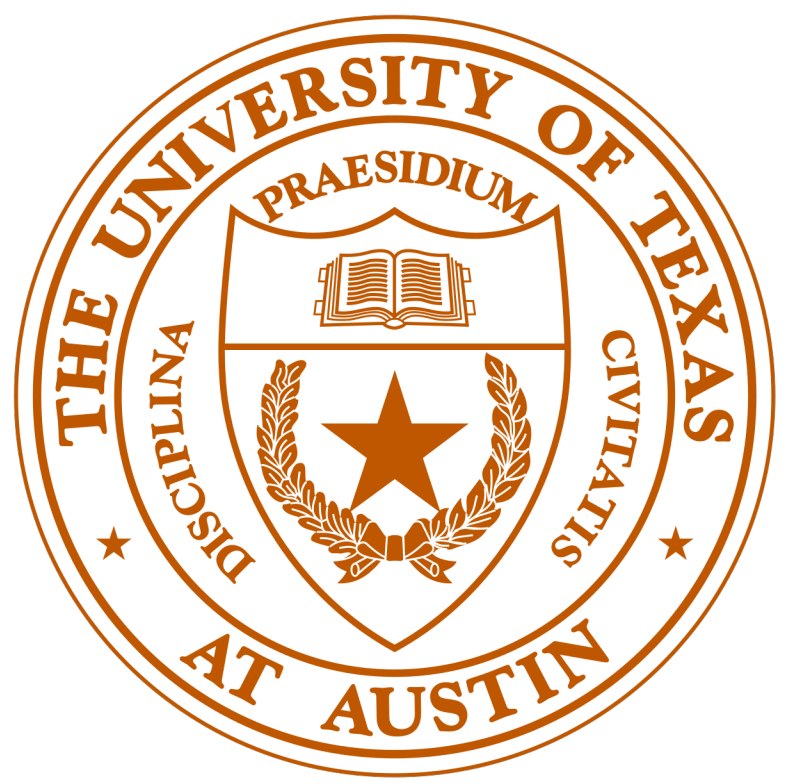


# The Role of Bilingual Proficiency on Bicultural Identity, Psychological Wellbeing and Academic Achievement in Mexican-Origin Undergraduates

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## INTRODUCTION

- **Biculturalism** (or **Bicultural Identity**) describes to what extent individuals integrate elements from two separate cultures into their personal lives.<sup>1</sup>
- Mixed findings on relationship between biculturalism and **psychological wellbeing (PWB)**<sup>1,4</sup>, while students with a more integrated or bicultural identity tend to show higher **academic achievement (AA)**<sup>3</sup>.
- Non-English language use can significantly influence strength of ethnic identification<sup>2</sup>. Despite this, not many studies have determined if language competency affects the relationship between biculturalism and wellbeing/achievement, especially among undergraduate students.

## HYPOTHESES

- Individuals who more equally integrate Mexican and Anglo cultures (“bicultural”) demonstrate the highest rates of wellbeing and achievement.
- Bilingual proficiency is a significant moderator in the relationship between bicultural identity and wellbeing/achievement.

