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Generational differences in American students' reasons for going to college, 1971–2014: The rise of extrinsic motives

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ABSTRACT

We examined generational differences in reasons for attending college among a nationally representative sample of college students ($N = 8$ million) entering college between 1971–2014. We validated the items on reasons for attending college against an established measure of extrinsic and intrinsic values among college students in 2014 ($n = 189$). Millennials (in college 2000s–2010s) and Generation X (1980s–1990s) valued extrinsic reasons for going to college (“to make more money”) more, and anti-extrinsic reasons (“to gain a general education and appreciation of ideas”) less than Boomers when they were the same age in the 1960s–1970s. Extrinsic reasons for going to college were higher in years with more income inequality, college enrollment, and extrinsic values. These results mirror previous research finding generational increases in extrinsic values begun by GenX and continued by Millennials, suggesting that more recent generations are more likely to favor extrinsic values in their decision-making.

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Cultural change; decision-making; extrinsic values; generations; intrinsic values

Research in cross-cultural psychology establishes that cultures and individuals mutually constitute one another (Markus & Kitayama, 2010). The same applies to change over time within one region, with the culture shifting and individual attitudes reflecting that change (Twenge, 2014). For example, changes in both cultural products and in individuals' characteristics suggest that cultural individualism has increased over the last few decades in the United States (e.g., Greenfield, 2013; Twenge, Campbell, & Gentile, 2012b). Adolescents and young adults are often the bellwether of generational shifts, as their life views are still being shaped (Stewart & Healy, 1989). Thus, cultural change produces generational differences.

One important but under-examined area of generational differences is in decision-making and motivation. In this paper, we explore generational differences in reasons for attending college by using time-lag samples of entering college students from 1971–2014 that include Boomers (approximately 1944–1960), Generation X (approx. 1961–1979), and Millennials (approx. 1980–1994) surveyed at the same age (note that the generational cutoffs and labels are arbitrary but are useful for identifying those born around the same time; e.g., Twenge, 2014).

How might Millennials differ from previous generations in their reasons for attending college? Some have speculated that Millennials are more likely to have a “consumer mentality,” believing they will pay their tuition in exchange for receiving the degree they need to get the job they want (Delucchi & Korgen, 2002). Academic values may also have shifted, with college students in the 2000s spending considerably less time studying than they did in earlier decades (Babcock & Marks, 2011). A higher percentage of high school graduates now enroll in college, which might have created a shift in values in the population, perhaps toward a more practical orientation. Income inequality may also impact value shifts, with concerns about “making it” financially more acute. Others have

observed that current students see the classroom as transactional and have little interest in learning anything that they will not be tested on (Hassel & Lourey, 2005). These observations suggest that Millennial college students, compared to those from earlier generations, are less interested in learning and more interested in the quantifiable outcomes of a college degree, such as more money and a better job.

However, it is difficult to determine generational differences in college students' views from perceptions or observations alone. Perhaps older people view young people differently as they age, or perhaps they selectively remember their own youth. In fact, some psychologists have questioned the idea that generational differences exist at all, hypothesizing that any perceptions of differences may be based on the biases of older people (Trzesniewski & Donnellan, 2010). To competently answer the question of whether college students' views on their own education have shifted, two things are necessary: (1) Survey data from college students themselves that spans the decades and generations, to ensure responses are not influenced by recall or perception; and (2) a theoretical framework to understand and validate items on students' reasons for attending college.

A useful theoretical framework for understanding reasons for going to college is extrinsic and intrinsic values (e.g., Grouzet et al., 2005; Kasser & Ryan, 1993, 1996). **Intrinsic values are those important to inherent psychological needs such as self-acceptance, affiliation, and community; in contrast, extrinsic values are those contingent on external feedback such as money, fame, and image.** The observations above posit, at base, that college students' views of the purpose of their education have become more extrinsic and less intrinsic. If so, this may impact their success at college. Students who chose to attend college for intrinsic reasons (e.g., personal satisfaction in accomplishing difficult academic activities) achieved a higher GPA and were more likely to intend to continue attending (Guiffrida, Lynch, Wall, & Abel, 2013). Students who are intrinsically motivated have a greater desire to master their goals, thus facilitating academic performance (Cerasoli & Ford, 2014). Intrinsic values are associated with higher levels of self-actualization, which is essential to interpersonal relationships, emotional integration, and self-knowledge (Jones & Crandall, 1986; Kasser & Ryan, 1996). Individuals with more intrinsic values report greater feelings of aliveness and mental and physical vitality. Conversely, extrinsic values may adversely impact mental and physical health, as people who focus on extrinsic values suffer from higher rates of anxiety, depression, and physical ailments (Kasser & Ryan, 1996).

