

Introduction

Predicting and improving student academic performance is a main aim of medical education. Previous research suggests that using positively reinforcing self-talk and cognitive reappraisal as an emotion regulation (ER) strategy have a beneficial impact on various aspects of cognitive performance. Conversely, expressive suppression, the alternative ER strategy, is known to be detrimental to cognitive performance. [1,2]

The aim of the present research was to establish whether expressive suppression is a mechanism through which self-reinforcement enhances academic performance of medical students. We hypothesized that using self-reinforcement will be negatively associated with expressive suppression which, in turn, results in enhanced academic performance.

Aims and Objectives

- Establish the relationship between positive self-talk and higher academic performance in medical students
- Establish the relationship between emotion regulation and higher academic performance in medical students
- Determine if a relationship between self-talk and higher academic performance is mediated by expressive suppression

Methods

Using a cross-sectional survey-based design, 50 students (75% female) from three different medical schools, were recruited to participate in the study. The Emotion Regulation Questionnaire, Cognitive Emotion Regulation Questionnaire, and Self-Talk Scale were used to assess ER strategies and self-talk patterns of participants. [3,4,5] Academic performance was measured using an average of three self-reported exam scores.

Results

The results of a mediation analysis using hierarchical regression analysis showed that self-reinforcement was negatively associated with expressive suppression [$\beta(48)=-.348, p=.006$]. A low level of expressive suppression was associated with higher academic performance, [$\beta(48)=-.304, p=.032$]

Conclusions

The results from this study reflect that students who use self-reinforcement are less likely to use expressive suppression as an ER strategy. Furthermore, those students who do use expressive suppression as an ER strategy are less likely to have high academic performance. These results suggest that self-reinforcement enhances academic performance with expressive suppression as a mediator. interventions to increase self-reinforcement as a means of reducing emotional suppression could potentially enhance students' academic performance. Further research is needed to elucidate how best to cultivate self-reinforcement among medical students.

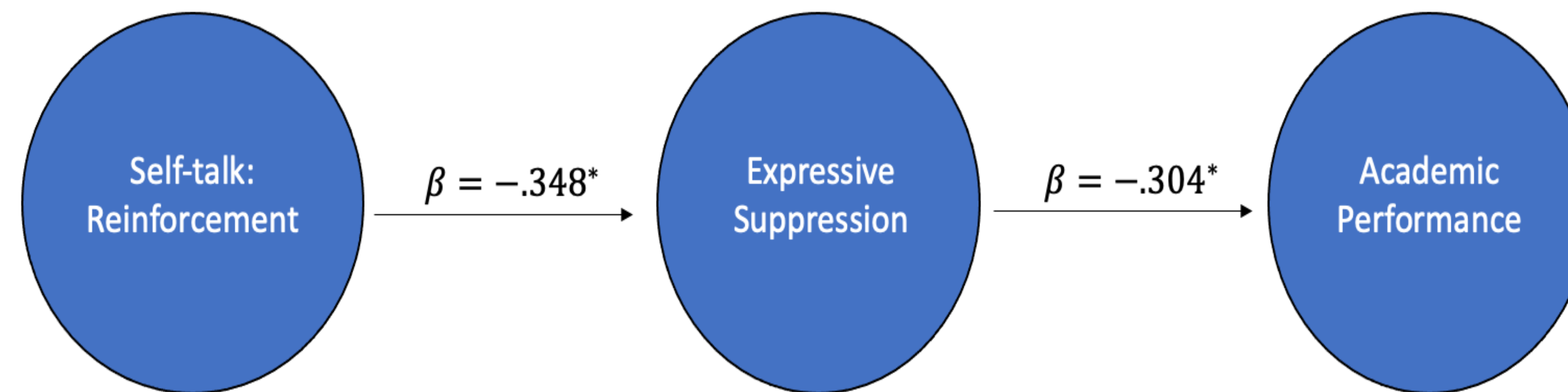


Figure 1. Model demonstrating the mediating effect of expressive suppression on the relationship between self-talk and academic performance. Self-reinforcement is negatively correlated to expressive suppression [$\beta(48) = -.348, p = .006$]. Expressive suppression is negatively correlated with academic performance [$\beta(48) = -.304, p = .032$].

References

1. Kross, E., Bruehlman-Senecal, E., Park, J., Burson, A., Dougherty, A., Shablack, H., Bremner, R., Moser, J., & Ayduk, O. (2014). Self-talk as a regulatory mechanism: how you do it matters. *Journal of personality and social psychology*, 106(2), 304–324. <https://doi.org/10.1037/a0035173>
2. John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: personality processes, individual differences, and life span development. *Journal of personality*, 72(6), 1301–1333. <https://doi.org/10.1111/j.1467-6494.2004.00298.x>
3. Brinthaup, T. M., Hein, M. B., & Kramer, T. E. (2009). The self-talk scale: development, factor analysis, and validation. *Journal of personality assessment*, 91(1), 82–92. <https://doi.org/10.1080/00223890802484498>
4. Garnefski, N., & Kraaij, V. (2006). Cognitive emotion regulation questionnaire - development of a short 18-item version (CERQ-short). *Personality and Individual Differences*, 41(6), 1045–1053. <https://doi.org/10.1016/j.paid.2006.04.010>
5. Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of personality and social psychology*, 85(2), 348–362. <https://doi.org/10.1037/0022-3514.85.2.348>