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Generational Status and Academic Performance

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Abstract

This paper examines the relationship between students' generational status (i.e., first-generation immigrant students compared to second and third-generation students) and academic achievement. Specifically, it explores the role of identity variables including self-concept clarity (an individual's degree of awareness regarding their personal attributes) and academic identity (a student's choice to adopt and commit to a set of academic values throughout their academic career). Self-concept clarity was investigated for mediation effects between the generational status of Latinx and Asian students and their GPA (both overall and major-specific). Lastly, generational status was examined as a moderator of the relationship between GPA and the four types of academic identity statuses (achieved, foreclosure, moratorium, and diffusion). The participants were 857 undergraduate students from a southern California university. The results indicate that self-concept clarity did not mediate the relationship between generational status and either form GPA; additionally, generational status did not moderate the relationship between either form of GPA and the hypothesized academic identity sub-constructs. However, the results yield an important finding; there were two interaction effects between generation and each of the moratorium and diffusion identity statuses on overall GPA in both the full dataset and the Asian subsample. Additionally, there was an interaction effect between generation and the moratorium identity on major GPA in the full dataset and a second interaction effect between generation and the diffusion identity on major GPA in the Asian subsample. Lastly, there was a main effect of generational status on students' overall GPA in the Asian subsample, but not in the Latinx subsample, which is indicative of differences between ethnic groups in terms of first-generation experience. Limitations and future directions are also discussed.

KEYWORDS: Generational status, self-concept clarity, academic identity, academic performance, identity, immigration.

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Introduction

First-generation immigrant students who identify as ethnic minorities rely heavily on their academic performance as a means of establishing or redefining their social status (Bui, 2002). However, this student group consistently encounters factors that threaten their college enrollment including lack of financial stability, lack of familial academic support, and psychological variables such as fear of failure. Each of these can have a significant negative impact on students' self-confidence and, in turn, their academic performance (Bui, 2002). Therefore, it is important to consider psychological processes such as academic identity that may help students navigate these difficulties.

Past literature has mainly focused on the effects of self-efficacy, often as a mediator for the relationship between generational status and academic performance (Ramos-Sánchez & Nichols, 2011). However, previous research has not fully examined other identity variables that may aid in understanding the psychological changes that take place in immigrants, both at the individual level during the immigration process, and also at the population level across generations of immigrants. To address this gap in the literature, the current paper examines the relationships between generation status, academic performance, and two less frequently examined identity constructs, self-concept clarity, and academic identity.

Self-Concept Clarity

Self-concept clarity (SCC; Campbell, 1990) is a structural aspect of self-concept. It refers to the degree to which a person is aware of their personal attributes, or the contents of their "self." More importantly, SCC focuses on how confidently and clearly these personal attributes are defined, as well as their consistency and stability (Campbell et al., 1996). Self-concept clarity has been shown to relate to academic adjustment and performance. For example, Ting (2003), in

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a four-year longitudinal study, examined the effectiveness of non-cognitive variables (i.e., self-concept, long-term planning, and self-appraisal) in predicting the academic success of first-generation students compared to cognitive variables such as SAT scores. Results indicated that non-cognitive variables were better indicators of GPA for students of color, and better at predicting the continuation of college enrollment of nontraditional students (Ting, 2003, p. 28).

Immigrant students often have to navigate unique problems as a result of their bicultural identity. Snyder (1990) argued that juggling expectations of academic success while learning to navigate a bicultural identity can threaten one's self-concept, increase self-doubt, and harm academic performance. For immigrant children who are first-generation college students, this expectation management only adds to the difficulty of adjusting to the university community. Self-concept clarity appears to aid first-generation students in navigating the conflict within their bicultural identity and may lead to increased academic performance. This gives rise to the following hypotheses:

Hypothesis 1a. As generational status increases, each form of GPA (overall GPA and major GPA) will also increase.

Hypothesis 1b. Self-concept clarity will mediate the relationship between generational status and both forms of GPA.