## METHODS

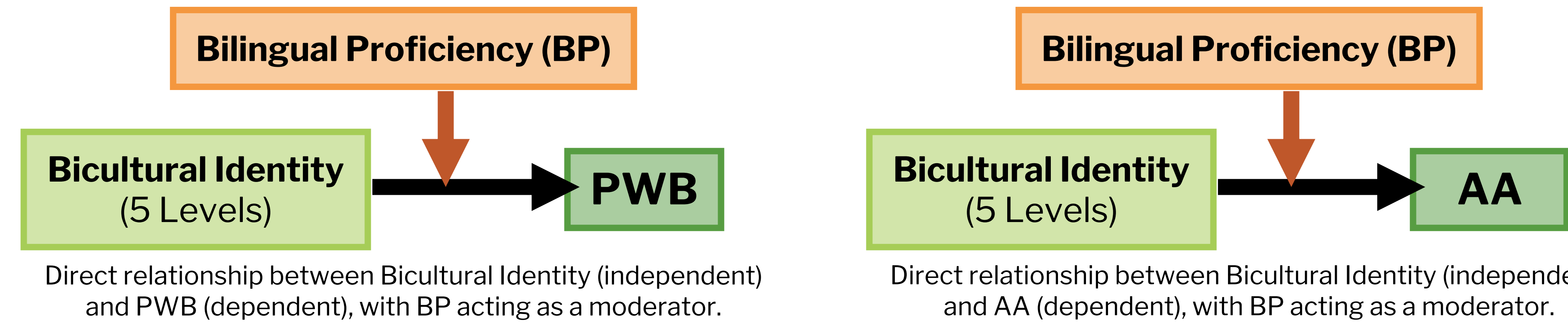
### Participants

- N = 30 UT Austin Mexican-origin undergraduates
- Aged 18-24, 57% Female, 37% Male, 6% Non-binary/other
- 53% White, 10% Black or African American, 7% Asian, 3% Native American, 27% Other or preferred not to say
- Immigrant Generations: 6% First-gen, 53% Second-gen, 30% Third-gen, 7% Fourth-gen, 4% Fifth-gen
- 80% First-gen students

### Procedure & Measures

- Scales presented in random order within anonymous, one-time Qualtrics survey.
- Acculturation Rating Scale for Mexican Americans-II
- English-Spanish Bilingual Language Profile
- Ryff’s Psychological Wellbeing Scale (42-item version)
- AA was assessed through 2 self-report elements
  - (1) Cumulative GPA (as of Fall 2021)
  - (2) Average Spring 2021 grade, based on semester GPA

