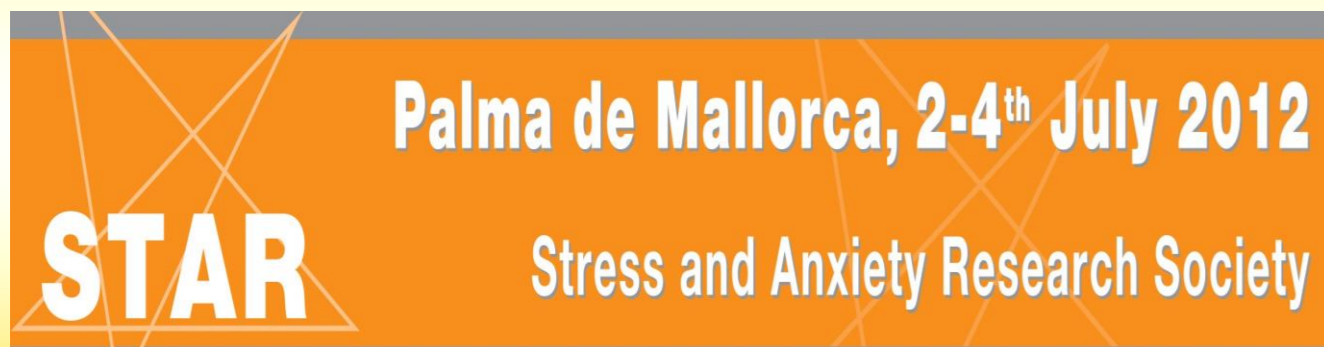


# ASSESSING COPING, EMOTIONAL REGULATION, AND PSYCHOSOCIAL PERCEPTIONS OF ACADEMIC STRESS IN UNDERGRADUATES

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## Objectives

Literature suggests most college students appear to lack the knowledge and skills to effectively cope with stressful academic experiences (Gall, Evans, & Bellrose, 2000). Ineffective coping strategies may increase students' health problems, demand for health services, and attrition rates (Morrison & O'Connor, 2005). This study aims to examine the associations, and processes between psychosocial variables deemed important in academic transitions.

## Methods

In this cross-sectional study, 177 first-year undergraduates (83% female, as expected in this population) aged 17 to 41 years (M=19.02, SD=2.79), completed a set of self-report measures. The questionnaires used were: Brief-COPE (Carver, 1997; Portuguese version of Pais-Ribeiro & Rodrigues, 2004), Difficulties in Emotion Regulation Scale (DERS, Gratz & Roemer, 2004; Portuguese version of Coutinho et al., 2010), Physical Manifestations of Discomfort Questionnaire (PMDQ, Pais-Ribeiro, 2003), Perceived Stress Scale (PSS, Cohen et al., 1983; Portuguese version of Pais-Ribeiro & Marques, 2009), and Positive and Negative Affect Schedule (PANAS; Watson et al., 1988; Portuguese version of Galinha & Pais-Ribeiro, 2005).

## Results

**Table 1.** Gender Differences for Coping, Emotion Regulation, Perceived Stress and Affect

Variables	Women (n=149)	Men (n=29)	Statistics for Gender Differences
	Mean (SD)	Mean (SD)	
Use of instrumental support <sup>a</sup>	6.02 (.11)	5.58 (.26)	$t(175)=-1.511$
Use of emotional support <sup>a</sup>	6.57 (.12)	5.55 (.29)	$t(175)=-3.129^{**}$
Religion <sup>a</sup>	4.39 (.16)	3.79 (.36)	$t(175)=-1.521$
Positive reframing <sup>a</sup>	6.07 (.11)	5.79 (.25)	$t(175)=-1.004$
Acceptance <sup>a</sup>	5.79 (.10)	5.82 (.22)	$t(175)=.121$
Venting <sup>a</sup>	5.83 (.13)	5.44 (.29)	$t(175)=-1.208$
Denial <sup>a</sup>	3.95 (.12)	3.96 (.28)	$t(175)=.020$
Self-distraction <sup>a</sup>	5.41 (.12)	5.72 (.29)	$t(175)=-.978$
Behavioral disengagement <sup>a</sup>	2.74 (.09)	3.03 (.21)	$t(175)=1.058$
Substance use <sup>a</sup>	2.14 (.04)	2.17 (.11)	$t(175)=.195$
Humor <sup>a</sup>	5.20 (.12)	5.82 (.27)	$t(175)=2.092^*$
Emotion Regulation <sup>b</sup>	80.90 (1.57)	80.37 (3.55)	$t(175)=.135$
Physical Symptoms <sup>c</sup>	59.58 (2.84)	30.00 (6.42)	$t(175)=-4.212^{***}$
Perceived Stress <sup>d</sup>	26.16 (.57)	21.79 (1.29)	$t(175)=-3.095^{**}$
Positive Affect <sup>e</sup>	28.10 (.60)	30.65 (1.36)	$t(175)=1.710$
Negative Affect <sup>e</sup>	21.43 (.73)	19.17 (1.66)	$t(175)=-1.240$

