UNDERGRADUATE RESEARCH

THE POTENCY OF ENVY

Lillian Brink, Sarah Finley,¹ David Gillette², and Datha Damron-Martinez³

Abstract

Economists and other scholars have long explored the role of envy in personal and social decision-making processes. The construct envy functions both as a motivator and deterrent in a variety of disciplines including sociology, psychology, politics, economics, and business. While many studies indicate that envy plays a role in individual and societal behavior, its extent and exact definition remain a source of debate in academic literature. Additionally, most research studies the construct in Baby Boomer and Generation X populations. Using exploratory and descriptive research methods, we investigate current college-aged students' perceptions of envy to discern its pervasiveness and influence on personal, social, and political values.

Key Words: Envy, Jealousy, Sociocultural, Consumer Behavior, Public Economics

JEL Classification Codes: A1, H8, Z1

Introduction

Economics is the science of decision-making: how does envy affect everyday decisions? What role does envy play in consumer behavior and marketing, specifically in the lives of college students? The studies on envy that exist have involved older generations, generations that prioritize different values and face different challenges than college students. This study explores the behaviors and perspectives of current college students regarding the role of envy in their lives – to what degree it is present and how it affects their view of themselves and others.

Literature Review

As a multifaceted aspect of human nature, envy invites an interdisciplinary approach to define, measure, and explore its role in decision-making. Literature from the disciplines of sociology, economics, psychology, political science, and business all address various aspects of envy. To understand envy's nature for the context of our study, we first explored the definition of envy and distinguished it from jealousy within the context of common values held by recent generations.

Defining Envy

When people think of envy they typically think of its semantic cousin, jealousy. Though the definition of envy among scholars remains unresolved definitively, the literature suggests common themes when distinguishing between jealousy and envy. Smith and Kim (2007) and

¹ Students of Truman State University, Bachelor of Arts in Economics

² Professor of Economics, Truman State University, 100 E. Normal Ave., Kirksville, MO 63501

³ Associate Professor of Business Administration, Truman State University, 100 E. Normal Ave., Kirksville, MO 63501

Vecchio (2000) posit that jealousy involves three people—two people who desire the attention of the third—and envy typically involves only two—one who desires the possessions or situation of the second. Another distinction lies in how jealousy and envy alter the perceptions of a desired possession. Smith and Kim as well as Nussbaum (2017) assert that the fear of losing someone or something largely drives jealous feelings. While jealousy derives from the fear of losing a possession, envy is the desire for something that is not and may never be reasonably within grasp. In his comprehensive work on envy, Schoeck (1987) argues that jealous people believe they have the right to what they are protecting because of real or perceived ownership whereas an envious person desires the object, even if it is completely out of reach. Additionally, the jealous person typically withholds or desires something out of spite (p. 18). Vecchio (2000) asserts that these two emotions exist at different levels of ill will: jealousy corresponds to the shallower feeling of anger while envy corresponds to the more intense feeling of hostility. Consequently, jealousy is a more satiable and socially acceptable feeling.

Kets de Vries' (1988) work on the motivating role of envy provided our initial working definition. He describes 4 major components of envy: a desire for emulation because of perceived excellence, a sense of lacking something followed by injured self-esteem, a longing for the desired possession, and a feeling of anger at the possessor. Envious people attribute the success of others to possessions or situations and believe that, given the same possessions or situations, they would be successful as well. Kets de Vries' definition highlights the inherent comparative nature of envy.

Envy in the Modern Political Climate

Contemporary contentious political issues such as redistribution exemplify envy's ability to influence individuals' policy preferences. Sznycer et al. (2017) studied support for redistribution across political parties in the U.S., U.K., and India by presenting participants with two hypothetical situations. They found that respondents are more likely to choose a scenario where the rich are taxed more and the poor receive less money than a situation where the rich are taxed less, even if the poor receive more money. Thus, Sznycer et al. argued that envy of the rich, not compassion for the poor, predicts the desire for redistributive measures. These findings suggest the potency of the sociological theory of relative deprivation, i.e., the idea that when evaluating their own satisfaction, people compare themselves to various reference groups and subsets of society, rather than the whole of society. The feelings of inferiority caused by relative deprivation often evolve into envy for the object the individual lacks.

Assuming social comparison (a key component of envy) affects policy preferences, Yitzhaki's (1979) work on the Gini coefficient and relative deprivation theory provides further insight. His work suggests that societies with slight levels of inequality induce more envy than societies with high degrees of inequality. Ishida et al. (2014) also applied relative deprivation theory when analyzing the China puzzle, the ironic simultaneous increase in unhappiness levels and economic growth in China. Ishida et al. use Yitzhaki's calculations to determine that higher incomes do tend to have higher amounts of satisfaction; however individual marginal satisfaction does not increase with income. Relative deprivation and envy's emphasis on relational comparison help explain why the China puzzle exhibits diminishing marginal satisfaction.

Generational Context

Past scholars focused on envy's influence on society, yet limited literature on specific generational effects exists. Our study focused on college-aged students and their perceptions of

envy. We first established common values and beliefs held by college-aged students (Generation Z and Millennials). We emphasized these generations because of their relative power in the workforce. According to Fry's (2018) report in Pew Research Center, Millennials have now become the largest generation in the labor force, replacing preceding Baby Boomers. Familiarity with these generations' values and envy's motivating role will offer insight into modern consumption, employment, and political behavior.