Previous research

To our knowledge, no previous empirical research has examined generational differences in reasons for going to college. Furthermore, no existing studies have validated the items on reasons for going to college against an established measure of intrinsic and extrinsic goals. A few previous studies have examined generational differences in extrinsic and intrinsic values in other realms. One examined life goals, finding that Millennials continued trends begun by GenX toward valuing extrinsic goals more and intrinsic goals less than Boomers (Twenge, Campbell, & Freeman, 2012a). Two other studies of preferred job characteristics found that Millennials rated extrinsic work values higher, and intrinsic work values lower, than Boomers (Twenge, Campbell, Hoffman, & Lance, 2010; Wray-Lake, Syvertsen, Briddell, Osgood, & Flanagan, 2011).

Current research

This paper seeks to accomplish the two goals mentioned in the introduction by (1) examining survey items on reasons for going to college from a large ($N = 8$ million), nationally representative survey of entering college students conducted from 1966 to 2014, the American Freshman (AF) survey; and (2) validating these survey items using the theoretical framework of intrinsic and extrinsic goals (Kasser & Ryan, 1996). Specifically, we validated the items on reasons for going to college against an established measure of extrinsic and intrinsic goals (Grouzet et al., 2005). Without validation, it is

difficult to interpret the meaning of the items in the AF survey on reasons for going to college. For example, is going to college to “learn about things that interest me” an intrinsic value, as it mentions learning, or is it an extrinsic value, as it seems self-focused? Is “to make more money” truly an extrinsic value, or does it just seem that way?

This paper takes an additional important step by correcting for relative centrality. Previous research on values (e.g., Grouzet et al., 2005) strongly recommends calculating the relative importance of values, as some respondents may rate many values as important, and others may rate few as important. This response tendency may have also varied systematically over time. Thus, we calculated relative centrality for each of the reasons for going to college in AF by subtracting the grand mean for each respondent. This allows us to see how the reasons have changed relative to the general tendency of students to say their reasons were important. This is especially vital, as previous research found that Millennials were more likely to rank more life goals as important (Twenge et al., 2012a).

In addition, we examine possible cultural-level causes for changes in reasons for going to college, matching them with economic indicators, college enrollment, and extrinsic and intrinsic life goals matched by year. These analyses cannot determine causation but can show which factors changed at the same time. For example, are extrinsic reasons for going to college more likely in years with more income inequality? How are reasons for going to college related to the percentage of high school students who enroll in college? Did reasons for going to college change at the same time as the importance placed on extrinsic and intrinsic life goals?

Method

American Freshman data, 1971–2014

The **American Freshman project**, part of the Cooperative Institutional Research Program (CIRP) administered by the Higher Education Research Institute (HERI), **has surveyed a nationwide sample of first-year students at 4-year colleges or universities every year since 1966** (e.g., Pryor, Hurtado, Saenz, Santos, & Korn, 2007). Originally, some two-year colleges participated, but the data—including that for past years—are now reported only for students at four-year colleges or universities (N for the reasons for going to college items range from 6,766,345 to 7,972,541). Most respondents are 18 years old. Data for campuses are included only if more than 75% of first-time, full-time freshman students participated. The survey weights its results to be demographically representative of all first-year students at 4-year colleges and universities in the United States. The weighting is done in a two-step procedure: first to correct for nonparticipation within campuses, and second to ensure that the campuses included are representative of 4-year colleges and universities in the United States. We obtained the aggregated data from HERI’s publicly available research reports. These reports provide mean responses on the items for each year but do not include secondary statistical analyses or effect sizes for differences over time. Because the data are only available at the aggregated level, it is not possible to examine moderators such as race/ethnicity or social class.

