

## **The impact of the 150-hour rule on the current supply of accountants**

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### **ABSTRACT**

Eliminating the 150-hour requirement for CPA licensure has received renewed focus as a solution for the decline in the accounting pipeline. Accordingly, this study tests a thought experiment to evaluate whether the 150-hour rule is an ongoing deterrent to a career in accounting. Results suggest that earning an additional 30-credit hours is a considerable deterrent for traditional college-aged students. Although greater career preferences and higher salaries can buffer this deterrent effect, these buffers may not necessarily be attainable for the profession as a whole. The study also presents evidence that, although the cost of the additional 30-credit hours of education is the single largest concern when considering 150-credit hours of education, it is not the overriding factor for many traditional college-aged students, with the extra degree completion time also being a material consideration. Furthermore, results indicate that traditional college-aged students have similar decision-making processes and arrive at similar decisions related to undertaking an additional 30-credit hours of education, regardless of economic background.

**Keywords:** 150-hour rule, accounting pipeline, staffing shortages in accounting, thought experiment, career preferences, salaries

**Acknowledgement:** This study was funded through a research grant from The Davis College of Business and Economics. Feedback and assistance from the following persons is also acknowledged: Michael Chatham, Yiwen Li, Vilson Dushi, Thomas White, Jordan King and Robert Warren.

## INTRODUCTION

A recent spate of discussions has occurred about whether the 150-hour requirement for CPA licensure should be eliminated (Accounting Voices, 2023; Edmonds, 2023; Ellis, 2023). These discussions have resulted in legislative initiatives in Minnesota, task forces in South Carolina and Virginia, and a pilot program in New Jersey that replaces 30-credit hours of college courses with a year of work experience. The impetus for considering the elimination of the 150-hour rule is the decline in the accounting pipeline. Foley concludes that the number of CPA exam takers has fallen to a 17-year low (Foley, 2023). The number of accountants in the workforce has fallen 17% in only two years (Ellis, 2023). Reported material weaknesses in internal control due to lack of personnel increased nearly 41% for US-listed companies for the first half of 2023 compared with pre-pandemic levels in 2019, where personnel shortages are typically in accounting or information technology (Maurer, 2023). Some professionals speculate that the CPA pipeline may recover if prospective CPAs are no longer required to complete an additional 30-credit hours of education in order to be licensed (Accounting Voices, 2023; Edmonds, 2023; Ellis, 2023).

This speculation is consistent with much of the extant literature that concludes that the 150-hour rule triggered a significant drop in the supply of CPA candidates, while not improving—and in some cases decreasing—candidate quality and performance (Allen & Woodland, 2006; Barrios, 2022; Jacob & Murray, 2006). However, prior research that derived rigorous findings about a decreased supply of CPA candidates from data that are several decades old. Given that 150-credit hours has been required for licensure in most states since 1999, it is difficult to know whether the imposition of the 150-hour rule may have been just a one-time shock to the supply of CPAs or whether it continues to act as a deterrent to choosing a career in accounting.

To fill this gap in the literature about the 150-hour rule as a one-time shock versus an ongoing impediment to the supply of accountants, the author conducted a thought experiment on a robust sample of traditional college-aged participants,<sup>1</sup> where the sample is independent of institutional setting, graduation, and even whether participants have opted to attend college at this time. A thought experiment is useful because it is no longer feasible to develop adequate and up-to-date, pre-post samples on the 150-hour rule that prior research relied upon (Shafer, Kunkel, & Hansen, 2003), given that the 150-hour rule is largely a uniform requirement for licensure. A thought experiment also isolates the impact of being required to earn 30 additional credit hours of education on career decisions, holding all other factors constant. Thus, the study excludes other real-life confounds that might impact the decision to become an accountant, such as negative stereotypes about accountants (Carnegie & Napier, 2010), anxieties about pursuing a perceived mathematical field (Daker, Gattas, Sokolowski, Green, & Lyons, 2021), and perceptions about salaries and working conditions in accounting (Ellis, 2023). In addition, the thought experiment efficiently provides insight about whether additional salary and career preferences might mitigate the effect of the 150-hour rule on the supply of accountants.

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<sup>1</sup>The author limited the study to traditional-aged students and to a traditional pathway for earning 30 additional credit hours to eliminate confounds in findings, given that this is a foundational study. However, further research would be useful to explore these other avenues.