Recent literature on Millennials differs in its definition of the generation, arguing that birth years range from 1988-1994 (Jones et. al 2012) or 1981 to 1996 (Dimock 2019). Despite these range differences, scholars recognize similar trends in Millennial values and beliefs. Jones et. al conclude that characteristics of younger Millennials include: a concern for job security and unemployment, higher rates of religion affiliation, a concern about the gap between the rich and the poor (and consequently a desire for economic reform), and a loss of faith in the American Dream that hard work pays off (Jones et al. 2012, p. 2). Pew's Social Trends Survey (2010) reflects pessimism among Millennials, reporting that Millennials tend to be unhappier with their earnings compared to past generations and less trustful in people than past generations. Yet despite their dissatisfaction with the present, Millennials remain largely optimistic towards the future.

Generation Z (those born since 1997), like Millennials, are characterized by their diversity, open-mindedness, and technological immersion (Dimock 2019). Fry and Parker (2018) observe that not only is Generation Z likely to be the most diverse generation yet, the data also suggest that they will be more educated and slower to join the workforce than their predecessors. The Deloitte Global Millennial Survey 2020 found that close to half of both generations are stressed all or most of the time and that long-term finances are a top cause of stress. Additionally, job loyalty is increasing, with more Millennials responding that they would like to stay at their employers for five years_rather than two. Parker, Graf, and Igielnik (2019) argue that both Millennials and Generation Z hold similar political and social values. Specifically, they point out that two thirds of Generation Z and Millennials believe the government should resolve more issues, while only 49% of Baby Boomers believe this. Differing values aid in explaining the variation in political preferences (such as redistribution) as well as social comparisons (how and what people envy).

Methodology

Our research included two studies: first, a qualitative pilot questionnaire exploring perceptions of and terminology used when describing the construct of envy; and second, a survey exploring students' feelings of envy and definitions of success and accomplishment. Using language intended to appeal and relate to college-aged students, we administered the surveys at a medium-sized Midwest liberal arts and sciences university. Both surveys were conducted to ensure anonymity and met IRB requirements.

The pilot questionnaire listed seven open-ended questions. We coded the responses of 178 anonymous respondents across various courses, majors, and extracurricular activities and found several themes, including positive relationships involving family, friends, love, etc. and negative connotations of envy. Inter-rater reliability practices allowed us to control for error throughout the process.

Our survey consisted of 37 questions based on the responses from the pilot questionnaire. The first 28 questions used a 5-point Likert scale from strongly disagree (1) and strongly agree (5). The Cronbach's Alphas for questions that addressed the construct of envy measured between 0.62 and 0.81, with an average scale of 0.73. Our overall Cronbach's Alpha was 0.80. To avoid priming, the word "envy" did not appear until page 5 of an 8-page survey. To ensure validity and truthful responses, only later pages asked respondents how envy affects their daily life. Nine questions asked about demographics. Our survey was open to all undergraduate and graduate students with incentives provided, resulting in 282 complete responses. The male to female breakdown of the respondents mirrored that of the university with about a 40:60 male to female ratio. Complete demographic statistics are below in Table 1.

Table 1: Survey Demographics Statistics

*Students were given the following demographic options and asked to self-identify.

Gender	Per	cent
Male	38%	0
Female	62%	6
Socioeconomic Status	Per	cent
Lower-Lower Class	1.49	%
Middle-Lower Class	5.49	%
Upper-Lower Class	3.69	%
Lower-Middle Class	15.	1%
Middle-Middle Class	34.	1%
Upper-Middle Class	24.′	7%
Lower-Upper Class	3.69	%
Middle-Upper Class	11.	5%
Upper-Upper Class	0.79	%
Year in School	Per	cent
First Year	6.19	%
Sophomore	24.7	7%
Junior	28.3	3%
Senior	36.9	9%
Graduate school	3.99	%
Social Views	Perc	cent
Social Liberal	55.2	2%
Moderate	14.3	5%
Social Conservative	21.8	3%
Prefer not to answer	8.6%	/o
Fiscal Views	Perc	cent
Fiscally Liberal	21.5	5%
Moderate	21.1	%
Fiscally Conservative 45.2		2%
Prefer not to answer	12.2	2%
Major		Percent
Arts and Letters		12.4%
School of Business		40.3%
Science and Math		12.7%
		•

Health Sciences	13.1%
Social and Cultural Studies	21.4%

Discussion

Preliminary Analysis

The preliminary questionnaire provided several observations. First, many college students consider envy and jealousy to be synonymous. When asked what they think when hearing the word envy, 30% responded with the word jealousy. Overall, 62% viewed envy negatively; many of their responses to the questions included such words as: malicious, sad, hate, greed, anger, sin, and unhealthy behavior. Another recurrent theme was "happiness." In response to "I will consider myself successful in five years if," the second most frequent response, after "I have a job I enjoy," was "I am happy." To the prompt "I want what others have because," students wrote, "I want to be happy like them." When asked, "Others want what I have because," they replied, "They think I am happy." However, when asked what they envied, students answered with things like relationships or money – happiness was seventh on the list. These students want happiness and when they see people who seem happy, they attribute that happiness to whatever "thing" those people have, transferring their envy from the person to that "thing." Lastly, people tend to focus on the possession they do not have. Sometimes in response to "When I think of things for which I am envious, they include," students answered with "I envy people who have...," shifting the focus from the object to the person and demonstrating the comparative nature of envy that other research suggests (see Ishida et al., 2014; Kets de Vries, 1988; Schoeck 1987; Vecchio, 2000; and Yitzhaki, 1979).

