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The Association Between Vigorous Physical Activity and Alcohol use

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Evidence supports a positive association between excessive exercise and alcohol use among young adults. Past research has looked at the effects of medium-intensity physical activity regarding alcohol use prevention among college students, suggesting a positive linear association between these two variables. However, prior research has primarily focused on men. Thus, questions regarding health-compromising behaviors, such as excessive drinking and exercise among women, remain to be investigated. Further, questions have been raised concerning the pattern of association between vigorous physical activity and alcohol use among men versus women. The present study aims to replicate prior research by evaluating (1) the association between vigorous physical activity and alcohol use and (2) the degree of association between vigorous physical activity and alcohol use levels separately for men and women. It is hypothesized that (1) there is a positive correlation between vigorous physical activity and drinking quantity and (2) a relatively higher association between vigorous physical activity and alcohol use quantity exists among men. College-attending emerging adults ($N = 1053$; 72.60% female; 50.20% White; $M_{\text{age}} = 22.23$, $SD = 1.94$) completed an online cross-sectional survey. Results from Aim 1 show a significant positive correlation between vigorous exercise and alcohol consumption ($r = .139$, $p < .001$). When separated by sex, the association between vigorous exercise and alcohol consumption was nonsignificant for males ($r[189] = .114$, $p = .116$) and females ($r[544] = .063$, $p = .143$). Reaffirming past research, those who engage in excessive exercise are at risk for elevated alcohol use. This association could be related to

environmental factors or unconscious motivations, such as the “work hard, play hard” mentality. Though a weak yet significant correlation between exercise and alcohol use exists in the overall sample, when evaluating men and women separately, the sample sizes were likely not large enough to detect such a small effect. Future research utilizing larger sample sizes should explore why moderate to heavy drinkers are predisposed to vigorous physical activity and examine relevant factors that could further clarify the co-occurrence of exercise and alcohol use, such as stress, perceived control, or relevant social norms. Additionally, future research should look at how different types of prolonged exercises, such as aerobic activity, cardio, and muscle-building exercise, may impact drinking habits

Keywords: Physical activity, college students, alcohol, vigorous exercise

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