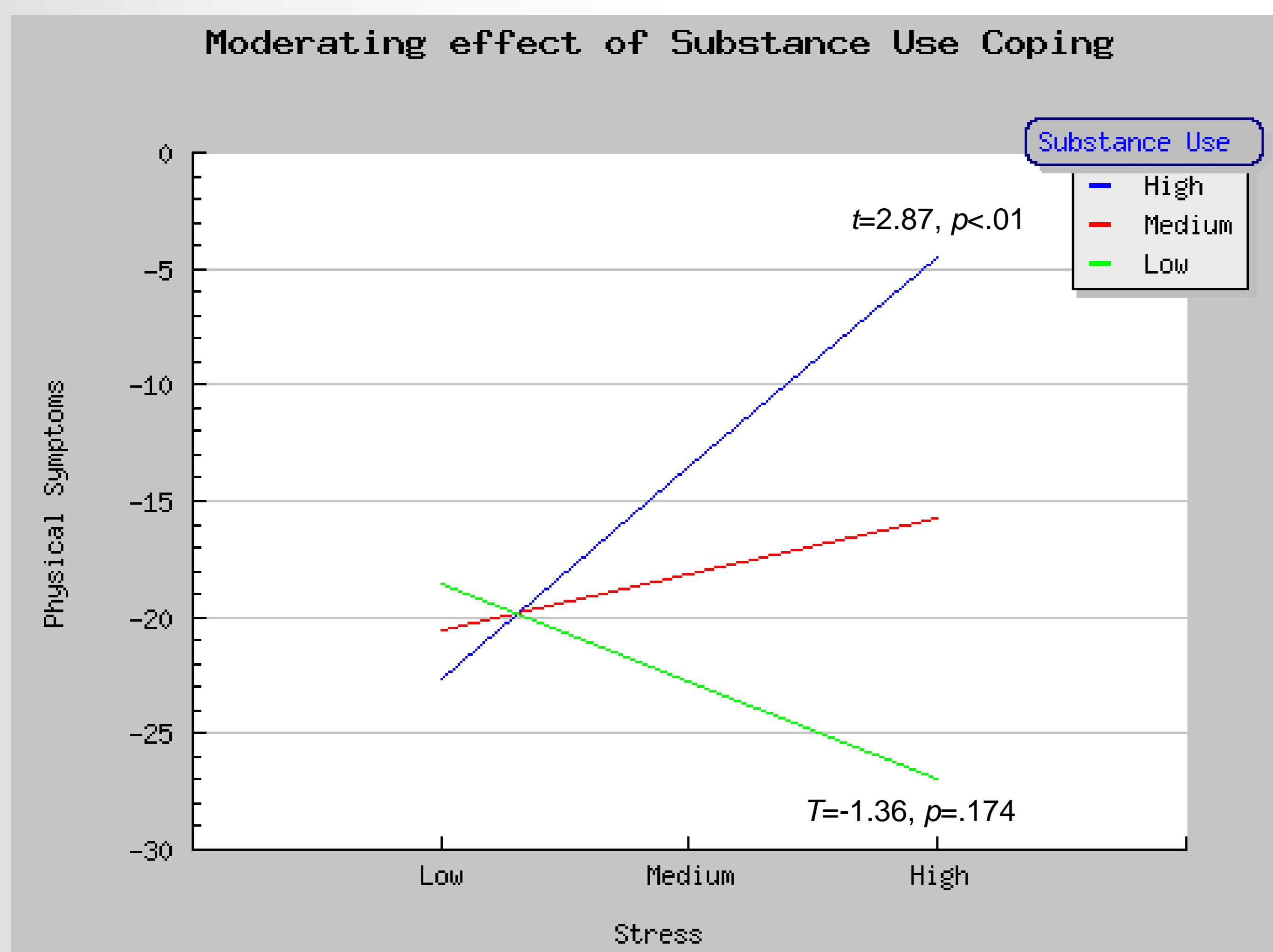
Note. N=177. \*\*p<.01. \*\*\*p<.001. <sup>a</sup>Brief-COPE scales. The scales 'active coping', 'planning', and 'self-blame' were not used in this study due to internal consistencies significantly lower than .70 (Nunnally & Bernstein, 1994). <sup>b</sup>DERS total score. <sup>c</sup>PMDQ total score. <sup>d</sup>PSS total score. <sup>e</sup>PANAS.