Cross Tabulation Analysis

Although we explored cross tabulation for all the demographics, the most noteworthy findings came from the following three areas. Significant tabulations are in the text; additional tabulations are presented in the appendix.

Socioeconomic Background

Cross tabulating socioeconomic classes with income category, political leaning, and class standing, our data uncovered differing attitudes toward career aspirations and motivations. Seventy percent or more of the respondents in all the income categories agreed with the statement "I will consider myself successful five years after graduation if I have a job that I enjoy" (see Appendix Figure 1).

The statement "I want what others have so I can be happy like them" yielded contrasting results with 100% of the highest income class in strong agreement and 75% of the lowest income class in strong disagreement (see Figure 2).

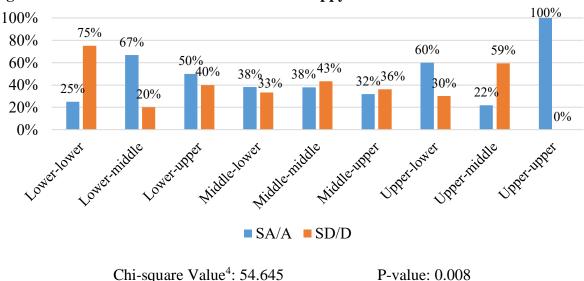


Figure 2: I want what others have so I can be happy like them

The other statement relating to perceived happiness shows a similar pattern. The percent of respondents who agree with the statement, "Other people want what I have because they think I'm happy" increases as income increases. When the groups are combined into the larger socioeconomic categories (lower, middle, and upper), the average increases by 20% as the wealth increases. These two statements relating to happiness had statistically significant chi-squares with p-values of 0.008 and less than 0.001 (see Figures 2 and 3). In both Figures 2 and 3, note that the largest response differences are driven by the socioeconomic extremes.

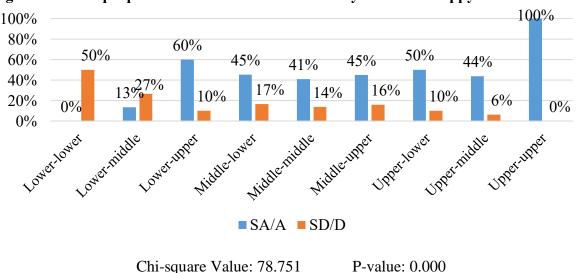


Figure 3: Other people want what I have because they think I'm happy

Lastly, as hypothesized, more respondents agreed with the statement, "I envy those with money" than disagreed in all income categories except the highest two (see Appendix Figure 4).

⁴ Chi-square statistics are reported for contingency table tests.

Fiscal Ideologies

When discussing both fiscal ideologies and social ideologies, we averaged the percentages for the two liberal categories and for the two conservative categories and reported the average as "liberal" or "conservative" respectively. Combining the categories shows the trends more clearly and increases readability.

The cross tabulation for the statement "Feelings of envy bother me constantly" showed agreement across ideologies– when combining moderate conservatives and conservatives, 83% agreed, as did 77% of moderate liberals and liberals (see Appendix Figure 5). High levels of disagreement and low levels of agreement (ranging from 3 to 13%) support the idea that envy has a negative connotation and baggage associated with it.

Respondents in each of the ideologies agreed with the statement, "The internal drive to be the best that I can be drives my ambition," with combined conservatives agreeing more frequently (87%) than combined liberals (75%) (see Appendix Figure 6).

In response to "When I envy others, I focus on how I can become equally successful in the future," we found slightly more consistent results across all ideological categories. Conservative was the only category exceeding 50% (see Appendix Figure 8). This agrees with earlier findings about an internal drive to do one's best.

More than 40% of respondents in each ideological category disagreed with the statement, "I can't have what I want because of factors outside of my control," consistent with the idea of an internal locus of control (see Figure 9). Strong and moderate conservatives show the highest levels of disagreement at 69% and 55% respectively. Our findings suggest, then, that more conservatives believe they have control over the opportunity for personal/individual improvement than liberals. This statement had a statistically significant chi-square with a p-value of 0.090.

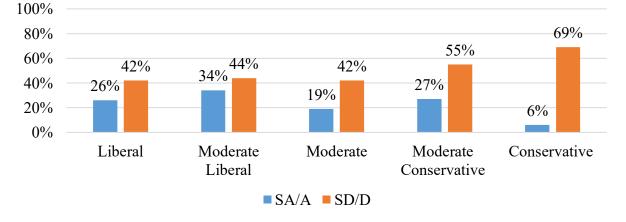


Figure 9: I can't have what I want because of factors outside of my control

Social Ideologies

Liberals (54%) were the most likely to agree with the statement, "I am troubled by feelings of my own inadequacy," followed by moderates (45%), and then, conservatives (38%) (see Figure 10). Similarly, in responding to "When I envy others, I focus on becoming equally successful in the future," liberal respondents agreed most strongly (53%), and conservative respondents disagreed most strongly (44%) (see Figure 11). Additionally, conservatives agree

Chi-square Value: 28.905

P-value: 0.090

the most (31%) and liberals the least (12%) with the statement, "I am not the type of person who often compares myself with others" (see Figure 12).

