

Review of: "Motivational Variables as Predictors of Academic Achievement Among University Students"

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Potential competing interests: No potential competing interests to declare.

INTRODUCTION

- 1. There appears to be over-reliance on Bandura's social cognitive theory and Pintrich's work on motivation and self-regulated learning. While these are fundamental frameworks, the over-reliance on these specific theories might overlook other relevant perspectives or recent advancements in understanding academic motivation.
- 2. There is potential oversaturation of empirical studies. A more synthesized presentation of key findings could be more impactful.
- 3. There is a lack of clear research gap identification that the current study aims to address.
- 4. There is insufficient discussion of contextual factors, e.g., does not explore how these factors interact with individual motivation or how they might influence the relationship between self-efficacy and academic performance.
- 5. There are potential biases in cited research, e.g., it does not discuss any contradictory findings or potential biases in the cited research, which could provide a more balanced view of the literature.
- 6. There is a lack of discussion on cultural or demographic variability.
- 7. The introduction presents various studies and their findings but lacks a critical examination of their methodologies. Discussing the strengths and limitations of the methods used in previous research would provide a more nuanced understanding of the available evidence.

METHODS

- 1. Non-random sampling may introduce selection bias and limit the generalizability of the findings. (No mention of how the sample was selected or any strategies used to mitigate potential biases arising from the non-random sampling.)
- 2. Calculation of sample size is unclear. 117 students is relatively small and may not provide sufficient power for the multiple regression analysis, especially considering the number of independent variables (31 items of the motivation scale). Additionally, the diversity of the sample is limited to second-year students from a single Chilean university.
- 3. There is potential for response bias due to the use of the university's internet platform. The method section does not address how the study controlled for potential response biases, such as social desirability or students not taking the



survey seriously.

- 4. The method section does not discuss the validation of the Spanish version used in the study. It's important to ensure that the translated version retains the psychometric properties of the original.
- 5. No mention of controlling for potential confounding variables that might influence academic performance, such as prior academic achievement, socioeconomic status, or teaching quality.
- 6. The researcher is also the teacher of the course, which could introduce bias in the data collection or interpretation. The method section does not discuss any steps taken to mitigate potential biases arising from this dual role.
- 7. The timing of the data collection is at the beginning and the end of the academic semester, which may not accurately capture changes in motivation or performance throughout the semester. The method section does not address this limitation.

RESULTS

- 1. The factor structure of the MSLQ test only partially adjusts to the original theoretical structure. Would it might impact the interpretation of the results or the validity of the instrument in this specific context.
- 2. Regarding normality and linearity, there is not mention of any potential deviations or how they were addressed.
- 3. With many predictors in the model, there is a potential risk of multicollinearity, which can inflate the variance of the coefficient estimates and make the model unstable.

DISCUSSION

- 1. The author extensively validates the use of the MSLQ test without critically analysing its limitations, particularly the fact that the factor structure only partially matched the original theoretical structure. The implications of this discrepancy for the study's findings are not addressed.
- 2. Apart from self-efficacy as a significant predictor of academic performance, the discussion could provide a more balanced examination of other factors that also influence academic outcomes, especially those identified as negative predictors in the results.
- 3. The authors discussed that learning control beliefs, value assigned to the task, and extrinsic goal orientation negatively affect academic performance but do not thoroughly explore the reasons behind these negative associations or discuss implications for educational practice.
- 4. The discussion heavily cites previous literature that supports the importance of self-efficacy, potentially overlooking studies with contradictory findings or different perspectives, which could present a more nuanced view of the role of self-efficacy in academic performance.
- 5. Most of the discussion suggests that the findings can be generalized to inform teaching policies and strategies at the



university level without acknowledging the limitations of the study's sample size, sampling method, and cultural context.

- 6. The methodological limitations of the study, such as the non-random sample and the potential biases introduced by the researcher's dual role as a teacher, are not sufficiently addressed in the discussion. This omission may affect the perceived robustness of the study's findings.
- 7. While the discussion highlights the importance of self-efficacy and motivational factors, it does not provide concrete, actionable strategies for educators on how to effectively enhance these aspects in their students.
- 8. The discussion on the implications for educational design is somewhat generic. A more detailed exploration of how the findings can be practically implemented in curriculum design, teaching strategies, or student support services would add value to the discussion.

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