887
Dependence	0.158	0.001	-0.321	0.331	0.347	0.352	0.012	-0.447	0.472	0.131
Emotional Energy	0.229	0.001	-0.335	0.339	0.182	0.271	0.003	-0.415	0.434	0.202
Flexibility in Working Relations	0.26	0.001	-0.336	0.322	0.126	-0.24	0.004	-0.432	0.445	0.271
Management of Output	-0.201	0.002	-0.327	0.345	0.24	0.284	0.01	-0.589	0.621	0.36

Source: Research Data (2021)

Table 53 - MICOM Analysis: Heavy Users vs. Light Users

STEP 2	Original Correlation	Correlation Permutation Mean	5.00%	Permutation p-Values						
Access to Colleagues	0.998	0.996	0.985	0.563						
Access to Organizational Knowledge	0.997	0.995	0.985	0.537						
Dependence	0.878	0.813	0.309	0.484						
Emotional Energy	0.97	0.896	0.534	0.61						
Flexibility in Working Relations	0.995	0.996	0.988	0.305						
Management of Output	0.98	0.975	0.922	0.421						
Relatedness	0.911	0.824	0.44	0.605						
STEP 3	Mean - Original Difference (Heavy Users- Light Users)	Mean - Permutation Mean Difference (Heavy Users- Light Users)	2.50%	97.50%	Permutation p-Values	Variance - Original Difference (Heavy Users- Light Users)	Variance - Permutation Mean Difference (Heavy Users- Light Users)	2.50%	97.50%	Permutation p-Values
	Mean - Original Difference (Heavy Users- Light Users)	Mean - Permutation Mean Difference (Heavy Users- Light Users)	2.50%	97.50%	Permutation p-Values	Variance - Original Difference (Heavy Users- Light Users)	Variance - Permutation Mean Difference (Heavy Users- Light Users)	2.50%	97.50%	Permutation p-Values
Access to Colleagues	0.167	0.002	-0.336	0.329	0.328	-0.324	-0.008	-0.538	0.507	0.216
Access to Organizational Knowledge	0.321	0.003	-0.328	0.339	0.059	-0.506	-0.006	-0.590	0.561	0.083
Dependence	0.569	0.003	-0.330	0.331	0.001	-0.190	-0.002	-0.474	0.445	0.408
Emotional Energy	0.354	0.002	-0.339	0.341	0.040	0.096	-0.003	-0.420	0.426	0.667
Flexibility in Working Relations	-0.209	-0.002	-0.334	0.322	0.214	0.292	0.003	-0.422	0.434	0.173
Management of Output	0.148	0.002	-0.335	0.327	0.388	0.037	-0.008	-0.633	0.598	0.905
Relatedness	0.484	-0.001	-0.339	0.335	0.005	-0.403	-0.002	-0.579	0.561	0.160

Source: Research Data (2021)

Note. The heavy users' group comprises individuals who answered that accessed at least 120 minutes daily and at least 11 times daily. Conversely, the light users' group comprises individuals who answered that they accessed less than 120 minutes daily and less than ten times during the day.

APPENDIX M - QUESTIONNAIRE STATEMENT (Portuguese)

Prezados senhores(as),

Meu nome é Yves, sou aluno de doutorado de Gestão de Sistemas e Tecnologia da Informação da Escola de Administração da Universidade Federal do Rio Grande do Sul- UFRGS e orientando da Profª Drª Raquel Janissek-Muniz, diretora do grupo de pesquisa IEA Future Lab Na minha tese de doutorado estou estudando o desenvolvimento da identidade de TI devido ao uso de mídias sociais e suas consequências para os arranjos organizacionais que estão se desenhando desde o começo da pandemia de COVID-19.

No atual cenário em que a pandemia causada pelo vírus SARS-CoV2 assola o mundo, organizações tiveram que se adaptar rapidamente a uma nova realidade no cotidiano do trabalho. Sob esse aspecto, a familiaridade no uso de mídias sociais pode representar uma vantagem para que os funcionários se adaptem às práticas de trabalho remoto com maior facilidade. Essa pesquisa tem por objetivo investigar como ocorre essa relação. Tendo em vista que potencialmente o sr(a) trabalha ou trabalhou durante esse período de forma remota, entende-se que vossa senhoria possui uma experiência técnica e prática relevante acerca do uso da tecnologia para executar o seu trabalho com o auxílio de soluções tecnológicas. Dessa forma, gostaria de contar com o(a) sr. (a) para responder um questionário. Será uma honra poder contar com a perspectiva dos(as) senhores(as) para esta pesquisa científica. Mais ainda, nesse momento de formação de conhecimento acerca desse novo paradigma no campo organizacional.

É importante destacar que o (a) senhor(a) não será identificado(a) em nenhum momento, nem o nome da organização. Essa pesquisa está comprometida com o sigilo e a privacidade as suas informações. Apresento na sequência o link para que possa responder à pesquisa. Por gentileza, clique no link e responda conforme puder. Por favor, caso o (a) sr. (a) conheça alguém que também trabalha ou trabalhou de forma remota durante a pandemia, poderia por gentileza compartilhar esse questionário com eles(as)?

Link: <https://bit.ly/31g8zQL>

Espero contar com a ajuda dos(as) senhores(as) e ao final da pesquisa, os principais resultados estarão disponíveis para que os(as) senhores(as) possam aferir suas potenciais

contribuições para a as suas respectivas organizações.

Agradeço antecipadamente e fico a disposição para qualquer dúvida adicional a respeito da pesquisa.

Yves Wanderley Estanislau da Costa Netto – yves.netto@fgv.br

Doutorando em Gestão de Sistema e Tecnologia da Informação

Escola de Administração/Universidade federal do Rio Grande do Sul – UFRGS