"I envy those with high academic standing" yielded similar responses across social ideologies (see Figure 13). Liberals had slightly higher agreement (48%), followed by moderates (43%) and then conservatives (36%), but in no category did 50% of the respondents agree. Fifty percent of moderates expressed disagreement, higher than any other social ideology by at least 7 percentage points.

Regression Analysis

Given integer valued variables, we performed our analysis using ordered logit regressions. Though there were a variety of interesting relationships to analyze, we chose the following themes to discuss because of their possible associations with envy.

Money

The statements significantly correlated with "I envy those with money" display a moneycentered definition of success. The statements "I pay a lot of attention to my success compared to others' success" and "I will consider myself successful five years after graduation if I am financially independent" positively correlate with the idea of success and money. The focus on high academic standing likely comes from the assumption that those who do well in school will have a higher income when they graduate.

The statements "I always pay a lot of attention to my success compared to others' success" and "Other people want what I have because they think I am in a good situation" demonstrate the comparative nature of envy. While respondents compare themselves with others, they do not see other people looking at them in the same way. Respondents envy, but do not see themselves as enviable.

The negative correlation with "Other people want what I have because they think I am in a good situation" demonstrates that the respondents link money with being in a good situation. They do not feel like they are in a good situation and they envy money because it can make their situation better. "I envy those with money" is also negatively correlated with "I can't have what I want because I have not put in the work it requires." A possible reason for the respondents not having what they want, even given the presence of money, suggests the influence of an outside factor instead of just the need to work harder or longer. While respondents feel like they have worked hard, they still lack the money, and the success, they seek.

The statements regarding how frequently respondents report feelings of envy correlate differently with the "I envy those with money" statement. "Feelings of envy bother me constantly" has a significant positive correlation whereas "Feelings of envy bother me daily" has a significant negative correlation. This difference in coefficient signs could be the result of respondents conceptualizing constantly and daily as two separate time intervals, suggesting these relationships warrant further research.

Table 2: Money Regression Table

Statement: *I envy those with money*

· · · · · ·	Coef.	St. Err.	T-value	P-value	Sig.
I envy those with high academic standing	0.675	0.129	5.22	0.000	***
I can't have what I want because I don't have the money to attain it	0.619	0.129	4.81	0.000	***
I always pay a lot of attention to my success compared to others' success	0.379	0.152	2.49	0.013	**
Feelings of envy bother me constantly	0.376	0.203	1.85	0.065	*
I will consider myself successful five years after graduation if I am financially independent.	0.337	0.177	1.90	0.057	*
I envy those with a strong romantic relationship	0.227	0.113	2.01	0.044	**
Feelings of envy bother me daily	-0.418	0.216	-1.93	0.053	*
Other people want what I have because they think I am in a good situation	-0.353	0.184	-1.92	0.055	*
I do not want what others have	-0.334	0.175	-1.90	0.057	*
I can't have what I want because I have not put in the work it requires	-0.215	0.118	-1.82	0.069	*
*** p<.01, ** p<.05, * p<.1; Pseudo r-squared	d, 0.244; Ch	bi-square, 206.	164		

Feelings of Inferiority

Further statistical analysis supports the hypothesis that envy is comparison-based. When run with the statement, "The truth is that I generally feel inferior to others," statements demonstrating feelings of inequality and unfairness surfaced with high statistical significance and positive correlations:

"I am troubled by feelings of my own inadequacy."

"Compared to my own success, it is so frustrating to see people succeed so easily."

"I want what others have so I can be happy like they are."

These correlations demonstrate the more negative side of envy in both personal behavior and the perception of others.

"The truth is that I generally feel inferior to others" was also significantly correlated with "I want what others have so I can be happy like they are." This assumes that the person attributes the other person's happiness to something they have. Because the respondent does not have the object, they feel unhappy. These correlations suggest that college-aged students feel inferior when they lack what others have. The respondents viewed those possessions as means to the end of happiness, success, and fitting in. The students seem focused on an external locus of control – they do not have what others have, so they cannot be like others and are therefore inferior.

Unsurprisingly, "Other people want what I have because they admire me" and "I am not the type of person who often compares myself with others" are negatively correlated with "The truth is that I generally feel inferior to others." Once again, the negative, comparative nature of envy rears its head.

	Coef.	St. Err.	T-value	P-value	Sig.
I am troubled by feelings of my own inadequacy	1.08	0.16	6.75	0.000	***
Compared to my own successes, it is so frustrating to see some people succeed so easily	0.554	0.154	3.60	0.000	***
<i>I want what others have so I can be happy like they are</i>	0.477	0.17	2.80	0.005	***
I do not want what others have	0.335	0.2	1.68	0.093	*
<i>I will consider myself successful five years after graduation if I am financially independent</i>	0.324	0.194	1.67	0.095	*
Other people want what I have because they admire me	-0.516	0.207	-2.49	0.013	**
I am not the type of person who often compares myself with others	-0.296	0.154	-1.92	0.055	*

Table 3: Feelings of Inferiority Regression Table

Statement: The truth is that I generally feel inferior to others

Sources of Happiness vs. Sources of Success

As demonstrated in the following tables, success and happiness are viewed as closely related. Many of the sources of happiness have to do with succeeding, avoiding failure, and becoming equally successful as others in the future. While the statement, "I want what others have so I can fit in with them," is included, the respondents' recipe for happiness is surprisingly not relationship-oriented. Of the four relationship-oriented statements, only "I envy those with a strong romantic relationship" is significantly correlated. For respondents, happiness is measured by how they are perceived and the desire for it driven by feeling less than others. They are less concerned about having friendships than they are about "fitting in."