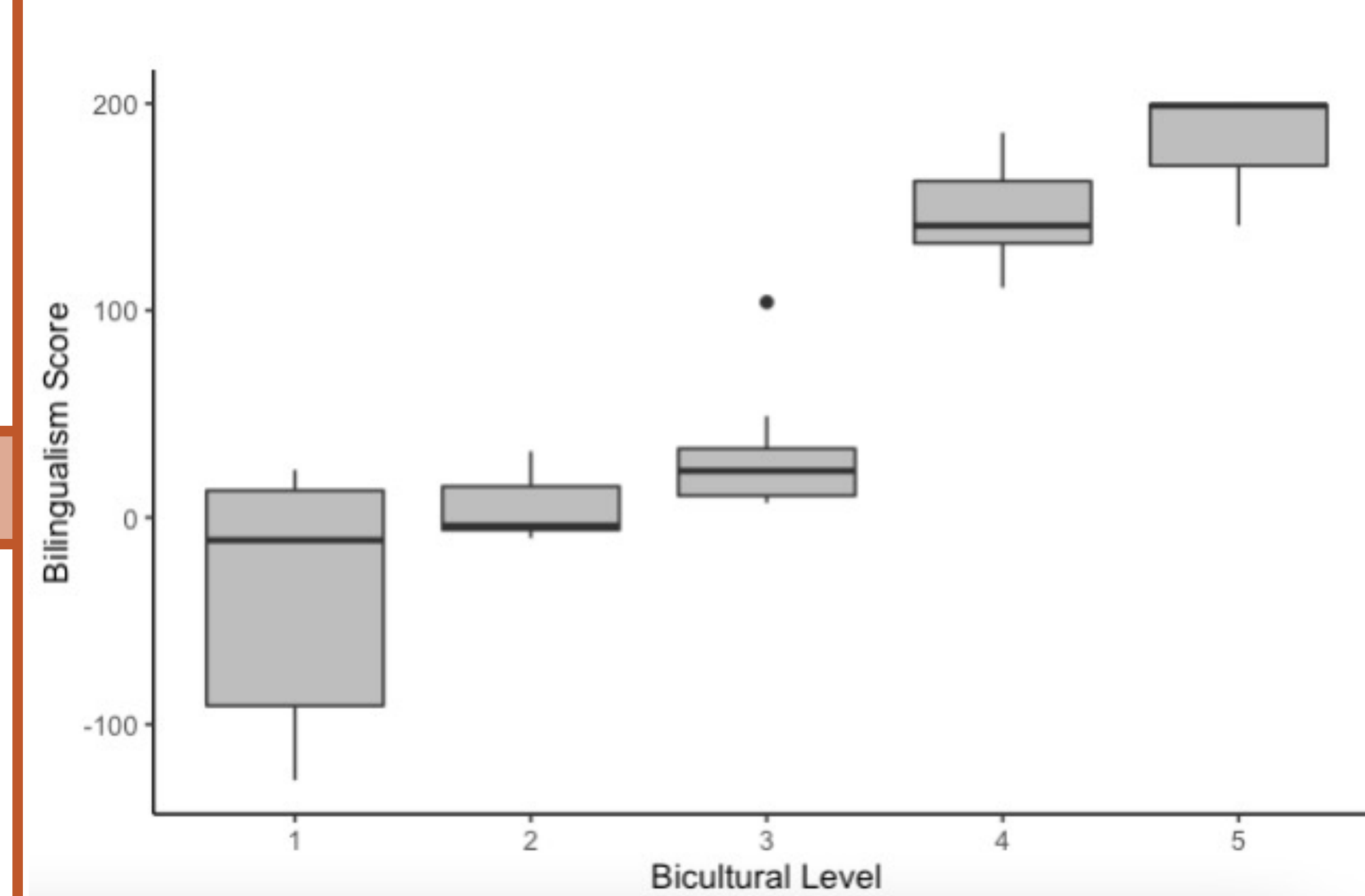
## DESIGN



## EXPECTED RESULTS

Predictor	Sum of Squares	df	F	p
Intercept	45697	1	109.575	1.264e-10***
Bicultural Identity	28816	4	17.274	6.491e-07***
Residuals	10426	25		

Significant differences in PWB found between bicultural groups at the 0.001 level. Tukey’s HSD revealed differences between bicultural students and Anglo-oriented students.



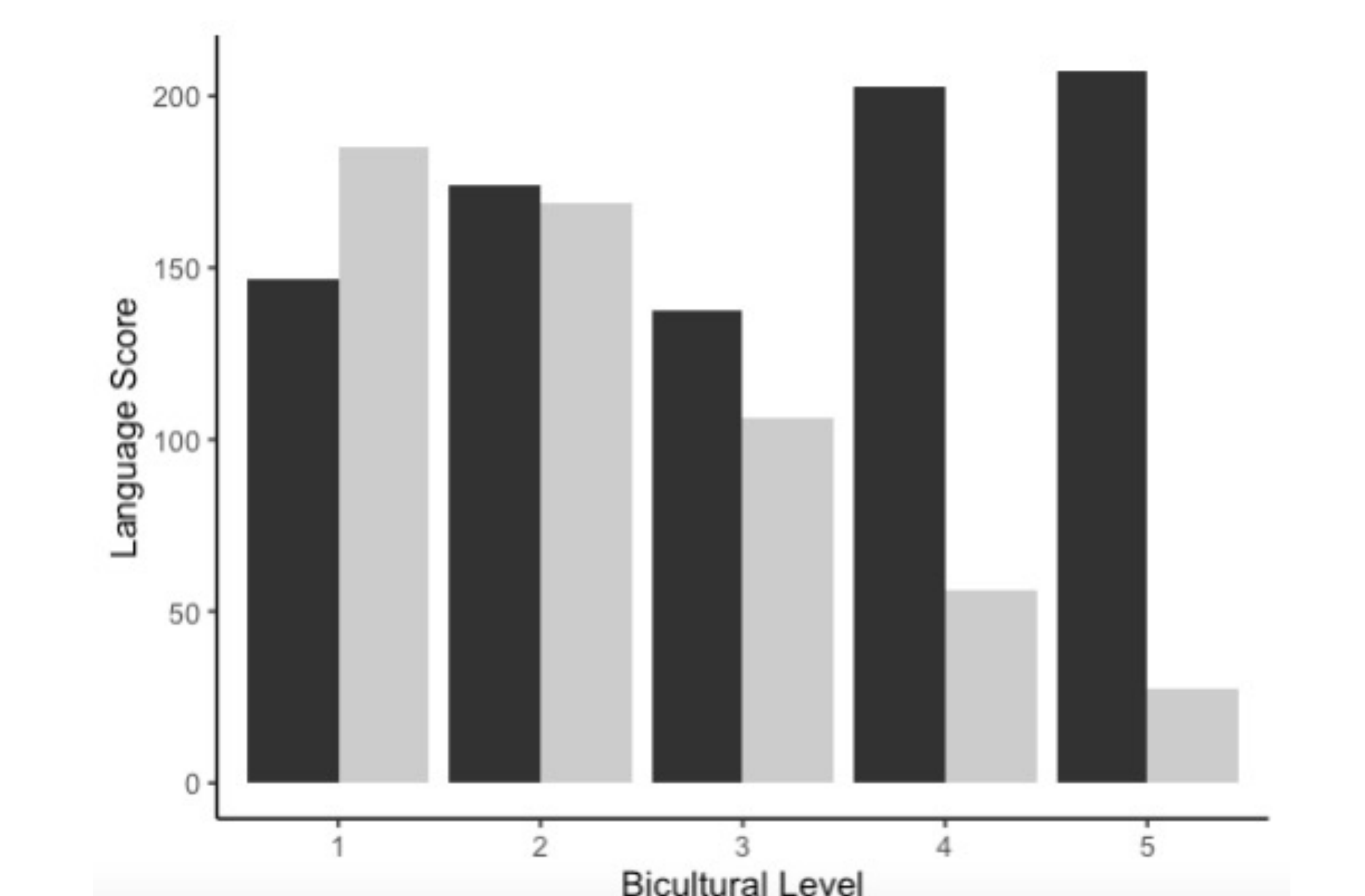
Anglo-oriented students (4 and 5) displayed greater English proficiency while bicultural students (2 and 3) showed more balanced bilingualism. Mexican-oriented students (1) had greater Spanish proficiency.