The AF survey asked respondents their reasons for going to college in 1971, 1976–1984, 1989–1997, 1999–2006, and 2009–2014. The survey asked: “In deciding to go to college, how important to you was each of the following reasons?” The six reasons asked most consistently across the years were: “To be able to get a better job”; “To gain a general education and appreciation of ideas”; “To make me a more cultured person”; “To be able to make more money”; “To learn more about things that interest me”; and “To prepare myself for graduate or professional school.” Each had choices of “very important,” “somewhat important,” and “not important.” The AF databooks report the percentage who answer that the reason was “very important.” Standard deviations were calculated based on the percentages. For example, if 60% of respondents rated themselves above average on a particular trait in a particular year (and thus 40% do not), the individual-level SD of that sample is 49 (Twenge et al., 2012b). This is a conservative approach that may underestimate effect sizes, as it

uses the individual rather than the group-level SD, so we also report the results in terms of percentage-point change.

We calculated relative centrality for each of the reasons for going to college by subtracting the grand mean for each year. As not all years included all six items, the N for relative centrality analyses was 6,006,296.

Validation sample

Participants

Undergraduates at San Diego State University ($n = 189$) completed the survey in exchange for course credit in Spring 2014. Their average age was 19.27 (range, 18–29). They were 64% female and 44% White, 30% Hispanic, 4% Black, 10% Asian, and 12% multiracial or unidentified.

Measures

Participants completed the same six items about reasons for going to college used in the AF survey and, to make their experience as similar as possible to the AF respondents, several other items from the survey asked less consistently (e.g., “My parents wanted me to go”.) We corrected each of the six items for relative centrality by subtracting the grand mean of the 6 items.

Participants also completed nine subscales of the Aspiration Index (Grouzet et al., 2005), including three intrinsic (self-acceptance, affiliation, and community); three extrinsic (money, fame, and image); and three closer to the middle of the circumplex (spirituality, conformity, and hedonism; we will not analyze these last three subscales independently, but their inclusion is suggested for computing relative centrality: Grouzet et al., 2005). Each item was corrected for relative centrality by subtracting the grand mean.

Social indicators

We gathered annual statistics on economic factors, educational attainment, and life goals from publicly available sources and previous research. Economic factors included the Gini index of income inequality and the annual unemployment rate. College enrollment was the percentage of high school graduates attending college, obtained from tables published by the National Center for Education Statistics (2015). We also included two life goals items from the American Freshman survey: the importance of “being very well-off financially” (the most extrinsic item when validated against the Aspirations Index; Twenge et al., 2012a) and “helping others in difficulty” (the most intrinsic item).

Results

Validation analysis

Correlations between the Aspiration Index subscales and the reasons for going to college reveal that “To be able to make more money” was the only reason for going to college significantly correlated with extrinsic values; it also correlated positively with the money and image subscales and negatively with total intrinsic, self-acceptance, and community values (see Table 1). “To make me a more cultured person” was positively correlated with the desire for fame. “To learn more about things that interest me” was negatively correlated with total extrinsic values and with the money subscale; “to gain a general education and appreciation of ideas” was negatively correlated with the money subscale. “To get a better job” and “to prepare myself for graduate or professional school” did not correlate with any of the extrinsic or intrinsic motives.

None of the reasons for going to college correlated positively with total intrinsic values or any of its three subscales. Thus, Tables 1 and 2 organized the reasons for going to college into extrinsic

Table 1. Correlations between reasons for going to college and Aspiration Index subscales (2014 college sample; $n = 189$).