An interesting note is that, while "I want what others have so I can succeed as well" is positively correlated, "when I envy others, I focus on how I can become equally successful in the future" is negatively correlated. Potentially, this difference is because the latter statement is more action-based. Being successful because you have the things successful people have sounds better than waiting and working to become successful in the future. This is further corroborated by the negative correlation with "I can't have what I want because I have not put in the work it requires."

The positive correlation with the statement "The truth is that I generally feel inferior to others" and the negative correlation with the statement "I am troubled by feelings of my own inadequacy" seem contradictory. It is possible that respondents differentiated between the definitions of inferior and inadequate; inferior is a reflection of inherent self-worth but inadequate is more linked to lacking skills. Another potential explanation is that people react differently to the "I am troubled" part of the inadequacy statement. Perhaps people see

themselves as inferior and inadequate, but accept it rather than being troubled, especially given the younger generations' proclivity to self-deprecation.

Table 4: Sources of Happiness Regression Table

Statement: I want what others have so I can be happy like them

rr. T-value	P-value	Sig.
6 4.63	0.000	***
8 3.32	0.001	***
5 3.67	0.000	***
5 3.66	0.000	***
5 2.75	0.006	***
9 2.01	0.044	**
2 2.31	0.021	**
7 -2.57	0.010	**
5 -2.94	0.003	***
1 -2.38	0.017	**
7 -2.23	0.026	**
	7 -2.23 89	

Further solidifying the relationship between happiness and success, the statement "I want what others have so I can succeed as well" is significantly correlated with many of the same statements as "I want what others have so I can be happy like they are."

Despite the strong connection between happiness and success, they are not synonymous. While "when I envy others, I focus on how I can become equally successful in the future" is negatively correlated with the happiness statement, it is positively correlated with the success statement (see Table 5). Perhaps happiness is viewed as a present state, while success is more long-term.

Another difference is the presence of "I envy those with romantic relationships" on the sources of happiness table, but "I envy those with high academic standing" on the sources of success table. Earlier tables have corroborated the correlation between success and high academic standing, but, despite the correlation between success and happiness, high academic standing is not strongly correlated with happiness. Instead, romantic relationships are.

	Coef.	St. Err.	T-value	P-value	Sig.
I want what others have so I can be happy like they are	0.808	0.174	4.63	0.000	***
I want what others have so I can fit in with them	0.443	0.149	2.96	0.003	***
When I envy others, I focus on how I can become equally successful in the future	0.428	0.139	3.07	0.002	***
<i>I can't have what I want because of factors out of my control</i>	0.264	0.148	1.79	0.074	*
I envy those with high academic standing	0.257	0.145	1.78	0.076	*
I do not want what others have	-0.38	0.186	-2.04	0.041	**

Table 5: Sources of Success Regression Table

Statement: I want what others have so I can succeed as well

Sense of Frustration

When looking at the group of statements related to a sense of frustration – either with oneself or with others – envy is a strong underlying theme.

The statement "I am troubled by feelings of my own inadequacy" asks respondents to consider their frustration with themselves. The corresponding statistically significant relationships listed below follow a foreseeable negative path. Respondents who expressed concern about feelings of inadequacy were more likely to feel inferior to others, experience feelings of envy daily, and be driven by a fear of failure. The high negative correlation found with "I want what others have so I can be happy like they are," however, suggests that those who feel inadequate are not necessarily seeking out happiness to alleviate these feelings of inadequacy (such as needing to work harder, have more money, or for factors out of the respondents' control) are not statistically significant. This helps to explain why these regressions imply such a negative and unproductive manifestation of envy; as the respondents cannot identify the specific obstacles they need to overcome in order to mitigate these feelings of inadequacy.

	Coef.	St. Err.	T-value	P-value	Sig.
<i>The truth is that I generally feel inferior to others</i>	1.188	0.175	6.8	0.000	***
Feelings of envy bother me daily	0.845	0.226	3.74	0.000	***
A fear of failure drives my ambition	0.342	0.133	2.58	0.010	***
Feelings of envy bother me infrequently	0.299	0.118	2.53	0.011	**
I often consider my situation in life relative to that of other people	0.284	0.155	1.82	0.068	*
I want what others have so I can be happy like they are	-0.509	0.167	-3.04	0.002	***
Other people want what I have because they admire me	-0.455	0.197	-2.31	0.021	**
I do not want what others have	-0.395	0.185	-2.14	0.033	**

Table 6: Feelings of Inadequacy Regression Table

Statement: I am troubled by feelings of my own inadequacy

Shifting away from personal feelings of frustration, the statement "Compared to my own successes, it is so frustrating to see some people succeed so easily" looks at how respondents perceive their frustrations with others. Yet again, negative associations permeate this regression. Feelings of unfairness, inferiority, and constant envy are all positively correlated with this sense of frustration. The negative correlation with the statement "I want what others have so I can fit in with them" suggests that once this feeling of frustration about others' success overwhelms a respondent, they no longer care as much about the relational aspect of success (as demonstrated by Table 5). Instead, they appear to focus more on the unattainable individual talent that these successful people have.

