



RISKY CHOICE, DELAY OF GRATIFICATION, AND STUDENT DEBT ATTITUDES

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BACKGROUND

- Average student graduates with >\$25,000 in student debt
- Debt, debt attitudes, and financial knowledge relate to mental health, academic performance, and student retention
- Harrison, Agnew, & Serido (2015) identified four student debt attitudes:
 - Utility-For-Lifestyle:** how willing a student is to use debt to meet a particular lifestyle
 - Utility-For-Investment:** the extent to which a student believes their debt is an investment for the future
 - Confidence:** awareness of debt, burden, and repayment (i.e., how much a student feels informed of their debt)
 - Anxiety:** negative effect of debt (feelings of unfairness)
- The authors predicted that these attitudes may result from the trait-like characteristics: risk taking and delay of gratification
- Risk taking:** tendency to prefer probabilistic options over certain options (Tversky & Kahneman, 1981).
- Delay of Gratification:** tendency to discount the value of an outcome based on the expected time of its arrival (Green & Myerson, 2004)

Question

Do **risky choice** (i.e., risk tolerance) AND/OR **delay of gratification** (i.e., patience, self control, or temporal discounting) **predict student attitudes toward debt?**

METHODS

Participants

- N = 191 UW-Platteville students
- 66% Female, $M_{age} = 20.1$ years ($SD = 1.80$ years)

Materials

- Demographics**
- Delay of Gratification** (e.g., would you prefer \$22 now or \$35 in 10 days?) – proportion of later choices out of 27 choices
- Risk choice** (e.g., would you prefer \$22 for sure or 50% chance of \$40) – proportion of risky choices out of 27 choices
- Student debt attitudes questionnaire** (Harrison, Agnew, & Serido, 2015), on a 7-point Likert Scale where 1=strongly disagree and 7 = strongly agree
 - Debt as utility for investment (5 items; $M = 5.5$, $SD = 0.83$)
 - Debt as utility for lifestyle (4 items; $M = 2.9$, $SD = 0.1.14$)
 - Debt confidence (3 items; $M = 4.8$, $SD = 0.1.30$)
 - Debt anxiety (5 items; $M = 3.5$, $SD = 1.21$)

RESULTS

Table 1
Bivariate Pearson's correlations among variables of interest

	Anx./Dep.	Risky	Delay Grat.	Debt Invest.	Debt Lifestyle	Debt Conf.	Debt Anxiety
Childhood SES	-0.22**	0.06	0.04	-0.03	-0.09	-0.10	-0.30***
Anxiety/Depression		-0.07	-0.12	-0.11	0.04	-0.13	0.40***
Risky Choices			0.27***	-0.08	-0.15*	0.18*	-0.08
Delay of Gratification				0.04	-0.26***	0.05	-0.12
Debt as Invest					-0.003	0.33***	-0.10
Debt as Lifestyle						-0.01	0.22**
Debt Confidence							-0.07

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; bolded correlations are the main relationships of interest

First we examined bivariate correlations (Table 1 and Figure 1) among our variables of interest and observed significant relationships between

- Risky taking and debt as utility for lifestyle, $r(191) = -0.15$, $p = 0.04$
- Risk taking and debt confidence, $r(191) = 0.18$, $p = 0.01$
- Delay of gratification and debt as utility for lifestyle, $r(191) = -0.26$, $p < 0.001$
- We did not find any significant correlations with debt as utility for investment.

Next, we examined whether delay of gratification or risky choice predicted debt attitudes while controlling for SES, gender, first generation college student status, and anxiety/depression (Table 2).

Table 2
Hierarchical regressions showing (2a) Delay of Gratification predicted Debt as Utility for Lifestyle and (2b) Risky Choice predicted Debt Confidence, when taking into account various demographics.

	Model 2a – Debt as Utility for Lifestyle		Model 2b – Debt Confidence	
	B (SE)	95 % CI	B (SE)	95 % CI
Constant	3.86 (0.58)***	[2.71, 5.00]	5.40 (0.66)***	[4.09, 6.70]
Childhood SES	-0.01 (0.02)	[-0.05, 0.03]	-0.03 (0.02)	[-0.08, 0.01]
Gender	-2.22 (0.18)	[-.57, 0.12]	-0.28 (0.20)	[-0.67, 0.11]
First Generation	0.24 (0.17)	[-0.10, 0.57]	0.27 (0.19)	[-0.11, 0.65]
Anxiety & Depression	-0.002 (0.02)	[-0.05, 0.04]	-0.05 (0.03)	[-0.10, 0.00]
Risky Choice	-0.38 (0.32)	[-1.00, 0.25]	0.94 (0.36)**	[0.22, 1.65]
Delay of Gratification	-1.19 (0.38)**	[-1.94, -0.44]	-0.01 (0.43)	[-0.86, 0.84]
ΔR^2	0.07**		0.04*	
R^2	0.10		0.09	
F	3.27**		2.93**	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (Model 2 shown for both regressions. Model 1 available upon request).

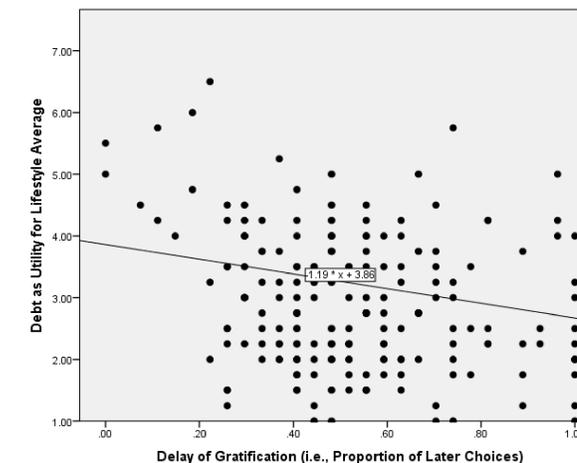


Figure 1. Scatterplot depicting relationship between Delay of Gratification and Debt as Utility for Lifestyle. Trend line from Model 2a in Table 2, taking into account demographics.

Conclusions and Future Directions

- Obtaining a college degree is more necessary to procure a well paying job, yet the price tag of a degree is increasing at a faster rate than inflation
- Student attitudes toward debt may influence their willingness to persist in higher education
- We found that individuals who are **more willing to delay gratification are less likely to view debt as utility for lifestyle** (and less likely to have debt anxiety)
- We found that individuals who are **more willing to make risky choices are more likely to express debt confidence**
- Delay of gratification (i.e., self control) and risky choice are potential “endophenotypes” and screening tools that help identify problem behavior, such as substance abuse
- Differences in delay of gratification and risky choice may also be indicative of student debt attitudes which are important for mental health and retention/recidivism in college students
- Although people tend to have trait-like tendencies to delay gratification or take risks, research also shows that delay of gratification and risky choice are influenced by context
- Future research should focus on interventions to increase delay of gratification and risk tolerance as this could help promote healthier debt attitudes, financial knowledge, mental health, and retention