	Extrinsic total	Money	Image	Fame	Intrinsic total	Self-acceptance	Affiliation	Community
Extrinsic motives								
To make more money	.24***	.26***	.23**	.03	-.24***	-.21**	-.05	-.26***
To become a more cultured person	.01	-.14	.00	.26***	.07	.02	-.06	.05
Non-extrinsic motives								
To learn about things that interest me	-.20**	-.24***	-.13	-.06	.10	.07	.12	.05
To gain a general education and appreciation of ideas	.11	-.16*	-.04	-.04	-.11	.08	.08	.09
To get a better job	.01	.08	.02	-.10	.00	.05	.03	-.04
To prepare myself for graduate or professional school	.04	.13	-.10	-.12	-.05	.01	-.06	.10

Note. Reasons for going to college and Aspiration Index scales are both corrected for relative centrality by subtracting each respondent's grand mean.

Table 2. Generational and time period differences in reasons for attending college, 1971–2014.

	Boomers (1970s)	GenX (1980s– 1990s)	Millennials (2000s– 2010s)	% change (<i>d</i>) B v. X	% change (<i>d</i>) X v. M	% change (<i>d</i>) B v. M
Raw Means						
Extrinsic motives						
To make more money	54.96% (49.20)	69.19% (46.30)	70.96% (45.50)	+14 (.30)	+2 (.04)	+16 (.34)
To become a more cultured person	36.24% (47.86)	39.70% (48.36)	44.52% (49.36)	+4 (.07)	+4 (.10)	+8 (.17)
Anti-extrinsic motives						
To learn about things that interest me	75.52% (43.52)	74.84% (43.99)	79.13% (40.30)	-1 (-.02)	+4 (.10)	+5 (.08)
To gain a general education and appreciation of ideas	69.49% (46.38)	64.69% (47.65)	67.96% (46.89)	-4 (-.10)	+3 (.06)	-1 (.04)
Neutral motives						
To get a better job	72.39% (44.92)	74.88% (43.75)	76.57% (41.51)	+3 (.06)	+1 (.03)	+4 (.10)
To prepare myself for graduate or professional school	44.93% (49.44)	52.94% (49.72)	58.52% (49.31)	+8 (.16)	+5 (.11)	+13 (.27)
Corrected For Relative Centrality						
Extrinsic motives						
To make more money	-3.96 (49.20)	5.56 (46.30)	4.87 (45.52)	+10 (.20)	-1 (-.01)	+9 (.19)
To become a more cultured person	-22.68 (47.86)	-22.92 (48.36)	-22.07 (49.38)	0 (.00)	-1 (-.01)	-1 (-.01)
Anti-extrinsic motives						
To learn about things that interest me	16.60 (43.52)	11.66 (43.99)	12.89 (40.42)	-5 (-.11)	+1 (.02)	-4 (-.09)
To gain a general education and appreciation of ideas	10.57 (46.38)	2.75 (47.65)	1.75 (46.93)	-8 (-.16)	+1 (-.03)	-7 (-.19)
Neutral motives						
To get a better job	13.47 (44.92)	11.98 (43.75)	10.01 (41.96)	-1 (-.03)	-2 (-.05)	-3 (-.08)
To prepare myself for graduate or professional school	-13.99 (49.44)	-9.02 (49.72)	-7.44 (49.32)	+5 (.10)	+2 (.03)	+7 (.13)

Note. All *d*'s .02 and above are statistically significant at $p < .001$. B = Boomers; X = GenX; M = Millennials.

values (those positively correlated with at least one extrinsic subscale) anti-extrinsic values (those negatively correlated with at least one extrinsic subscale), and neutral values (those not significantly correlated with extrinsic or intrinsic values).

Generational/time period differences

Millennials were more likely than Boomers and GenX'ers to rate all six reasons for going to college as "very important" (see Figure 1), consistent with previous research on life goals (Twenge et al., 2012a). Thus, the correction for relative centrality was necessary.

With the correction for relative centrality applied, the largest generational increase between Boomers and Millennials was in "to make more money" (the most extrinsic value), and the largest decrease was in "to gain a general education and appreciation of ideas" (an anti-extrinsic value). Among Boomers, more felt that gaining a general education was important (69%) than those who felt making more money was important (55%), but among Millennials, money (71%) was more important than education (68%; see Table 2).