Predictor	Estimate	Standard Error	t-value	p
Intercept	98.92	7.29	13.569	2.63e-13**
Bicultural Identity	-24.32	3.37	-7.209	1.18e-07**
Bilingualism Score	0.0043	0.049	0.087	0.931
Interaction (Identity*Bilingualism)	0.27	0.019	13.895	1.52e-13**

The regression coefficient estimate for the interaction between Bicultural Identity and Bilingualism score is 0.27 ( $p < .01$ ). Therefore, bilingual proficiency is a significant moderator in the relationship between bicultural identity and PWB.

Predictor	Sum of Squares	df	F	p
Intercept	47.802	1	144.911	6.714e-12***
Bicultural Identity	5.989	4	4.539	0.006803**
Residuals	8.247	25		

Significant differences in cumulative GPA found between bicultural groups at the 0.01 level. Tukey’s HSD revealed differences between bicultural students and Anglo-oriented students.



When broken down by language, Anglo-oriented students (4 and 5) show biggest difference between English proficiency (dark grey) and Spanish proficiency (light grey).

Predictor	Estimate	Standard Error	t-value	p
Intercept	3.27	0.16	20.14	2e-16**
Bicultural Identity	-0.90	0.086	-10.37	9.81e-11**
GPA	0.0011	0.0011	1.061	0.299
Interaction (Identity*GPA)	0.27	0.02	13.662	2.25e-13**

The regression coefficient estimate for the interaction between Bicultural Identity and GPA is 0.27 ( $p < .01$ ). Therefore, bilingual proficiency is a significant moderator in the relationship between bicultural identity and GPA.

## SUMMARY

- Integrated bicultural students demonstrated the strongest association with positive PWB and the highest scores on academic achievement. These scores were significantly different from the traditional (more Mexican-oriented) and assimilated (more Anglo-oriented) groups.
- Bilingual proficiency (BP) was a significant moderator in the relationship between bicultural identity and PWB with strengthening effects. Effect was strongest in the integrated bicultural group, while weaker or insignificant in the traditional and assimilated groups.
- BP was also a significant moderator in the relationship between biculturalism and AA with strengthening effects. Effect was strongest in the integrated group but weaker or insignificant in the other groups.

## CONCLUSIONS

- Results suggest an integrated bicultural identity can be beneficial for Mexican-origin students, with exacerbated impact if the student has high bicultural proficiency.
- Moderating effect may be influenced by language brokering, or the act of translating between languages on behalf of someone (usually family) who is not fluent in the dominant language<sup>2</sup>. Those with high BP are more likely to broker, which naturally strengthens connection to the heritage culture and fortifies familial or social support, which may further influence PWB and AA.

### Future Directions

- Future studies could also assess the impact of language brokering on these relationships as a potential mediator, based on past research.<sup>3</sup>

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