Academic Identity

Was and Isaacson's (2008) Academic Identity Measure (AIM) was created based on Marcia's (1966) identity statuses. The AIM consists of four subscales, each representing a different identity status situated along the two dimensions of identity exploration and identity commitment. The *achievement* identity status refers to a student who has fully committed to a set of academic values after a period of exploring different options. The *foreclosure* identity status

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refers to a student who has committed to and adopted academic values without having explored, often due to pressure from loved ones. The *moratorium* identity status describes a student who is indecisive toward their academic career, who is exploring options in hopes of reaching an educated decision. The *diffusion* identity status refers to a student who lacks both exploration and commitment, often delaying decisions about academia.

First-generation immigrants travel to new cultures to create a secure future for their children and themselves. This strong dedication implies high commitment to academics, which in Was and Isaacson's (2008) framework should translate into either the *achieved* or the *foreclosure* identity status. These two statuses could have been adopted by the students prior to their immigration and are resumed and/or maintained when attending a four-year institution in the United States. This may appear to contradict Hypothesis 1 in theory; however, this is not the case. Commitment in first-generation students does not translate into academic success, as many first-generation immigrant students face institutional challenges, language barriers, and overwhelming struggles with their identity and self-esteem. This literature suggests two hypotheses regarding the AIM in relation to generation and academic performance:

Hypothesis 2. First-generation students will score higher on the *achieved* (H2a) and *foreclosure* (H2b) identity statuses than second and third-generation students.

Hypothesis 3. Generational status will moderate the relationship between the *achieved* and *foreclosure* identity statuses and both overall (H3a) and major GPA (H3b).

Methods

Participants

Participants consisted of 857 undergraduate students from a southern California university, ranging from 17 to 30 years of age ($M = 19.40$). In terms of gender, 62.62% indicated

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they were female, 35.98% indicated they were male, and 1.40% declined to state their gender. In terms of ethnic groups, there were 39.91% Asian Americans, 34.66% Hispanic/Latinos, 8.75% Caucasians, 5.02% African Americans, 4.78% Mixed Heritage, and 6.88% other. Students were primarily freshman and sophomores; 51.29% of the students were in their freshman year, 26.05% were in their sophomore year, 13.55% were in their third year, and 7.71% were either fourth or fifth year. In terms of generation, 26.29% were first generation, 58.29% were second generation, and 13.90% were third generation, while 1.52% of participants did not specify.

Procedure

The full research protocol was approved by the institutional IRB prior to the start of the study. Data was collected in multiple waves over the course of two years. Data collection was conducted at the primary researcher's lab. Upon arrival, each participant signed an informed consent form and was assigned an identification number. Participants then took an online survey containing multiple personality measures, including the primary measures used in the current study. After completion, participants were asked to report their demographic information, including their sociodemographic information and generational status, as well as information regarding their academics, such as their overall GPA, major GPA, and their year in college. The estimated time for completing the study was sixty minutes. After finishing, participants were debriefed. All participants were awarded course credit for their participation in the study.

Measures

Self-Concept Clarity Scale. The Self-Concept Clarity Scale (SCC) assesses an individual's self-concept clarity. Campbell et al. (1996) defines self-concept clarity as "the extent to which self-beliefs are clearly and confidently defined, internally consistent, and stable." The SCC is a 12-item measure using a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly

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agree). The Cronbach's alpha for the SCC is $\alpha = .88$, indicating high reliability.

Academic Identity. The academic identity statuses were measured using the Academic Identity Measure (AIM; Was & Isaacson, 2008). The AIM is a 40-item scale consisting of four subscales; each subscale represents one of the four academic identity statuses. The four AIM subscales—achieved ($\alpha = .82$), foreclosure ($\alpha = .79$), moratorium ($\alpha = .84$), and diffusion ($\alpha = .77$)—are 10-item scales using a 5-point Likert-type scale ranging from 1 (Not at all like me) to 5 (Very much like me). All four subscales show acceptable reliability.

