



# Structural Model Predicting Systemic Leadership through Self-Management and Academic Attitudes



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## INTRODUCTION

- With the rise in school- and community-based interventions using social and emotional learning (SEL) competencies such as self-awareness, social-awareness, relationship skills, and responsible decision-making (CASEL, 2019), findings are showing more positive outcomes associated with these competencies (Taylor, Oberle, Durlak, & Weissberg, 2017).
- Research has demonstrated that improved SEL skills are related to more positive academic performance, school-related behaviors, and stress-management in grade school children (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). A recent meta analysis showed that SEL interventions are similarly beneficial across different ethnic and socioeconomic groups (Taylor, Oberle, Durlak, & Weissberg, 2017).
- Research on one of the five SEL competencies, self-management, has also shown positive outcomes. Self-management is defined as including personal goals, self-instruction toward achieving goals, self-administered consequences, and plans for one's behavior patterns (Mischel, 1973).
- Recent studies have shown that self-management is related to one's effectiveness as a leader (Wildesen, 2012). However, there is limited research on self-management and different types of leadership styles such as systemic (shared governance) with young adults.

## Present Study

- In the present study, we used a structural equation model to examine the relationship among self-management, academic attitudes, and systemic leadership style.
- It was hypothesized that self-management would predict systemic leadership with academic attitudes acting as a mediator in this relationship.
- Furthermore, a MANOVA was utilized to test for any differences by ethnicity.

## METHOD

- Participants**
  - Data were collected from 325 participants; however, eight participants were considered multivariate outliers and removed from all analyses, leaving 317 participants for analyses. Participants ranged in age from 17 to 61 ( $M = 21.79$ ,  $SD = 6.05$ ) and consisted of majority women (79.2%).
  - Participants consisted of Asian Americans (36.9%), followed by White Americans (29.0%), Latinx Americans (23.0%), Multiracial Americans (6.3%), African Americans (2.8%), and other (1.8%).
- Procedures**
  - Participants were recruited from a mentoring program at a public university in northern California and completed a series of inventories on the variables of interest.
- Data Analysis**
  - Demographic and hypothesis testing analyses were conducted through IBM SPSS and IBM SPSS Amos.
  - SEL, HESL, and LABS subscales were combined into three summed variables to be analyzed in a MANOVA.
  - Individual subscale items were maintained and entered into a structural equation model.

## Results

Inventory	Subscale	Label (# of items)	Item Example	Alpha	Higher Scores Indicate
Higher Education Service-Learning (Service Learning & Development Center, 2000)	Academic Attitudes	HESL (6)	"I enjoy learning in school when course materials pertain to real life."	.70	More positive academic attitudes
The Leadership Attitudes and Beliefs Scale (Wielkiewicz, 2000)	Systemic Thinking	LABS (14)	"Everyone in an organization needs to be responsible for accomplishing organizational goals."	.84	Emphasis on entire community rather than an individual or group within the community
Social and Emotional Scale	Self-Management	SEL (3)	"When I have goals, chores, or homework assignments to do, I make plans to complete them on time."	.70	Higher ability to manage one's self

❖ A MANOVA, with a Bonferroni correction, was conducted using ethnicity (Asian American, White American, Latinx American, and other) as the grouping variable and academic attitudes, systemic leadership, and self-management as the dependent variables.