The second-largest generational increase was in "to prepare myself for graduate or professional school" (a neutral value), and the second-largest decrease was in "to learn more about things that interest me" (the most anti-extrinsic value). A second extrinsic value, "to make me a more cultured person," did not change significantly over the generations when corrected for relative centrality (see Table 2). Overall, Millennials were more likely than Boomers to embrace extrinsic reasons for going to college and less likely to value anti-extrinsic values (see Figure 2). However, as usually found (Grouzet et al., 2005), students rated intrinsic values as more important than extrinsic values overall.

In all cases, Millennials continued (though did not reverse) trends begun by GenX, and GenX and Millennials were similar to each other in their reasons for attending college when the relative centrality correction was applied (see Figure 2). Overall, Millennials and GenX named more extrinsic reasons for going to college compared to Boomers at the same age, but these values have been in place since the 1990s.

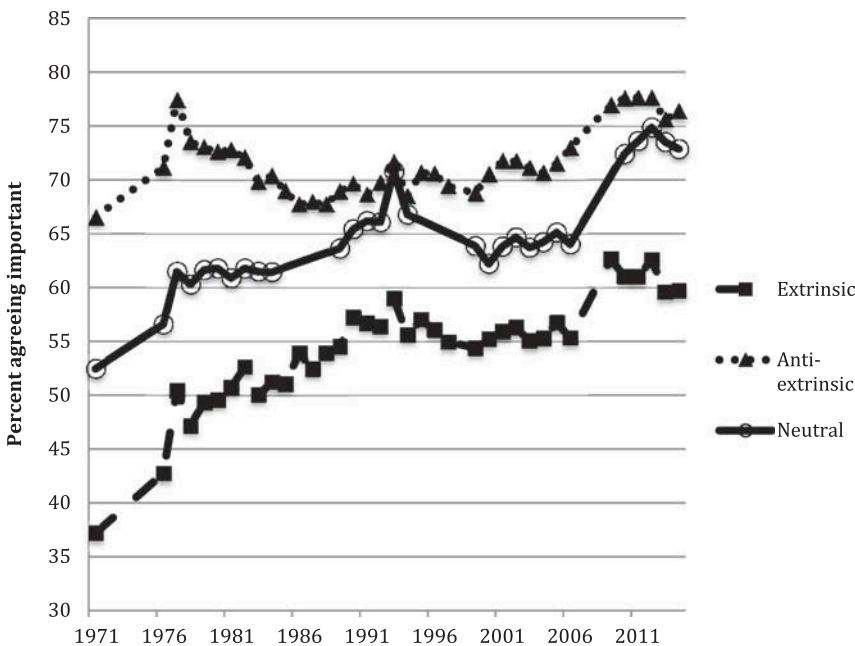


Figure 1. Generational/time period differences in reasons for going to college, raw means, 1971–2014.