The remainder of this study unfolds as follows: Section two presents the study's research questions grounded in the literature. Section three briefly describes the study's research design, with section four addressing study results. Section five provides the study conclusions including a discussion of study findings, implications, and avenues for further research.

## RESEARCH QUESTIONS AND BACKGROUND

### Research Question 1:

Are traditional college-aged students less likely to pursue careers that require 150-credit hours versus 120-credit hours of college education, all else equal? Why?

### Summary of the Literature

A significant portion of the extant literature indicates that the 150-hour rule initially reduced the supply of CPA candidates (Allen & Woodland, 2006; Barrios, 2022; Jacob & Murray, 2006). As stated in the introduction, the author's objective in reevaluating this research question is to assess whether these prior findings imply that the 150-hour rule was a one-time shock to accounting pipeline or whether the 150-hour rule has an ongoing impact on the supply of accountants. In terms of why some students might opt for 120-credit hours or 150-credit hours, the author evaluated both participants' explicit reasons for their career decisions and the correlation between their decisions and their assigned economic viewpoint in the thought experiment described in the next section. It has been well-established that students from poorer socioeconomic status (SES) backgrounds are less likely to attend and to earn undergraduate degrees (Hearn, 1984; National Center for Education Statistics [NCES], 2022).

### Research Question 2:

- A. Will traditional students change their decisions to pursue either 150-credit hours or 120-credit hours of college education based on greater career preferences or increased salary, all else equal?
- B. Are persons from poorer economic backgrounds more vulnerable to not being able to act on career preferences and increased salary when contemplating 30 additional hours of education?

### Summary of the Literature

Overall, personal preferences (e.g., interests, tastes) play a key role in the choice of college major according to literature specific to the decision to major in business (Malgwi, Howe, & Burnaby, 2005) and broader literature on reasons for selecting college major (Wiswall & Zafar, 2015). These same literatures conclude that factors related to salary (e.g., expected salary, opportunities for advancement) play an important, but lesser role.

Life history theory<sup>2</sup> (MacArthur & Wilson, 1967) indicates, that in difficult situations, people from poorer (more prosperous) economic backgrounds may opt for short-term (longer-term) rewards over longer-term (short-term) benefits (Côté, 2011; Griskevicius, Delton, Robertson, & Tybur, 2011). Côté (2011) reasons that this difference in decision making may occur because people from poorer economic backgrounds may feel more helpless about changing a difficult situation, given their previous life experiences. In the context of the 150-hour rule, the author suggests that life history theory predicts that people from poorer economic backgrounds may be less likely to pursue a career requiring 150-credit hours relative to one requiring 120-credit hours in the face of longer-term rewards such as greater salary and job preferences.

The author also posits that general economic concepts, such as opportunity costs (Buchanan, 1991), may apply. People from poorer economic backgrounds may have greater economic hurdles to overcome in terms of meeting their basic survival needs. When deciding whether to pursue a fifth year of college education in lieu of a degree that requires only four years of education, those living at lower income levels may be more likely to stop at four-years of education, so that they can begin generating income to meet survival needs.

## THOUGHT-EXPERIMENT DESIGN

### Procedure

Participants considered a hypothetical thought experiment, where they decided between two careers. The only difference between the two careers was that one required 120-credit hours of college education and one required 150-credit hours of college education. The author instructed participants to make the following initial assumptions: the careers have the same short- and long-term salaries; the participant has equal skills, abilities, and preferences for each career; career prestige, working conditions, and the value of each career to society and others, and any other factor are the same for each career.

Next, participants had two opportunities to change their initial career decisions. For the first opportunity, salaries associated with each career remained the same, but career preferences could vary. If they decided to switch careers, participants rated how much more they would need to prefer the other career to switch (1 = 1 time more to 10 = 10 times more). For the second opportunity to switch, preferences for the two careers were the same, but salaries could vary. If they decided to switch careers, participants indicated how much more they would need to earn per year to switch careers. After the thought experiment, participants answered three comprehension check questions and a series of demographic questions based on their real lives.