Results

Hypothesis 1

Hypothesis 1a predicted that generation would be positively correlated with GPA, while Hypothesis 1b predicted that the relationship between generation and GPA would be mediated through self-concept clarity. Hypothesis 1a was examined through calculating Pearson's bivariate correlation for the relationship between generational status and each form of GPA (both overall GPA and major GPA). Pairwise deletion was used to address the missing data in the datasets. The correlations can be seen in **Table 1**. In the full dataset, generational status had a marginally significant correlation with overall GPA ($r(801) = .063, p = .076$) which suggests that this relationship may be worth examining further. However, there was no correlation between generation and major GPA ($r(572) = .057, p = .172$). Since the results for the tests of Hypothesis 1a indicate that there was no relationship between generational status and GPA, a mediation test was not needed to test Hypothesis 1b. This decision aligns with Baron and Kenny (1986), who recommended that if there is no relationship between the predictor and outcome, further testing

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Table 1

Pearson Bivariate Correlation Data on Academic Performance and Personality Constructs of all Study Participants.

	Full Data Set													
	Overall GPA		Major GPA		Self-clarity		Achieved		Foreclosure		Moratorium		Diffusion	
	<i>r</i>	<i>p</i>	<i>ρ</i>	<i>P</i>	<i>ρ</i>	<i>P</i>	<i>ρ</i>	<i>P</i>	<i>ρ</i>	<i>P</i>	<i>ρ</i>	<i>P</i>	<i>ρ</i>	<i>P</i>
Generation	.063	.076	.057	.172	-.049	.157	.070	.042	-.073	.034	-.089	.010	-.128	<.001
Overall GPA	-	-	-	-	-.055	.119	.191	<.001	-.029	.414	-.230	<.001	-.211	<.001
Major GPA	-	-	-	-	-.067	.109	.188	<.001	-.018	.664	-.205	<.001	-.180	<.001

Note: * $p < .05$. ** $p < .01$. *** $p < .001$

is unnecessary since there is no relationship that requires a mediation test to be explained.

To further examine the first hypothesis, the full dataset was divided into two sub-datasets based on the most prominent ethnic groups in the dataset: Asian students and Latinx students. There was no significant correlation between generational status and either form of GPA within the Latinx subsample. There was a positive correlation between generational status and overall GPA in the Asian subsample ($r(332) = .165, p = .003$), but a follow-up test showed no significant correlation between generational status and the proposed mediator, self-clarity ($r = -.036, p = .519$), therefore mediation was not tested further. As a whole, Hypothesis 1 was unsupported.

Hypothesis 2

Hypothesis 2a predicted that there would be a negative correlation between generational status and achieved identity status, while Hypothesis 2b predicted a negative correlation between generational status and foreclosure identity status. Hypothesis 2a was directly contradicted by the findings; rather than the hypothesized negative correlation between generational status and achieved identity, the results showed a significant positive correlation ($r(833) = .070, p = .042$). However, Hypothesis 2b was supported by the findings; there was a significant negative correlation between generational status and the foreclosure identity status ($r(833) = -.073, p = .034$), as predicted. Additional bivariate correlation analyses on the remaining two academic

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identity statuses, moratorium identity status and diffusion identity status, also yielded important findings, even though these were not hypothesized. As shown in **Table 1**, both the moratorium and diffusion academic identity statuses had a strong negative correlation with generational status. Lastly, correlations between generational status and each of the AIM subscales were examined in both the Asian and Latinx subsamples. No significant correlations were found between generational status and the four academic identity statuses in either subsample.

Hypothesis 3

Hypothesis 3a predicted that generational status would moderate the relationship between achieved and foreclosure identity status and overall GPA while Hypothesis 3b predicted that generational status would moderate the relationship between achieved and foreclosure identity status and major GPA. Regression analyses were conducted to examine the variables within each of the two hypotheses with generational status as a moderator. Generations two and three were combined in the analyses due to the noticeably smaller number of students in generation three. Students who failed to report their generational status were excluded from the analyses. Hypothesis 3a was not supported in either the full dataset or the Asian and Latinx subsamples. To follow-up on these tests, moderation analyses were conducted for moratorium and diffusion academic statuses. There was a strong moderation effect of generational status on the relationship between overall GPA and both the moratorium and diffusion identity statuses. This moderation effect was found within both the full dataset and the Asian sample, as shown in **Table 2**. There was no similar moderation effect of generation on the relationship between overall GPA and SCC subscales. Hypothesis 3b was also not supported; there was no main effect of generational status on the relationship between the academic identities and major GPA in the

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full dataset, the Asian subsample, or the Latinx subsample, as shown in **Table 3**.