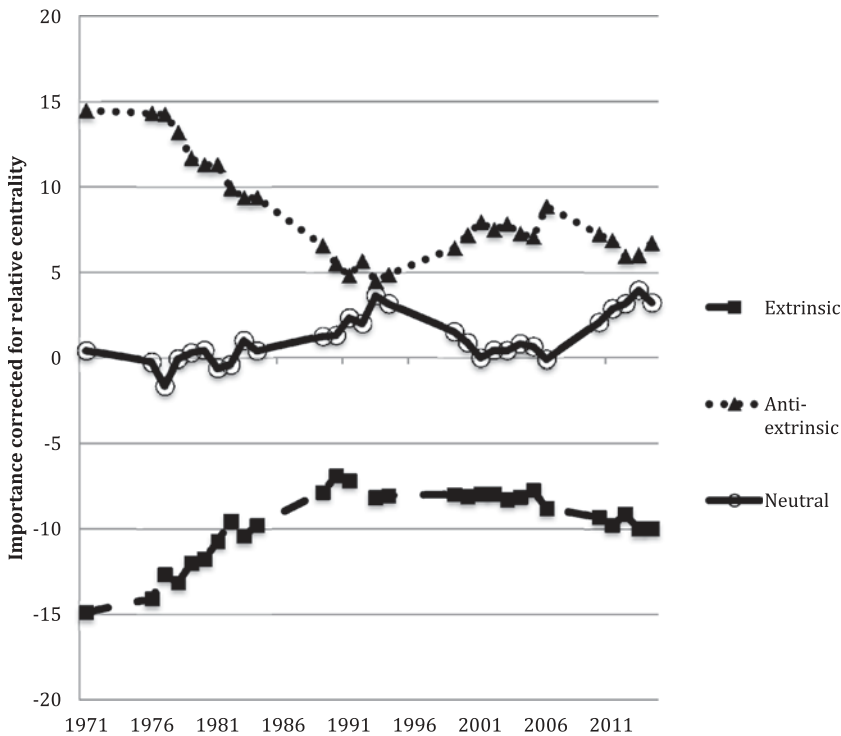


Figure 2. Generational/time period differences in reasons for going to college, corrected for relative centrality, 1971–2014.

To discover what cultural-level factors co-occurred with these shifts, we matched indicators such as unemployment, income inequality, college enrollment, and student values by year with the annual extrinsic and anti-extrinsic reasons for going to college (see Table 3). These analyses cannot determine causation; they can only show which factors changed at the same time. Unemployment was not significantly correlated with reasons for going to college, suggesting that cyclical economic indicators are not behind the trends. However, income inequality rose at the same time as extrinsic reasons increased and anti-extrinsic reasons decreased. College enrollment was also higher in years with more extrinsic and less anti-extrinsic reasons. Students' ratings of the importance of being very well-off financially (an extrinsic value) were positively correlated by year with extrinsic reasons for going to college and negatively correlated with anti-extrinsic reasons, with the opposite pattern for helping others (an intrinsic value), suggesting that the trends in reasons for going to college are related to general trends in intrinsic and extrinsic values.

Table 3. Correlations between motives for attending college and social indicators matched by year, weighted by annual sample size.

	Extrinsic motives for attending college	Anti-extrinsic motives for attending college
Unemployment rate	-.33	.15
Income inequality	.70***	-.70***
Poverty rate	.42*	-.62**
College enrollment	.75***	-.76***
Importance of being very well-off financially	.82***	-.84***
Importance of developing a meaningful philosophy of life	-.89***	.80***

Discussion

Millennial college students favor extrinsic reasons for going to college more than Boomers did, continuing trends begun by GenX. Today's college students may have the "consumer mentality" toward education that many have observed, but these trends have been present since the 1990s.

These results mirror previous research on the American Freshman survey. For example, most of the generational shift toward extrinsic values in life goals (Twenge et al., 2012a) and positive self-views (Twenge et al., 2012b) occurred between Boomers and GenX, with Millennials continuing the trends. Overall, these generational differences reflect a movement toward decision-making focusing more on extrinsic values.

Although causation cannot be determined, correlational analyses suggest that the changes in reasons for going to college co-occurred with several other trends. Reasons for going to college became more extrinsic as income inequality increased, suggesting a greater emphasis on making money as the gap between the "haves" and "have nots" widened. However, cyclical economic indicators such as the annual unemployment rate were not significantly related. As more high school graduates enrolled in college, extrinsic values increased and anti-extrinsic values decreased; thus, as going to college became more common, more students focused on extrinsic outcomes such as money, and fewer focused on intrinsic outcomes such as learning and ideas. Finally, extrinsic reasons for going to college rose as students focused more on being well-off financially, and anti-extrinsic values declined as students focused less on helping others, suggesting that reasons for going to college reflect broader value changes in the population of entering college students.

Implications

Two perspectives on these results deserve mention. Given rising income inequality and student loan debt, Millennial students' focus on making more money may be a practical consideration. Indeed, we found that extrinsic reasons for going to college increased at the same time and at the same pace as income inequality. On the other hand, the continued emphasis on going to college to earn more money may promote a consumer mentality, which Long and Lake (1996) argued "undermines the concept of merit by contributing to the pernicious idea that students are customers, to be served only in ways they find pleasing."