Table 7: Sense of Frustration Regression Table

Statement: Compared to my own successes, it is so frustrating to see some people succeed so easily

	Coef.	St. Err.	T-value	P-value	Sig.
It somehow doesn't seem fair that some people seem to have all the talent	0.823	0.142	5.8	0.000	***
<i>The truth is that I generally feel inferior to others</i>	0.620	0.168	3.68	0.000	***
Other people don't want what I have	0.603	0.193	3.12	0.002	***
Other people want what I have because they think I'm happy	0.487	0.186	2.62	0.009	***
Feelings of envy bother me constantly	0.452	0.202	2.24	0.025	**
I will consider myself successful five years after graduation if I have a job that I enjoy	0.326	0.159	2.05	0.040	**
<i>I</i> want what others have so <i>I</i> can fit in with them	-0.321	0.139	-2.31	0.021	**
*** p<.01, ** p<.05, * p<.1; Pseudo r-squared, 0.	244; Chi-s	quare, 195.7	754		

Consequently, the statement "It doesn't seem fair that some people have all the talent" has the highest positive correlation with "Compared to my own successes, it is so frustrating to see some people succeed so easily". This regression also illustrates the more material-based side of success, as respondents envy those with high academic standing and see money as a means to attaining what they want.

Table 8: Sense of Fairness	Regression Table
-----------------------------------	-------------------------

	_	
Statement: It doesn't seem	fair that some people	have all the talent

	Coef.	St. Err.	T-value	P-value	Sig.
Compared to my own successes, it is so frustrating to see some people succeed so easily	0.871	0.143	6.1	0.000	***
<i>I want what others have so I can fit in with them</i>	0.564	0.138	4.09	0.000	***
I envy those with high academic standing	0.287	0.134	2.15	0.032	**
I can't have what I want because I don't have the money to attain it	0.268	0.132	2.03	0.042	**
<i>When I hear the word "envy" I think of an unhealthy, negative behavior</i>	-0.348	0.156	-2.23	0.026	**
Other people want what I have because they think I'm happy	-0.313	0.183	-1.71	0.087	*
*** p<.01, ** p<.05, * p<.1; Pseudo r-squared,	0.215; Chi-	square, 172.	475		

Limitations

Although our study gives insight into the role of envy in college students' lives, it is limited, particularly in scope. Our study focused on college-aged students, instead of the full age range of Millennials and Generation Z. We studied specifically those at a traditional 4-year liberal arts university, which limits the generalizability of the work we have done. Future work will address this concern with a subsequent survey from the same student body, and the administration of that same survey at a different university with a high rate of non-traditional students.

The nature of the study also constrains the implications of the regression results. Our data allow regressions to measure the correlation between certain attitudes and beliefs held by respondents but lack measures to adequately address causality between them. For this reason, coupled with simultaneity problems, we could not include regressions analyzing demographic variables such as those explored in the crosstabulation analysis.

Conclusion and Future Research

The role of envy in the behavior of college-aged students is under-researched and holds great potential to explain student motivations and decisions. Because envy colors people's responses to their social position compared to others, it influences their desire for happiness, the possessions they consider important, and the policy measures they support. Although our literature review posited envy's potential as a positive motivator, our respondents largely associated envy with negative connotations.

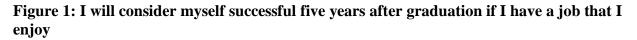
This research contributes to the understanding of individual motivation and to the role that the construct envy plays in this motivation. Additionally, it contributes to the understanding of a specific and understudied population in this type of research: college-aged students consisting of Millennials and Generation Z. Our research so far has focused on the micro side of envy—how it causes people to personally respond. Our continued research studies how personal feelings of envy affect people's views on how others do or should react to envy, specifically considering current debates about salary differentials, income distribution, and government responsibilities therein.