**Table 2.** Discriminative Capacity of Difficulties in Emotion Regulation Scale (DERS)

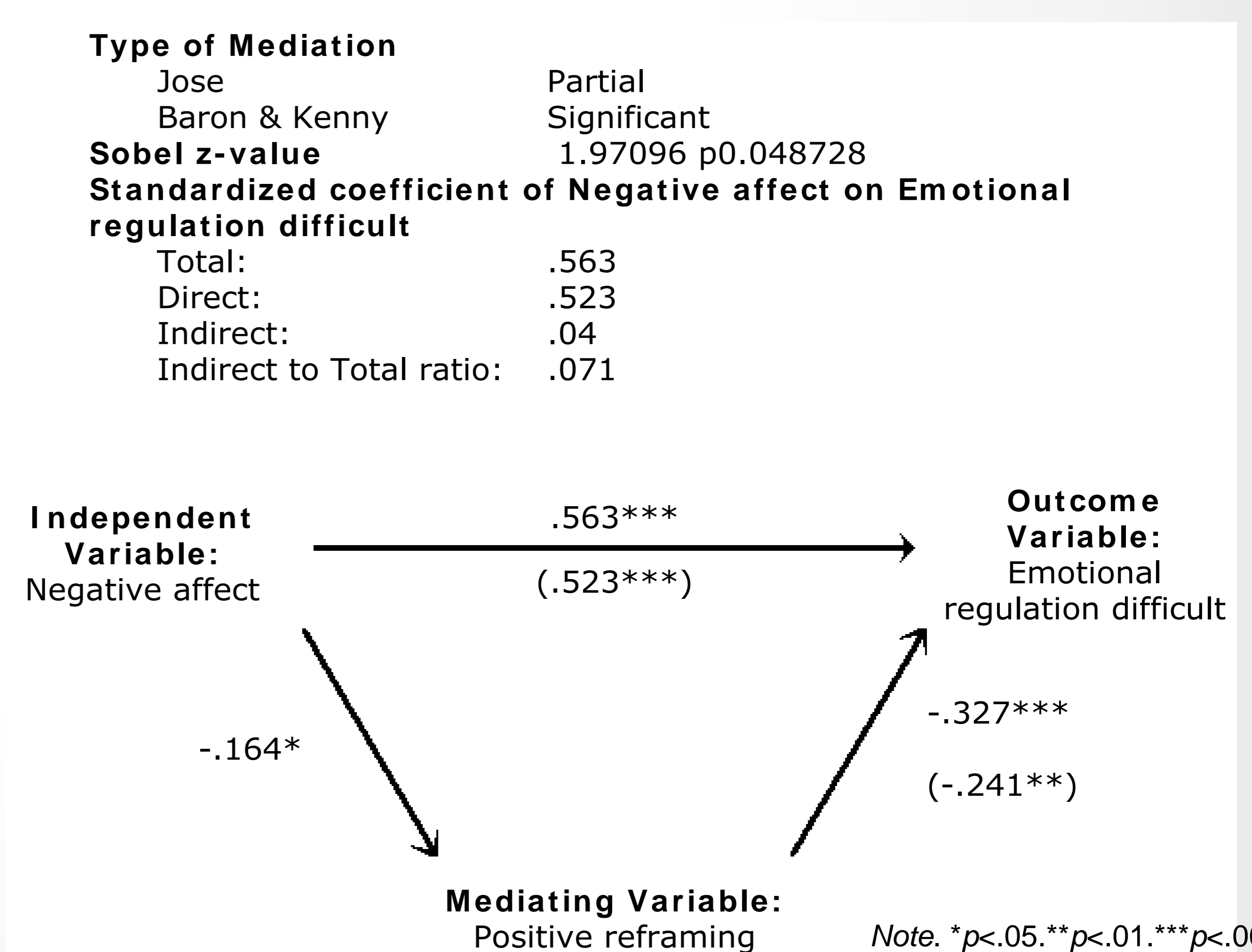
Variables	HIGH emotional dysregulation <sup>+</sup> (n=88)	LOW emotional dysregulation <sup>+</sup> (n=86)	Statistics for Gender Differences
	Mean (SD)	Mean (SD)	
Use of instrumental support <sup>a</sup>	5.96 (1.45)	5.95 (1.39)	$F(1,172)=.003$
Use of emotional support <sup>a</sup>	6.29 (1.78)	6.53 (1.53)	$F(1,172)=.902$
Religion <sup>a</sup>	4.21 (2.07)	4.40 (1.89)	$F(1,172)=.403$
Positive reframing <sup>a</sup>	5.68 (1.42)	6.43 (1.17)	$F(1,172)=12.244^{***}$
Acceptance <sup>a</sup>	5.69 (1.27)	5.94 (1.18)	$F(1,172)=1.783$
Venting <sup>a</sup>	5.80 (1.70)	5.74 (1.48)	$F(1,172)=.067$
Denial <sup>a</sup>	4.31 (1.57)	3.63 (1.36)	$F(1,172)=9.239^{**}$
Self-distraction <sup>a</sup>	5.64 (1.53)	5.31 (1.58)	$F(1,172)=2.001$
Behavioral disengagement <sup>a</sup>	3.09 (1.30)	2.55 (.95)	$F(1,172)=9.459^{**}$
Substance use <sup>a</sup>	2.20 (.71)	2.10 (.46)	$F(1,172)=1.197$
Humor <sup>a</sup>	5.15 (1.53)	5.50 (1.40)	$F(1,172)=2.342$
Physical Symptoms <sup>b</sup>	65.93 (36.85)	43.06 (32.20)	$F(1,172)=18.954^{***}$
Perceived Stress <sup>c</sup>	29.19 (5.95)	21.54 (6.16)	$F(1,172)=69.224^{***}$
Positive Affect <sup>d</sup>	26.50 (7.39)	30.65 (6.87)	$F(1,172)=14.690^{***}$
Negative Affect <sup>d</sup>	25.11 (9.35)	16.86 (6.36)	$F(1,172)=46.085^{***}$