### Sample

After obtaining institutional review board permissions, the author invited contractors at Prolific, a high-quality online survey platform (Peer, Rothschild, Gordon, Evernden, & Damer, 2022), to complete the study survey. Participants in the analytical sample ( $N = 413$ ) consented to

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<sup>2</sup>Researchers from a wide range of disciplines (e.g., psychology and biology) have relied on life history theory to examine any organism's motivations and approaches for distributing resources over its lifetime (Nettle & Frankenhuis, 2020).

participate, met the eligibility criteria for the study,<sup>3</sup> answered comprehension checks correctly, and responded to all survey questions.<sup>4</sup> The author used Qualtrics to randomly assign participants to one of three economic perspectives: poverty, lower-middle class, or middle class. The author assigned participants to an economic perspective to ensure that a relatively equal number of participants were available for each perspective. The literature supports the assignment of economic perspectives as an effective empirical approach (Côté, 2011).<sup>5</sup>

Random assignment was successful in that the portion of participants assigned to each economic perspective were not statistically different based on age, gender, race, education, marital status, perceived value of a college education, receiving financial support from others, providing financial support to others, and college major (classified as accounting, other business major, and non-business major). The portion of participants assigned to each economic perspective were not statistically different based on self-perceived real-life status of poverty and upper-middle class, but they were statistically different based on self-perceived status of lower-middle class and middle class. The difference in the number assigned to each group were relatively small (i.e., the maximum difference between groups for lower middle class was 18 participants, and the maximum difference between groups for middle class was 25 participants). More importantly, no self-perceived, real-life finance status had explanatory power related to the career decisions under study. Table 1 (Appendix) provides statistics on the demographic characteristics of the sample.

## RESULTS

### Pursuit of 150-Credit Hours Versus 120-Credit Hours of College Education (Research Question 1)

Figure 1 (Appendix) illustrates that only 4% of participants ( $n = 16$ ) would select a career that requires 150-credit hours in lieu of one that requires 120-credit hours if required to make a definitive decision about the two career types. Figure 2 (Appendix) compares the likelihood that participants would opt for each career type considered separately, with likelihoods shown on a 3-point Likert scale (1 = unlikely, 2 = neutral, and 3 = likely). In terms of the career requiring 150-credit hours of education, 9% ( $n = 38$ ) of participants rated the career choice as likely; 8% ( $n = 31$ ) were neutral; 83% ( $n = 344$ ) indicated that the career choice was unlikely. In terms of the career requiring 120-credit hours, 94% ( $n = 387$ ) of participants rated the career choice as likely; 2% ( $n = 8$ ) were neutral; 4% ( $n = 18$ ) indicated that the career choice was unlikely.

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<sup>3</sup>Eligible participants lived in the United States, were fluent in English, and of a traditional college age (18- to 26-years old, which is reflective of an 8-year graduation rate).

<sup>4</sup>The author culled 92 participants due to missing one or more comprehension checks, 8 did not complete the survey, and 4 did not pass eligibility checks.

<sup>5</sup>The author provided participants with both a quantitative expert statement that described their assigned economic background and a qualitative expert statement about what it feels like to live in their assigned group. For example, the author presented participants assigned to an economic perspective of poverty with the quantitative statement that poverty can be defined as income levels below \$27,740 for a family of four (United States Census Bureau (USCB), 2022). The qualitative statement said that "poverty means that the income level from employment is so low that basic human needs can't be met" (Chen, 2022).

Contrary to the author's expectations based on the literature, assigned economic perspectives did not have explanatory power in terms of participants' career decisions as determined via analytical techniques appropriate for experimental designs called analysis of variance, better known as ANOVA. Supplemental ANOVA analysis also corroborated that participants' real-life economic statuses did not have explanatory power in participants' career decisions.

Text analysis of the reasons for participants' career choices suggests that although financial factors played the largest single role in participants' decision making, other factors may have been more influential for many participants. More specifically, Figure 3 (Appendix) illustrates that 35% ( $n = 140$ ) of participants who definitively selected the career requiring 120-credit hours did so for financial reasons. However, the extra time to complete their educations, combined with decisions made in consideration of both financial factors and extra completion time, represented 52% ( $n = 205$ ) of the reasons for the career decisions. Thus, the opportunity cost of extra time to complete 150-credit hours of education was a considerable barrier. Some participants (9%,  $n = 37$ ) selected the career requiring 120-credit hours of education because they would have to take less coursework.