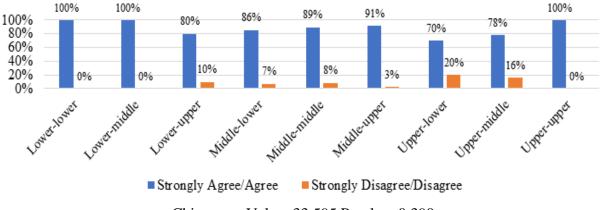
References

- Brennan, Geoffrey. 1973. "Pareto Desirable Redistribution: The Case of Malice and Envy." *Journal of Public Economics*, 2(2): 173-183.
- Dimock, Michael. 2019. "Defining generations: Where Millennials end and Generation Z begins." *Pew Research Center*. <u>https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/</u>.
- The Deloitte Global Millennial Survey 2020. Deloitte. https://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html.
- Fry, Richard. 2018. "Millennials are the largest generation in the U.S. labor force." *Pew Research Center*. <u>https://www.pewresearch.org/fact-tank/2018/04/11/millennials-largest-generation-us-labor-force/</u>.
- Fry, Richard and Kim Parker. 2018. "Early Benchmarks Show 'Post-Millennials' on Track to Be Most Diverse, Best-Educated Generation Yet." *Pew Research Center: Social & Demographic Trends*. <u>https://www.pewsocialtrends.org/2018/11/15/early-benchmarks-show-post-millennials-on-track-to-be-most-diverse-best-educated-generation-yet/</u>.
- Garner, Alan. 1986. "Equity in Economic Relationships: Towards a Positive Theory." *Journal* of Economic Behavior and Organizations, 7(3): 253-264.
- Hanley, Ken. 1992. "The Problem of Social Cost: Coase's economics versus ethics." *Journal of Applied Philosophy*, 9(1): 77-83.
- Ishida, Atsushi, Kenji Kosaka, and Hiroshi Hamada. 2014. "A Paradox of Economic Growth and Relative Deprivation." *Journal of Mathematical Sociology*, 38(4): 269-284.
- Jones, Robert, Daniel Cox, and Thomas Banchoff. 2012. "A Generation in Transition: Religion, Values, and Politics among College-Age Millennials." *Public Religion Research Institute, Inc. and Georgetown University's Berkley Center for Religion, Peace, and World Affairs,* <u>https://berkleycenter.georgetown.edu/publications/millennial-values-</u> <u>survey-report</u>
- Kets De Vries, Manfred F.R. 1992. "The Motivating Role of Envy: A Forgotten Factor in Management Theory." *Administration & Society*, 24(1): 41+ <u>http://bi.gale.com.ezproxy.lib.apsu.edu/essentials/article/GALE%7CA12401257/62651a6</u> <u>d6cd714fe4c6c4ee203e813b4?u=tel_a_apsu</u>.
- Kochhar, Rakesh and Anthony Cilluffo. 2018. "Income Inequality in the U.S. Is Rising Most Rapidly Among Asians." *Pew Research Center*. <u>https://www.pewsocialtrends.org/2018/07/12/income-inequality-in-the-u-s-is-rising-most-rapidly-among-asians/</u>.
- Le Grand, Julian. 1984. "Equity as an Economic Objective." *Journal of Applied Philosophy*, 1(1): 39-51.

- Levine, David. 1989. "Cohesiveness, Productivity, and Wage Dispersion." *Institute for Research on Labor and Employment: Working Paper Series*. UC Berkeley <u>https://escholarship.org/uc/item/8kd4d0p4</u>.
- Morgan-Knapp, Christopher. 2014. "Economic Envy." *Journal of Applied Philosophy*, 31(2). doi: 10.1111/japp.12045.
- Mui, Vai-Lam. 1994. "The economics of envy." Journal of Economic Behavior and Organization, 26(3): 311-336.
- Norman, Richard. 2002. "Equality, Envy, and the Sense of Injustice." *Journal of Applied Philosophy*, 19(1): 43-54. doi: 10.1111/1468-5930.00203.
- Nussbaum, Martha. 2017. "Martha Nussbaum on Alexander Hamilton." *The Library of Economics and Liberty*, <u>http://www.econtalk.org/martha-nussbaum-on-alexander-hamilton/</u>.
- Parker, Kim, Nikki Graf, and Ruth Igielnik. 2019. "Generation Z Looks a Lot Like Millennials on Key Social and Political Issues." *Pew Research Center: Social & Demographic Trends* <u>https://www.pewsocialtrends.org/2019/01/17/generation-z-looks-a-lot-like-</u> <u>millennials-on-key-social-and-political-issues/</u>.
- Pignol, Claire. 2012. "Rousseau's notion of envy: A comparison with modern economic theory." *The European Journal of the History of Economic Thought*, 19(4): 529-549.
- Pew Research Center. 2010. "Millennials: A Portrait of Generation Next. Confident. Connected. Open to Change." <u>https://www.pewresearch.org/wp-</u> content/uploads/sites/3/2010/10/millennials-confident-connected-open-to-change.pdf.
- Schoeck, Helmut. 1987. Envy: A Theory of Social Behaviour. Indianapolis: Liberty Fund.
- Smith, Richard H., and Sung Hee Kim. 2007. "Comprehending Envy." *Psychological Bulletin* 133(1): 46-64. doi:10.1037/0033-2909.133.1.46.
- Smith, Richard H. 2008. Envy: Theory and Research. New York, NY: Oxford University Press.
- Sussangkarn, Chal and Steven M. Goldman. 1983. "Dealing with Envy." Journal of Public Economics, 22(1): 103-112.
- Sznycer, Daniel, Maria Florencia Lopez Seal, Aaron Sell, Julian Lim, Roni Porat, Shaul Shalvi, Eran Halperin, Leda Cosmides, and John Tooby. 2017. "Support for redistribution is shaped by compassion, envy, and self-interest, but not a taste for fairness." *Proceedings* of the National Academy of Sciences of the United States of America, 114(31): 8420-8425. doi: 10.1073/pnas.1703801114.
- Vecchio, Robert. 2000. "Negative Emotion in the Workplace: Employee Jealousy and Envy." International Journal of Stress Management, 7(3): 161-179. doi: 10.1023/A:1009592430712.
- Yitzhaki, Shlomo. 1979. "Deprivation and the Gini Coefficient." *The Quarterly Journal of Economics*, 93(2): 321-324.