This consumer mentality might reflect a devaluing of the educational process; namely, students may treat acquiring knowledge as a transactional procedure or a means to an end. This could have important implications for retaining knowledge within one's discipline. If information is not valued for its own sake, it may be easier to forget after the test has passed and the grade entered. As such, holding extrinsic values in the domain of education could undermine the quality of education an individual receives. In addition, valuing the end result may lead to more plagiarism and cheating (Callahan, 2004).

These findings suggest that college faculty may find it more challenging to emphasize the intrinsic value in learning and course content than they did a few decades ago. Student affairs staff and college administrators may deal with more cases in which students (or their parents) see the college experience as transactional, with tuition paid and degrees rendered. Colleges and universities looking to market themselves to today's students might (and perhaps already have) emphasize that their graduates enter well-compensated careers.

A shift toward extrinsic values has negative implications outside of educational settings. Extrinsic values are associated with the regulatory mode of assessment, marked by the presence of continuous self-evaluation, fear of invalidity, self-consciousness, and need for social comparison (Higgins, Kruglanski, & Pierro, 2003; Kruglanski et al., 2000). This impairs the ability to focus on and achieve long-term goals, and it predicts lower life satisfaction and more depressive mood (Hong, Tan, & Chang, 2004). Given the overlap between extrinsic values and assessment mode, it is unsurprising that those who focus on extrinsic values suffer more anxiety and depression (Kasser & Ryan, 1996). Perhaps as a

result, rates of anxiety and depression have increased between Boomers and GenX'ers and show either a continued increase or a leveling off among Millennials (e.g., Compton et al., 2006; Twenge, 2011, 2015).

Conclusions

Overall, reasons for going to college have become more extrinsic in the generations of college students who followed the Boomers. Since the 1990s, this has meant more students focused on the end goal of a college degree (such as making more money) and fewer focused on the learning process (gaining an education and appreciation of ideas).

Notes on contributors

Jean M. Twenge is Professor of Psychology at San Diego State University. Her research focuses on generational differences in traits, attitudes, and work values, and she is the author of *Generation Me: Why Today's Young Americans Are More Confident, Assertive, Entitled—And More Miserable Than Ever Before* (Atria Books, 2014). *Kristin Donnelly* is a second-year graduate student at the University of California, San Diego. Her research focuses on social cognition and decision-making.

References

- Babcock, P., & Marks, M. (2011). The falling time cost of college: Evidence from half a century of time use data. *Review of Economics and Statistics*, 93, 468–478. doi:10.1162/REST_a_00093
- Callahan, D. (2004). *The cheating culture: Why more Americans are doing wrong to get ahead*. New York, NY: Mariner Books.
- Cerasoli, C., & Ford, M. (2014). Intrinsic motivation, performance, and the mediating role of mastery goal orientation: A test of self-determination theory. *The Journal of Psychology*, 148(3), 267–286. doi:10.1080/00223980.2013.783778
- Compton, W. M., Conway, K. P., Stinson, F. S., & Grant, B. F. (2006). Changes in the prevalence of major depression and comorbid substance use disorders in the United States between 1991–1992 and 2001–2002. *American Journal of Psychiatry*, 163, 2141–2147.
- Delucchi, M., & Korgen, K. (2002). “We’re the customer—we pay the tuition”: Student consumerism among undergraduate sociology majors. *Teaching Sociology*, 30, 100–107. doi:10.2307/3211524
- Greenfield, P. M. (2013). The changing psychology of culture from 1800 through 2000. *Psychological Science*, 24, 1722–1731. doi:10.1177/0956797613479387
- Grouzet, F. E., Kasser, T., Ahuvia, A., Dols, J. F., Kim, Y., Lau, S., & Sheldon, K. M. (2005). The structure of goal contents across 15 cultures. *Journal of Personality and Social Psychology*, 89, 800–816. doi:10.1037/0022-3514.89.5.800
- Guiffrida, D. A., Lynch, M. F., Wall, A. F., & Abel, D. S. (2013). Do reasons for attending college affect academic outcomes?: A test of a motivational model from a self-determination theory perspective. *Journal of College Student Development*, 54, 121–139. doi:10.1353/csd.2013.0019
- Hassel, H., & Lourey, J. (2005). The dea(r)th of student responsibility. *College Teaching*, 53, 2–13. doi:10.3200/CTCH.53.1.2-13
- Higgins, E., Kruglanski, A., & Pierro, A. (2003). Regulatory mode: Locomotion and assessment as distinct orientations. In M. P. Zanna (Ed.), *Advances in experimental and social psychology* (Vol. 35, pp. 293–344). New York, NY: Academic Press.
- Hong, R., Tan, M., & Chang, W. (2004). Locomotion and assessment: Self-regulation and subjective well-being. *Personality and Individual Differences*, 37, 325–332. doi:10.1016/j.paid.2003.09.006
- Jones, A., & Crandall, R. (1986). Validation of a short index of self-actualization. *Personality and Social Psychology Bulletin*, 12, 63–73. doi:10.1177/0146167286121007
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410–422. doi:10.1037/0022-3514.65.2.410
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 280–287. doi:10.1177/0146167296223006
- Kruglanski, A., Higgins, E., Pierro, A., Thompson, E., Atash, M., Shah, J., & Spiegel, S. (2000). To “do the right thing” or “just do it”: Locomotion and assessment as distinct self-regulatory imperatives. *Journal of Personality and Social Psychology*, 79, 793–815. doi:10.1037/0022-3514.79.5.793