The reasons that some participants definitively selected a 150-hour career were much less cohesive. Reasons shared by at least two participants included: (1) the 150-hour career would allow them to spend more time in college (13%,  $n = 2$ ), (2) the extra 30-hours would allow them to gain more practice and academic experience (25%,  $n = 4$ ), and (3) the extra 30-hours suggested appealing intellectual complexity (13%,  $n = 2$ ).

### **Influence of Career Preferences and Increased Salary on the Decisions to Pursue 150-Credit Hours or 120-Credit Hours of College Education (Research Question 2)**

#### **Career preferences**

Eighty-nine percent ( $n = 354$ ) of participants who initially selected a career requiring 120-credit hours of education indicated that they would switch to the career requiring 150-credit hours due to career preferences. However, on average, they would need to prefer their new career a mean (median) of 3.8 (3) times more. Responses of participants who initially selected the career requiring 150-credit hours of education are not necessarily directly comparable due to the small sample size ( $n = 16$ ). However, the percentage of those who would change careers due to preference was similar at 88% ( $n = 14$ ), with mean (median) preferences required to be 3 (2) times higher. These measures of central tendency are not significantly different from those who switched from their initial choice of 120-credit hours of education.

Contrary to the author's expectations based on the literature, ANOVA analysis revealed that participants' assigned economic perspectives did not have explanatory power related to switching careers on account of career preferences. More specifically, assigned economic perspectives were not related to the decision about whether to switch career choices due to career preferences. Assigned economic perspectives were also unrelated to the magnitude of career preferences necessary to switch careers. Supplemental ANOVA analysis yielded the same results when the author replaced participants' assigned economic status with their real-life economic statuses.



## Salary

Ninety-one percent ( $n = 363$ ) of participants who initially selected the career requiring 120-credit hours of education indicated that they would switch to the career requiring 150-credit hours of education for a higher salary. The mean (median) response to the question about how much higher salary they would need to earn to switch was \$23,143 (\$20,000) more. Responses of participants who initially selected the career requiring 150-credit hours of education are not necessarily directly comparable due to the small sample size ( $n = 16$ ). The percentage of those who would change careers for more salary was 81% ( $n = 13$ ), with mean (median) salaries required to be \$36,153 (\$25,000) higher. These measures of central tendency are not significantly different from those who switched from their initial choice of 120-credit hours of education.

Contrary to the author's expectations based on the literature, ANOVA analysis revealed that participants' assigned economic perspectives did not have explanatory power related to switching careers in exchange for additional salary. More specifically, assigned economic perspectives were not related to the decision about whether to switch career choices in exchange for salary. Assigned economic perspectives were also unrelated to the magnitude of salary necessary to switch careers. Supplemental ANOVA analysis yielded the same results when the author replaced participants' assigned economic status with their real-life economic statuses.

## CONCLUSION

A central finding of this study is that the 150-hour rule appears to have an ongoing, negative impact on the supply of accountants, rather than having been a one-time downward shock to supply when the rule was initially implemented. The ongoing negative impact of the rule appears to be sizable, with 96% of participants indicating that they would not opt for a career that requires 150-credit hours of college education, all else equal. Most participants were willing to reconsider that decision in exchange for much greater job satisfaction (i.e., enhanced career preferences) or more salary.

Unfortunately, delivering on either factor may prove challenging broadly speaking. Commentators have recently speculated that the real lack of appeal of a career in accounting is rooted in the job itself (Bolinger, 2023). Although the press has reported significant increases in entry-level accounting salaries (Maurer, 2023), a few statistics suggest the salary differentials required by participants in this study might not be sustainable broadly speaking. For example, the US Bureau of Labor Statistics (BLS) (2022) reports that the median salary for computer and information technology occupations, which are widely considered a main alternative to accounting, is \$97,430. Furthermore, in order to achieve the median differential required by study participants, accountants would need to earn \$117,430. However, BLS reports the median salary for accountants and auditors is \$77,250. Thus, increasing accountants' wages to \$117,430 represents an unlikely percentage increase of 52%.

Another key finding of this study is that the cost of an additional year of college is not traditional college-aged students' sole consideration when faced with the choice of pursuing an extra year of college. In fact, 52% of study participants rejected an additional year of college either because of additional time for degree completion as a solo factor or as a factor combined with financial sacrifices. This study also does not suggest that financial remedies for participants from poorer economic backgrounds will increase the accounting pipeline. Rather, participants

from all financial backgrounds appeared to have similar decision-making processes and to arrive at the same conclusions.

