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LATE CHRONOTYPE BUT NOT SOCIAL JETLAG IS ASSOCIATED WITH DEPRESSION AMONG ADOLESCENTS  
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**Introduction:** Depression is a serious and prevalent disease among adolescents. Thus, identifying possible factors involved with its genesis and presentation is an important task for researchers and clinical practitioners. Both chronotype, which is the individual characteristic of allocating sleeping and wakening time accordingly to one's physiological predisposition, and social jetlag that is the discrepancy between social and inner rhythms, have been associated with depression in different populations. However, information on this is lacking among adolescents.

**Objective:** Examine the relationship between chronotype and social jetlag with the presence of depression symptoms in young students.

**Methods:** This study was part of a broader epidemiological survey that took place in the Taquari River Valley, Southern Brazil. We assessed 351 students aged 12–21 years old. They answered a questionnaire on demographic characteristics, the Munich Chronotype Questionnaire (MCTQ) and the Beck Depression Inventory (BDI). Age, sex, classes' routine (morning, afternoon or evening students), sunlight exposure, sleep duration, chronotype, and social jetlag were taken as factors and the presence of depression symptoms (BDI's scores higher than 10) as the outcome. Univariate and multivariate analyses were performed. The Ethics Committee from Hospital de Clínicas de Porto Alegre approved the study protocol (Project 08-087 GPPG/HCPA, CONEP 15155) and all participants gave signed informed consent.

**Results:** Girls ( $\chi^2=5.01$ ,  $p=0.025$ ) and evening students ( $\chi^2=6.69$ ,  $p=0.035$ ) were more frequently depressed than their comparative groups. The depression group was significantly delayed, that is, from a later chronotype, when compared with the nondepressed group ( $t=2.04$ ,  $p=0.047$ ). Nevertheless, the two groups did not differ in relation to their social jetlag hours ( $t=-0.68$ ,  $p=0.501$ ) neither subjects with two or more hours of social jetlag were more frequent among the depressed ( $\chi^2=1.00$ ,  $p=0.317$ ). In multivariate analysis, the model that best explained our outcome included only sex ( $b=-0.12$ ,  $t=-2.28$ ,  $p=0.023$ ) and chronotype ( $b=-0.19$ ,  $t=-2.08$ ,  $p=0.038$ ) as significant predictor variables.

**Discussion:** The relationship between chronotype and depression, previously described for adults and younger populations, was here replicated. However, this was the first study to access the relationship between social jetlag and depression among adolescents. Not finding a significant association, as has been found for young adults and previously theorized, might be attributed to: (1) greater participation from younger adolescents in our sample, mostly under parental control for weekend's sleep routine, (2) the depressed have a greater difficulty in being flexible with their different schedules for week and free days, resulting in lower hours of social jetlag, or (3) the effect of this variable on the symptoms of depression requires time to manifest, becoming apparent only at a later period in life.