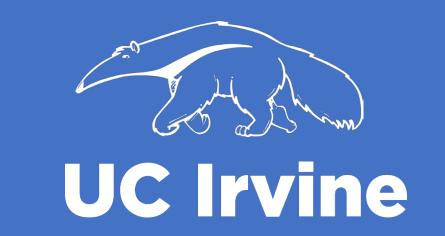# Examining the Associations of Students' Career Goals Survey Response to Writing Response

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BACKGROUND

- Language offers a vast amount of information about an individual's social and personality processes [1, 2, 3]

- Prior studies have found links between personality traits, attitudes, and language use [4, 5]

- To further extend this work, we examined the link between career goal affordance beliefs and language usage using the goal congruency perspective [6]

RESEARCH QUESTIONS

1. **Do students' prosocial goal affordance beliefs towards engineering relate to students' interpersonal and achievement-related language use in their writing about their career plan?**

1. **Do students' agentic goal affordance beliefs towards engineering relate to students' interpersonal and achievement-related language use in their writing about their career plan?**

METHOD

Sample
- 944 undergraduates (69.70% male) enrolled in an introductory engineering course-track

Measures
Prosocial Goal Affordance Beliefs
- 3-item measure oriented toward helping others on a 7-point Likert scale (1 = Not at all to 7 = Very Much) [7]
- e.g., "I want to study engineering because I want to make a contribution to society."

Agentic Goal Affordance Beliefs
- 1-item measure oriented toward the self on a 7-point Likert scale (1 = Not at all to 7 = Very Much) [7]
- e.g., "I want to study physical and engineering sciences because I want a job that makes a lot of money."

Writing Prompt
- Open-ended: "What are your plans after graduation?"

Word Usage
- Examined LIWC categories [2]
- Interpersonal Words: social, family, and affiliation words
- Achievement-Related Words: achievement, reward, and money words

Control Variables
- Number of words from writing prompt, gender, race/ethnicity, and prior achievement (i.e., SAT score)

Data Analysis
- Regression analyses to test the association between LIWC2015 word categories and career goal affordance beliefs

RESULTS RQ1

| | Dependent Variable: | | | | | |
| | Interpersonal Words | | | Achievement-Related Words | | |
	Social Words	Family Words	Affiliation Words	Achievement Words	Reward Words	Money Words
Prosocial	0.06*	-0.08*	0.09**	0.03	-0.05	-0.06
	(0.02)	(0.001)	(0.01)	(0.02)	(0.01)	(0.01)
Word Count	0.40***	-0.06	0.30***	0.42***	0.34***	0.08*
	(0.003)	(0.0002)	(0.002)	(0.002)	(0.002)	(0.001)
Female	0.09**	0.01	0.11***	-0.004	-0.02	0.003
	(0.06)	(0.004)	(0.04)	(0.05)	(0.03)	(0.02)
Asian	-0.0004	-0.03	-0.03	0.02	-0.03	0.04
	(0.07)	(0.01)	(0.05)	(0.06)	(0.04)	(0.02)
Hispanic/Latino	0.002	-0.04	-0.01	0.02	0.03	-0.02
	(0.09)	(0.01)	(0.06)	(0.08)	(0.05)	(0.03)
Other	-0.003	-0.02	-0.04	0.02	0.07	0.05
	(0.13)	(0.01)	(0.09)	(0.11)	(0.08)	(0.04)
SAT Score	-0.07*	-0.01	-0.06	-0.08*	-0.01	-0.01
	(0.0004)	(0.00003)	(0.0003)	(0.0003)	(0.0002)	(0.0001)
Constant	0.000	0.000	0.000	0.000	0.000	0.000
	(0.30)	(0.02)	(0.21)	(0.25)	(0.18)	(0.09)
R^2	0.19	0.01	0.13	0.18	0.12	0.01
F Statistic	30.66***	1.86	19.35***	30.19***	18.99***	1.71

Note. The reference group for gender was male; the reference group for race/ethnicity was White. For each predictor variable, the reported coefficients are as follows (from top to bottom): standardized beta and standard error. *$p < 0.05$ **$p < 0.01$ ***$p < 0.001$.

RESULTS RQ2

| | Dependent Variable: | | | | | |
| | Interpersonal Words | | | Achievement-Related Words | | |
	Social Words	Family Words	Affiliation Words	Achievement Words	Reward Words	Money Words
Agentic	-0.04	-0.04	-0.03	0.004	-0.04	-0.16***
	(0.02)	(0.001)	(0.01)	(0.01)	(0.01)	(0.01)
Word Count	0.41***	-0.07*	0.31***	0.42***	0.33***	0.07*
	(0.003)	(0.0002)	(0.002)	(0.002)	(0.002)	(0.001)
Female	0.09**	0.01	0.11***	-0.01	-0.02	0.01
	(0.06)	(0.004)	(0.04)	(0.05)	(0.03)	(0.02)
Asian	0.01	-0.03	-0.03	0.02	-0.03	0.03
	(0.08)	(0.01)	(0.05)	(0.06)	(0.04)	(0.02)
Hispanic/Latino	0.004	-0.05	-0.01	0.02	0.03	-0.02
	(0.09)	(0.01)	(0.06)	(0.08)	(0.05)	(0.03)
Other	0.002	-0.02	-0.04	0.02	0.06	0.04
	(0.13)	(0.01)	(0.09)	(0.11)	(0.08)	(0.04)
SAT Score	-0.09**	-0.004	-0.07*	-0.08*	0.003	0.01
	(0.0004)	(0.00003)	(0.0003)	(0.0003)	(0.0002)	(0.0001)
Constant	0.000*	0.000	0.000*	0.000*	0.000	0.000
	(0.30)	(0.02)	(0.21)	(0.25)	(0.17)	(0.09)
R^2	0.18	0.01	0.11	0.18	0.12	0.04
F Statistic	30.21***	1.13	17.97***	29.88***	18.82***	4.87***

Note. The reference group for gender was male; the reference group for race/ethnicity was White. For each predictor variable, the reported coefficients are as follows (from top to bottom): standardized beta and standard error. *$p < 0.05$ **$p < 0.01$ ***$p < 0.001$.

RESULTS SUMMARY

RQ1:
- Prosocial goal affordance beliefs were positively associated with social words and affiliation words, and negatively with family words

RQ2:
- Agentic goal affordance beliefs were positively associated with money words and not associated with achievement or reward words

CONCLUSIONS

- Prosocial goal affordance beliefs relate to goals oriented toward others, whereas agentic goal affordance beliefs relate to goals oriented toward the self [6]

- Contrary to our predictions, family words were negatively related to prosocial goal affordance beliefs, which might be due to the measure used (i.e., prosocial goal affordance beliefs ask about making a contribution to society and community rather than specifically family members)

FUTURE DIRECTIONS

- More diverse survey items should be compared with writing responses

- Future research could consider examining group differences in articulation of future plans (e.g., by gender, by college-type, by generational college-going status) to better understanding of diverse students' career plans

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SCAN ME

THANK YOU

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