Appendix





Chi-square Value: 33.595 P-value: 0.390

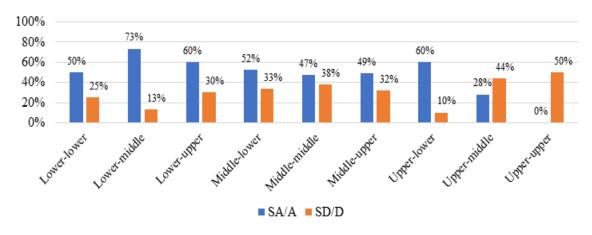


Figure 4: I envy those with money

Chi-square Value: 31.662 P-value: 0.484

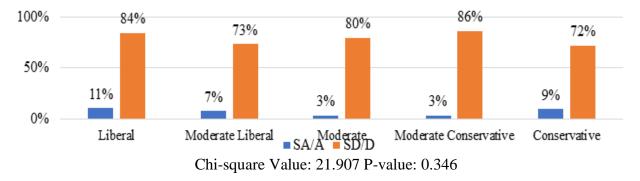
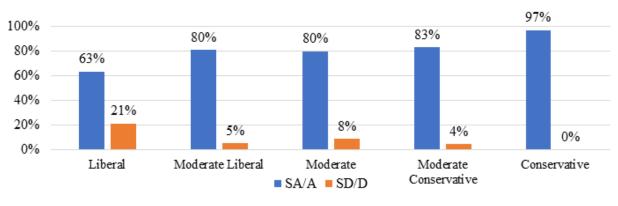


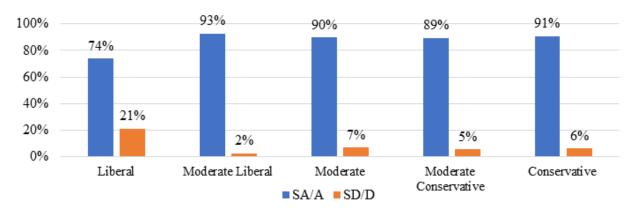
Figure 5: Feelings of envy bother me constantly

Figure 6: The internal drive to be the best that I can be drives my ambition

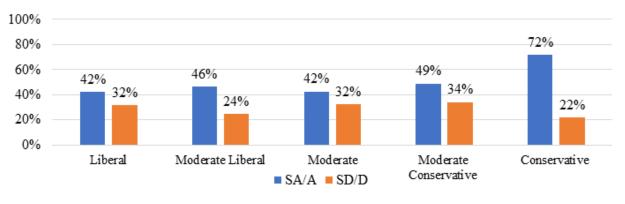


Chi-square Value: 22.923 P-value: 0.293

Figure 7: I will consider myself successful in five years if I am financially independent

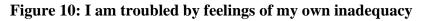


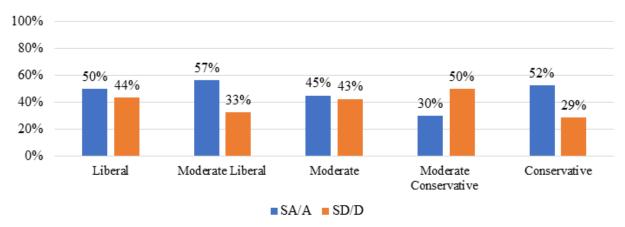
Chi-square Value: 17.183 P-value: 0.308



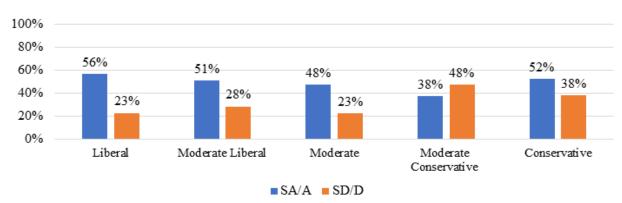


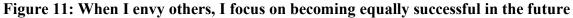
Chi-square Value: 24.610 P-value: 0.217





Chi-square Value: 26.869 P-value: 0.139





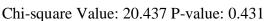
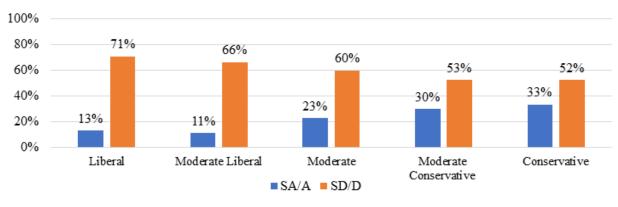
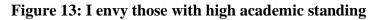
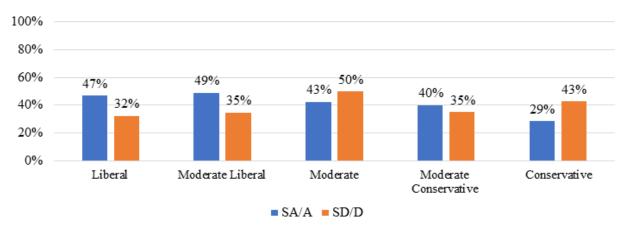


Figure 12: I am not the type of person who often compares myself with others



Chi-square Value: 21.778 P-value:0.353





Chi-square Value: 27.464 P-value: 0.123