Table 2

Regression Analyses: Main Effects and Interaction Effects with Overall GPA as an outcome.

		Outcome: Overall GPA									
		Self-Concept Clarity		Achieved		Foreclosure		Moratorium		Diffusion	
		β	<i>P</i>	β	<i>P</i>	β	<i>P</i>	β	<i>P</i>	β	<i>P</i>
Full Dataset	Generation	.057	.107	.047	.175	-.062	.079	.042	.226	.036	.297
	Predictor	.049	.174	.183	<.001	-.028	.441	-.216	<.001	-.201	<.001
	Gen x Pred	-.046	.176	.031	.379	.005	.881	-.069	.033	-.072	.031
Asian Dataset	Generation	.159	.003	.161	.003	.179	.001	.195	<.001	.194	<.001
	Predictor	-.036	.574	.154	.008	-.016	.797	-.121	.048	-.185	.001
	Gen x Pred	-.015	.803	.017	.762	-.085	.151	-.125	.037	-.175	.002
Latinx Dataset	Generation	.020	.741	.031	.619	-.024	.690	.031	.601	.024	.688
	Predictor	-.015	.792	.152	.009	-.038	.533	-.217	<.001	-.157	.011
	Gen x Pred	-.009	.881	-.041	.530	.071	.210	.034	.581	.054	.380

Note: *N*= 801. **p* < .05. ***p* < .01. ****p* < .001

Table 3

Regression Analyses: Main Effects and Interaction Effects with Major GPA as an outcome.

		Outcome: Major GPA									
		Self-Concept Clarity		Achieved		Foreclosure		Moratorium		Diffusion	
		β	<i>P</i>	β	<i>P</i>	β	<i>P</i>	β	<i>P</i>	β	<i>P</i>
Full Dataset	Generation	.045	.289	.037	.388	.054	.203	.038	.363	.030	.484
	Predictor	-.061	.139	.176	<.001	-.017	.699	-.179	<.001	-.168	<.001
	Gen x Pred	-.100	.015	.032	.442	-.038	.351	-.116	.002	-.075	.067
Asian Dataset	Generation	.076	.229	.072	.252	.095	.152	.115	.092	.105	.105
	Predictor	-.050	.504	.133	.058	-.002	.981	-.058	.440	-.193	.005
	Gen x Pred	-.067	.346	.015	.824	-.080	.264	-.119	.089	-.149	.024
Latinx Dataset	Generation	.079	.309	.087	.251	.078	.315	.092	.225	.096	.211
	Predictor	-.012	.860	.244	<.001	.034	.653	-.254	<.001	-.174	.018
	Gen x Pred	-.007	.919	-.053	.477	.026	.742	-.022	.776	.107	.171

Note: *N*=572. **p* < .05. ***p* < .01. ****p* < .001

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Discussion

Only one of the three major hypotheses in the study was supported by the data. However, there were important findings in the exploratory analyses. There was a strong moderation effect of generation on the relationship between overall GPA and two identity statuses (moratorium and diffusion) in the Asian subsample. There was also a main effect of generation on students' overall GPA in the Asian subsample.

Hypothesis 1 was not supported. Self-concept clarity was not related to either of the measures of academic performance—overall GPA or major GPA—used in this study and therefore could not have mediated the relationship between generational status and GPA. Additionally, SCC cannot mediate the significant relationship between generation and overall GPA that was found within the Asian subsample due to the absence of a correlation between SCC and generational status, the predictor. According to this finding, if an immigrant student is struggling with navigating their bicultural identity, SCC does not seem to play a substantial part in the ability to navigate the identities within the context of academic performance.

Hypothesis 2a was contradicted by the results, which showed a significant positive relationship between generational status and the achieved identity status, instead of a negative one. However, Hypothesis 2b was supported, and prompted further analyses that yielded findings regarding the relationship between generational status and the moratorium and diffusion academic identity statuses. Hypothesis 2b predicted that generational status would be negatively correlated with the foreclosure identity status and that prediction was strongly supported by the test results. Although moratorium and diffusion were originally thought not to fit the general profile of first-generation immigrants, correlation tests showed a significant negative relationship between generation and both the moratorium and diffusion statuses. To summarize, more first-

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generation students claimed the foreclosure, moratorium, and diffusion identities than second or third generation students. The opposite is true for the achieved identity status. However, these effects were not found in either the Asian or the Latinx subsamples, suggesting that they may be driven by the ethnic groups in the dataset that were not analyzed due to their smaller sample size.