The author believes that this study has implications for three possible future scenarios related to the 150-hour rule. First, if the 150-hour rule goes largely unchanged, then the accounting profession may face an increasingly uphill battle attracting new accountants; the supply of accountants may continue to dwindle, especially as long as the job market is strong. A second possibility is that the additional 30-credit hours of education could be delayed until accountants are employed, with CPAs being provisionally licensed for 5-years until they earn the additional education. In such cases, employers could sponsor relevant and appropriately sequenced graduate education in exchange for longer-term work commitments from employees. A foreseeable third scenario is the elimination of the 150-hour rule all together. In such cases, new accountants could make laissez-faire decisions about whether to pursue 30 extra hours of education. Graduate study (rather than just 30 additional hours of education) is associated with career advancement in accounting (Brink, Norman, & Wier, 2016), so that those who wish to flourish are likely to continue to pursue such education. The author is hopeful that a considerably increased supply of new undergraduate accounting majors would help universities defray any declines in graduate enrollment, should the 150-hour rule be eliminated.





**REFERENCES**

- Accounting Voices: Accountants weigh in on the 150-hour question. (2023, April 27). *Accounting Today*. <https://www.accountingtoday.com/opinion/readers-weigh-in-on-the-150-hour-question>.
- Allen, A. C., & Woodland, A. M. (2006). The 150-hour requirement and the number of CPA exam candidates, pass rates, and the number passing. *Issues in Accounting Education*, 21(3), 173-193.
- Barrios, J. M. (2022). Occupational licensing and accountant quality: Evidence from the 150-hour rule. *Journal of Accounting Research*, 60(1), 3-43.
- Brink, A. G., Norman, C. S., & Wier, B. (2016). Attained education and promotion in public accounting,” *Issues in Accounting Education*, 31, 3, 301-320.
- Bolinger, G. (2023, March 21). Accounting Voices: The 150-hour rule is not the problem. *Accounting Today*. <https://www.accountingtoday.com/opinion/the-150-hour-rule-is-not-the-problem>.
- Buchanan, J.M. (1991). Opportunity Cost. In: Eatwell, J., Milgate, M., Newman, P. (eds) *The World of Economics*. Palgrave Macmillan, London.
- Carnegie, G. D., & Napier, C. J. (2010). Traditional accountants and business professionals: Portraying the accounting profession after Enron. *Accounting, Organizations and Society* 35(3), 360-376.
- Chen, J. (2022). What's poverty? Meaning, causes, and how to measure. *Investopedia*. <https://www.investopedia.com/terms/p/poverty.asp> (last accessed November 17, 2022).
- Côté, S. (2011). How social class shapes thoughts and actions in organizations. *Research in Organizational Behavior*, 31, 43-71.
- Daker, R. J., Gattas, S. U., Sokolowski, H. M., Green, A. E. & Lyons, I. M. (2021). First-year students' math anxiety predicts STEM avoidance and underperformance throughout university, independently of math ability. *npj Science of Learning* 6(1), 17.
- Edmonds, J. (2023). Is 150 too many? *Disclosures Magazine*. <https://www.vscpa.com/disclosures>.
- Ellis, L. (2023, March 6). Accountants Have to Go to College for Five Years. Some Are Rethinking That. *The Wall Street Journal*. <https://www.wsj.com>.
- Foley, S. (2023, May 28). Candidates number for US accountancy exams drop to lowest level in 17 years. *Financial Times*. <https://www.ft.com>.