- Markus, H. R., & Kitayama, S. (2010). Cultures and selves: A cycle of mutual constitution. *Perspectives on Psychological Science*, 5, 420–430. doi:10.1177/1745691610375557
- National Center for Education Statistics. (2015). *Digest of Education Statistics, Table 302.10 Recent high school completers and their enrollment in 2-year and 4-year colleges, by sex, 1960 through 2012*. Retrieved from http://nces.ed.gov/programs/digest/d13/tables/dt13_302.10.asp
- Pryor, J. H., Hurtado, B., Saenz, V. B., Santos, J. L., & Korn, W. S. (2007). *The American Freshman: Forty-year trends, 1966–2006*. Los Angeles, CA: Higher Education Research Institute.
- Stewart, A. J., & Healy, J. M. (1989). Linking individual development and social changes. *American Psychologist*, 44, 30–42. doi:10.1037/0003-066X.44.1.30
- Trzesniewski, K. H., & Donnellan, M. B. (2010). Rethinking “Generation Me”: A study of cohort effects from 1976–2006. *Perspectives on Psychological Science*, 5, 58–75. doi:10.1177/1745691609356789
- Twenge, J. M. (2011). Generational differences in mental health: Are children and adolescents suffering more, or less? *American Journal of Orthopsychiatry*, 81, 469–472. doi:10.1111/j.1939-0025.2011.01115.x
- Twenge, J. M. (2014). *Generation me: Why today's young Americans are more confident, assertive, entitled—and more miserable than ever before* (2nd ed.). New York, NY: Atria Books.
- Twenge, J. M. (2015). Time period and birth cohort differences in depressive symptoms in the U.S., 1982–2013. *Social Indicators Research*, 121, 437–454. doi:10.1007/s11205-014-0647-1
- Twenge, J. M., Campbell, S. M., Hoffman, B. R., & Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, 36, 1117–1142. doi:10.1177/0149206309352246
- Twenge, J. M., Campbell, W. K., & Freeman, E. C. (2012a). Generational differences in young adults' life goals, concern for others, and civic orientation, 1966–2009. *Journal of Personality and Social Psychology*, 102, 1045–1062. doi:10.1037/a0027408
- Twenge, J. M., Campbell, W. K., & Gentile, B. (2012b). Generational increases in agentic self-evaluations among American college students, 1966–2009. *Self and Identity*, 11, 409–427. doi:10.1080/15298868.2011.576820
- Wray-Lake, L., Syvertsen, A. K., Briddell, L., Osgood, D. W., & Flanagan, C. A. (2011). Exploring the changing meaning of work for American high school seniors from 1976 to 2005. *Youth & Society*, 43, 1110–1135. doi:10.1177/0044118X10381367