Finally, the tests for Hypothesis 3 showed no moderation effect of generational status on the relationship between overall GPA and either the achieved and foreclosure identity statuses. Therefore, hypothesis 3a was not supported by the results. However, generational status did moderate the relationship between overall GPA and the moratorium and diffusion identity statuses. These moderation effects also were present to a lesser degree when major GPA was the outcome. There was a moderation effect of generational status on the relationship between major GPA and the moratorium identity within the full dataset. There was also another moderation effect of generation on the relationship between major GPA and diffusion identity status within the Asian subsample. As seen in **Tables 2 and 3**, the moderation effect sizes were often similar in the models with both overall GPA and major GPA as an outcome. However, in the models with Major GPA as an outcome, two of the moderation effects were not significant, even though the beta values were similar. In the full dataset, the effect size ($\beta = -.072$) of the interaction between generational status and diffusion identity status on overall GPA is almost identical to the effect size ($\beta = -.075$) of the interaction effect between generational status and the diffusion identity status on major GPA, which is not statistically significant. This difference in significance may be due to fewer participants reporting their major GPA ($N = 572$) than their overall GPA ($N = 801$).

Limitations and Future Directions

This study has certain limitations. First, the first-generation students in this study only

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provided information pertaining to their generational status and did not address the duration of their stay within the United States or the duration of their enrollment in university. Knowing this would help clarify the effect that self-concept clarity and academic identity status have on the relationship between generation and academic performance. For instance, first-generation immigrant students who moved to the United States during their childhood or adolescence have a clear advantage in navigating their undergraduate experience compared to first-generation immigrants who moved to the United States permanently to attend college or as exchange students. In future studies, the duration of stay can be accounted for by asking the participants to report the month and year of their arrival date to the United States. Another way is to conduct a longitudinal study with a single cohort of first-generation immigrants to monitor their duration of stay, changes to personality measures responses, and their academic performance over time.

Another limitation was the difference in sample sizes between the three generation groups. The percentages for the three generations in this study were 26.29% first generation, 58.29% second generation, and 13.90% third generation. This gap between the number of participants in each of the three groups may affect the accuracy of the findings; however, this can be resolved in future research through a more carefully targeted recruitment procedure. In this study, this was addressed by combining the second and third generation samples for the moderation analyses.

In addition to addressing the above limitations, future studies should also examine ethnic groups other than Asian and Latinx. As shown through the moderation tests in this study, different ethnic groups have different experiences with adopting and navigating bicultural identities as first-generation immigrants. Therefore, addressing these questions in future studies will paint a clearer picture of the struggles that first-generation immigrants encounter and how

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that shapes their academic experience.

References

- Bui, K. V. T. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal, 36*(1), 3-12
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173.
- Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. *Journal of Personality and Social Psychology, 59*, 538-549.
- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates, and cultural boundaries. *Journal of Personality and Social Psychology, 70*(1), 141.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*(5), 551.
- Ramos-Sánchez, L., & Nichols, L. (2011). Self-Efficacy of First-Generation and Non-First-

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- Generation College Students: The Relationship With Academic Performance and College Adjustment. *Journal of College Counseling*, 10(1), 6–18.
- Snyder, C. R. (1990). Self-Handicapping Processes and Sequelae: On the Taking of a Psychological Dive. In R. Higgins, C. R. Snyder & S. Berglas (Eds.), *Self-handicapping: The paradox that isn't* (pp. 107-145). New York: Plenum.
- Ting, S. M. (2003). A longitudinal study of non-cognitive variables in predicting academic success of first-generation college students. *College & University*, 78(4), 27–31.
- Was, C. A. & Isaacson, R. M. (2008). The development of a measure of Academic Identity Status. *Journal of Research in Education*, 18, 94-105