Note. N=177. \*\*p<.01. \*\*\*p<.001. <sup>+</sup>Considering the median value (79.00) on DERS. Participants with a value equal to the median were excluded from groups. <sup>a</sup>Brief-COPE scales. The scales 'active coping', 'planning', and 'self-blame' were not used in this study due to internal consistencies significantly lower than .70 (Nunnally & Bernstein, 1994). <sup>b</sup>PMDQ total score. <sup>c</sup>PSS total score. <sup>d</sup>PANAS.

**Figure 1 – Moderating Effect of Substance Use on the Relationship between Stress and Physical Symptoms**



**Figure 2 – Mediating Effect of Positive Reframing on the Relationship between Negative Affect and Emotional Regulation Difficulties**



Significant gender differences were found in coping (emotional vs. humor support strategies for women and men, respectively), physical symptoms, and stress (both higher in women). The discriminative analysis with DERS revealed that participants with higher emotional dysregulation showed less active (positive reframing) and more avoidant (denial and behavioral disengagement) coping strategies, along with a higher rate of physical symptoms, stress, and negative affect. Process analysis showed that a higher use of substances, as a coping strategy, had a moderating effect between stress and physical symptoms. Finally, positive reframing coping showed a partial mediating effect between negative affect and difficulties in emotional regulation.

## Conclusion

Emotion dysregulation and maladaptive coping seem to be a potentially unifying function of several problematic symptoms and behaviors in freshmen (Labouliere, 2009). Results suggest the need to consider diverse coping strategies in the perception of stress and physical symptoms, including gender issues, dispositional affect, and emotional regulation. This should encourage institutions to promote developmental programs supporting the transition to higher-education (Robotham, 2008).

## References

- Carver, C.S. (1997). You want to measure coping but your protocol's too long: Consider the Brief COPE. *International Journal of Behavioral Medicine*, 4(1), 92-100. / Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396. / Coutinho, J., Ribeiro, R., Ferreirinha, R., & Dias, P. (2010). The Portuguese version of the Difficulties in Emotion Regulation Scale and its relationship with psychopathological symptoms. *Revista de Psiquiatria Clínica*, 37(4), 145-151. / Galinha, I.C., & Pais-Ribeiro, J.L. (2005). Contribuição para o estudo da versão portuguesa da Positive and Negative Affect Schedule (PANAS): II – Estudo psicométrico. *Análise Psicológica*, 23(XIII), 219-227. / Gall, T., Evans, D., & Bellrose, S. (2000). Transition to first-year university: patterns of change in adjustment across life domains and time. *Journal of Social and Clinical Psychology*, 19(4), 544-567. / Gratz, K.L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology & Behavioral Assessment*, 28(1), 41-54. / Labouliere, C.D. (2009). *The spectrum of self-harm in college undergraduates: The intersection of maladaptive coping and emotion dysregulation*. Graduate School Theses and Dissertations. Paper 2052. / Morrison, R., & O'Connor, R. (2005). Predicting psychological distress in college students: the role of rumination and stress. *Journal of Clinical Psychology*, 61(4), 447-460. / Nunnally, J., & Bernstein, I. (1994). *Psychometric theory* (3rd ed.). New York: McGraw Hill. / Pais-Ribeiro, J.L. (2003). Estudo de adaptação do Questionário de Manifestações Físicas de Mal Estar. *Psiquiatria Clínica*, 24(1), 65-76. / Pais-Ribeiro, J.L., & Rodrigues, A.P. (2004). Questões acerca do coping: A propósito do estudo de adaptação do Brief COPE. *Psicologia, Saúde & Doenças*, 5(1), 3-15. / Robotham, D. (2008). Stress among higher education students: towards a research agenda. *Higher Education* 56(6), 735-746. / Watson, D., Clark, L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.