- Griskevicius, V., Delton, A. W., Robertson, T. E., & Tybur, J. M. (2011). The environmental contingency of life history strategies: Influences of mortality and socioeconomic status on reproductive timing. *Journal of Personality and Social Psychology*, 100(2), 241–254.
- Hearn, J. C. (1984). The relative roles of academic, ascribed, and socioeconomic characteristics in college destinations. *Sociology of Education* 57, 22-30.
- Jacob, J., & Murray, D. (2006). Supply-side effects of the 150-hour educational requirement for CPA licensure. *Journal of Regulatory Economics*, 30,159-178.
- Maurer, M. (2023, July 11). The Accountant Shortage Is Showing Up in Financial Statements. *The Wall Street Journal*. <https://www.wsj.com>.
- MacArthur, R. H. & Wilson, E. O. (1967). *The Theory of Island Biogeography*. Princeton, NJ: Princeton University Press.
- Malgwi, C. A., Howe, M. A. & Burnaby, P. A. (2005). Influences on Students' Choice of College Major. *Journal of Education for Business*, 80(5), 275-282.
- National Center for Education Statistics (NCES). (2022). Young Adult Educational and Employment Outcomes by Family Socioeconomic Status. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. from <https://nces.ed.gov/programs/coe/indicator/tbe>.
- Nettle, D., & Frankenhuis, W. E. (2020). Life-history theory in psychology and evolutionary biology: One research programme or two? *Philosophical Transactions of the Royal Society B* 375: 20190490. <http://dx.doi.org/10.1098/rstb.2019.0490>
- Peer, E., Rothschild, D., Gordon, A., Evernden, Z. & Damer, E. (2022). Data quality of platforms and panels for online behavioral research. *Behavioral Research Methods*, 54, 1643-1662.
- Shafer, W. E., Kunkel, J. G., & Hansen, K. A. (2003). Effects of the 150-hour education requirement. *The CPA Journal*, 73(1), 72.
- U. S. Bureau of Labor Statistics. (2022). *Occupational Outlook Handbook*, <https://www.bls.gov/ooh/>
- The United States Census Bureau (USCB). (2022). *Poverty Thresholds: Poverty Thresholds by Size of Family and Number of Children [2021]*. <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html> (last accessed November 17, 2022).
- Wiswall, M. & Zafar, B. (2015). Determinants of College Major Choice: Identification using an Information Experiment. *Review of Economic Studies*, 82(2), 791-824.

## APPENDIX

**Table 1**  
**Participant Demographic Variables**

Variable	<i>N</i> = 413
Age	
Mean	23
SD	2.2
Self-described gender	
Female %	42.4
Male %	49.9
Other %	6.1
Prefer not to respond %	1.6
Self-described race	
White %	61.0
Black %	9.7
Hispanic %	9.2
Asian %	13.3
Mixed %	4.6
Other %	1.5
Prefer not to answer %	0.7
Education	
Some high school %	1.0
Graduated high school %	13.6
Some college %	13.3
Currently in college %	29.5
Completed undergraduate degree %	31.0
Undergraduate degree plus some graduate coursework %	6.5
Graduate degree %	4.4
Other %	0.7

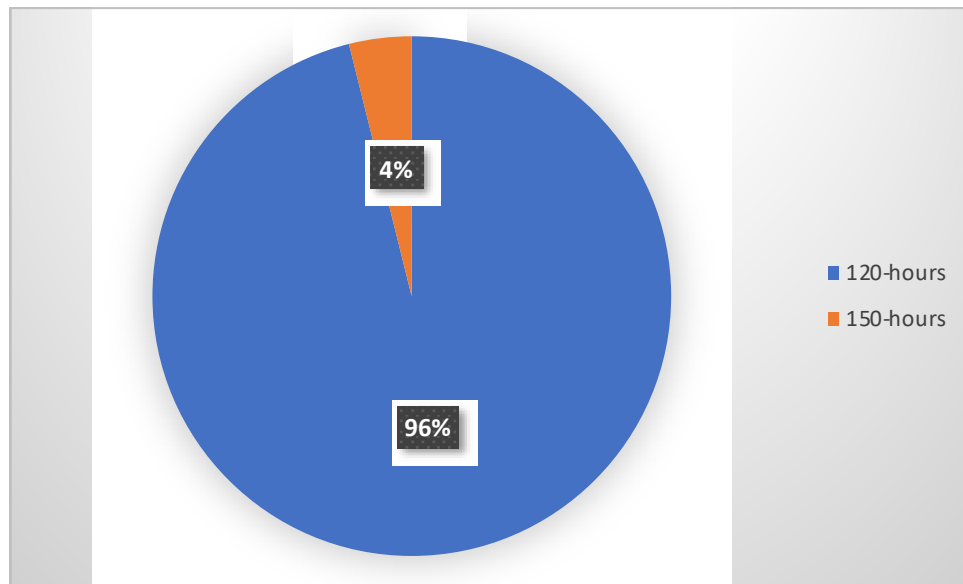


Figure 1. Percent of traditional college-aged participants who would select a career requiring 150-credit hours and 120-credit hours of college education if a definitive decision was required.