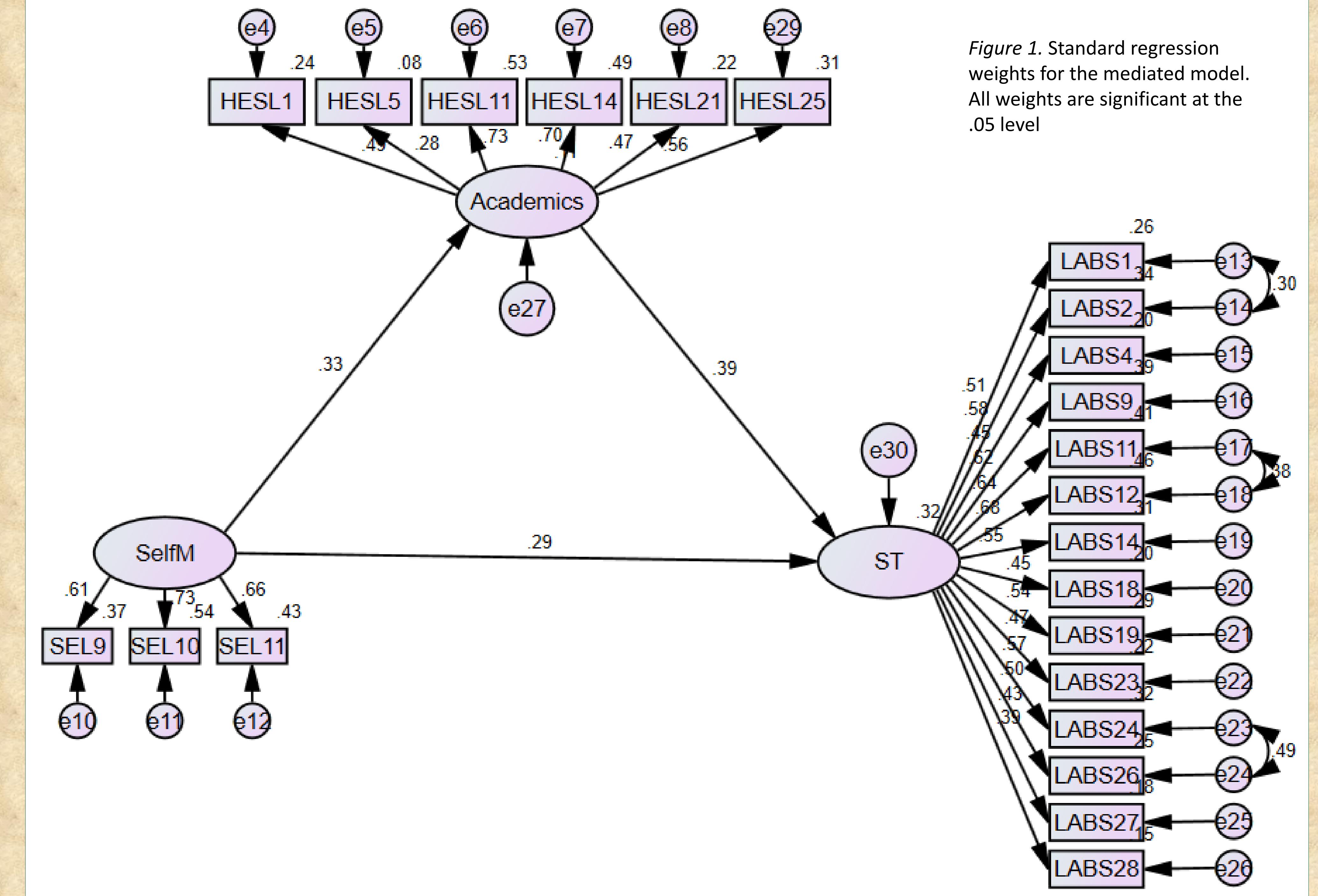
❖ A significant Wilks' Lambda,  $F(3, 313) = 3.213$ ,  $p < .05$ , allows for the individual ANOVAs to be interpreted.

❖ Only systemic leadership,  $F(3, 313) = 3.987$ ,  $p < .05$ ,  $\eta^2 = .037$ , and self-management,  $F(3, 313) = 3.404$ ,  $p < .05$ ,  $\eta^2 = .032$ , yielded significant differences.

❖ Pairwise comparisons found that Asian Americans had significantly lower systemic thinking scores compared to Latinx Americans as well as lower self-management scores compared to White American participants.

❖ A structural equation model was utilized which showed relatively good goodness of fit ( $\chi^2 = 347.648$ ,  $N = 317$ ,  $df = 224$ ,  $p < .001$ ;  $GFI = .91$ ;  $TLI = .92$ ;  $CFI = .93$ ;  $RMSEA = .04$ ).

❖ The unmediated model showed a positive and statistically significant direct path from self-management to systemic leadership ( $\beta = .418$ ).



## Results Continued

- The full model showed positive statistically significant paths between variables.
- The estimate for the direct path between self-management to systemic leadership decreased in the full model, indicating a partial mediation.
- The partial mediation is further supported by statistically significant Aroian and Freedman-Schatzkin tests and accounts for 30% of the variance.

## Discussion

- The present study demonstrates the mediating ability of academic attitudes on self-management and systemic leadership.
- Results of a MANOVA indicate that though statistical differences do exist between Asian Americans and other groups, the effect size is relatively small. Therefore, other factors such as SES or family support may play a larger role in group differences. These findings are consistent with those by Misra and Castillo (2004).
- SEM findings suggest that students who engage in more self-management and have positive academic attitudes are more likely to have a high level of systemic leadership. These findings are supported by prior research indicating that self-management contributes to both academic attitudes (Kanfer, 1990) and effective leadership (Wildesen, 2012).
- Implications of these results suggest that universities with mentorship programs can emphasize self-management and academic attitudes to shape more collaborative and shared leadership styles.

## Limitations

- The limited sample size makes it impossible to determine potential model differences across ethnic groups.
- Participants were recruited from college students enrolled in a mentorship program. As such, views on academic and leadership may differ from the general public. Furthermore, students enrolled in a mentorship program may have a higher ability to self-manage.
- The self-management subscale used in this study has not been validated.

## Future Directions

- Future research should aim to replicate this study with an equal number of participants in each ethnic group.
- Furthermore, more research is needed to determine the validity and reliability of the SEL scale.
- Lastly, additional research should examine the predictive power of the other four SEL competencies within a similar model.

## Conclusion

- The present research is one of the first to examine the ability of self-management (separated from the larger concept of SEL) to predict systemic leadership through academic attitudes within a college student sample.

## Contact Information

Presented at the Western Psychological Association Conference at Pasadena, CA.

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