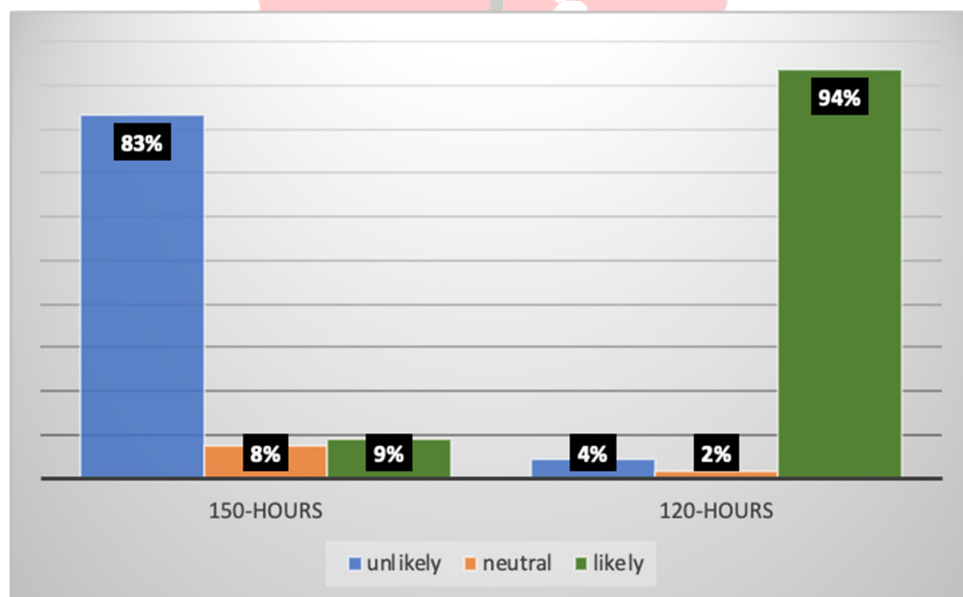


Figure 2. Likelihood of selecting a career requiring 150-credit hours and 120-credit hours of college education, where participants considered each career separately.

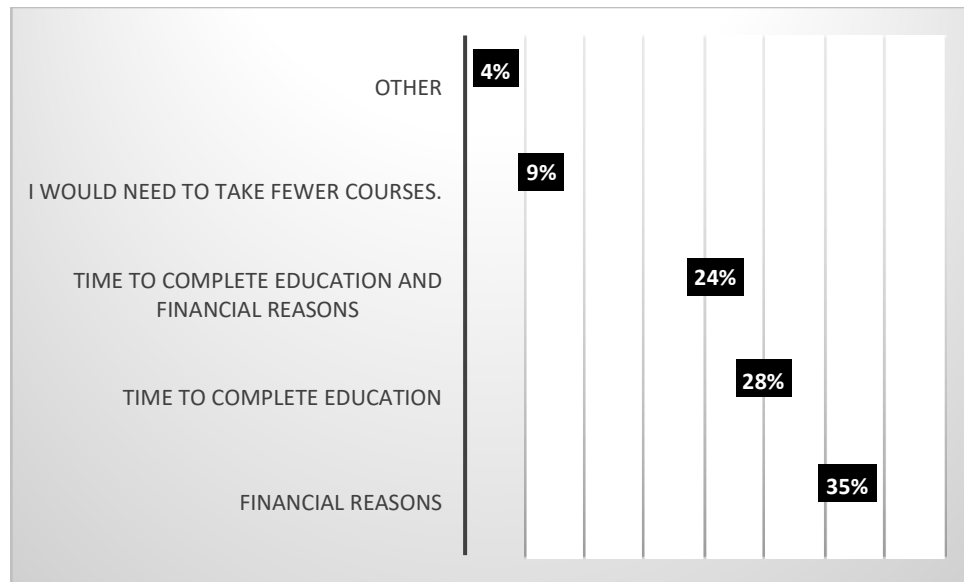


Figure 3. Reasons for selecting a career requiring 120-credit hours of college education.

