

Understanding the Gender Gap in Utah Higher Education: Quantitative Findings

Utah ranks as the worst state for women’s equality in many areas, including wages, education, health, and political empowerment.¹ Although many factors contribute to these inequities, of particular importance is the gender gap in higher education. In the early 2010s, Utah women’s college graduation rate was 10.0% lower than the national average.² Recent data shows that slightly more Utah women are earning bachelor’s degrees than Utah men (23.4% vs. 22.6%).³ These gains are important, but Utah still lags in other areas. Specifically, Utah has the largest educational attainment gap among advanced degree holders (higher than a bachelor’s degree).⁴ Nationally, 13.0% of females and 12.4% of males have obtained a graduate degree.⁵ In Utah, only 9.3% of females have obtained a graduate degree, compared to 14.1% of males.⁶

Gender disparities within higher education are directly and indirectly linked to many economic and social outcomes at the individual, family, and state levels.⁷ Thus, promoting women’s degree attainment in higher education, including graduate education, is critical to address the issue of gender inequality in Utah.⁸ In spite of the magnitude of Utah’s gender gap in higher education and its implications on individuals and the community, we have limited knowledge about the underlying causes and mechanisms. To better understand this area of disparity, we collected quantitative and qualitative data examining resources and challenges of women pursuing undergraduate or graduate degrees. This brief, the first of two reports, summarizes results from the quantitative data.

Study Background

The quantitative portion of the study focused on women aged 18 or older who were enrolled in colleges/universities pursuing an undergraduate or graduate degree in Utah. Data collection occurred during the spring of 2022 and, due to the COVID-19 pandemic, involved a non-probability sample of Utah women. Participants were recruited through the registrar’s offices and graduate offices of universities in Utah.⁹ A call for participants was also announced through social media platforms of universities and through Utah Women & Leadership Project (UWLP) networks. Additionally, research team members sent out a call for participants to colleagues at various universities in Utah through their professional networks.

Participants were invited to complete a survey administered through Qualtrics. The survey collected information on Utah women’s educational goals and resources, along with socio-demographic information (i.e., race, marital status, religion, location, employment, and health ratings). As of June 2022, 1,158 women had completed the survey. After applying eligibility criteria (i.e., age, Utah undergraduate/graduate enroll-

ment), 907 women were included in the analytic sample. The survey results are reported as follows. First, we discuss characteristics of survey participants. Second, we report education and career goals as well as challenges and resources of Utah women in undergraduate programs. Third, we report the responses of Utah women in graduate programs to similar questions about goals, challenges, and resources. Fourth, we summarize key findings and provide recommendations for reducing gender disparity in Utah higher education.

Characteristics of Survey Participants

Women in graduate programs were older and more diverse in terms of race/ethnicity and religious affiliation compared to those in undergraduate programs. In addition, women in graduate programs were more likely to be married/cohabiting and have at least one child. Graduate students worked at higher rates and were more likely to hold regular, full-time jobs than undergraduates. Additionally, the percentage of women who rated their health to be “good, very good, or excellent” was slightly higher among graduate students than among undergraduates. See Table 1 for demographics of survey participants separated by degree program.

Table 1: Participant Demographics¹⁰

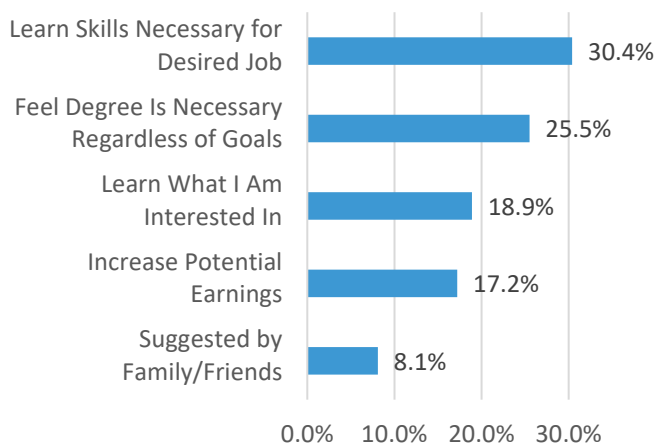
Category	Undergraduate Students	Graduate Students	Total
Mean Age (SD)	23.5 (7.1)	29.6 (8.2)	25.1 (7.9)
Race %			
White	91.1	81.1	88.3
Hispanic	4.9	5.7	5.1
Asian	2.3	8.1	3.9
Other	1.2	2.4	1.5
Black	0.6	2.8	1.2
Marital Status %			
Single	65.7	34.7	57.2
Married	26.4	48.8	32.5
Cohabiting	4.4	11.3	6.3
Divorced/Widowed	3.5	5.2	4.0
Parental Status %			
Have Child(ren)	12.9	32.3	18.2
Employment Status %			
Regular, Full-Time	17.2	35.1	22.1
Regular, Part-Time	52.5	31.9	46.9
Nonregular Jobs	9.4	19.4	12.1
Not Working	20.9	13.7	19.0
Religion %			
Latter-day Saint	65.1	50.0	61.0
No Religion	23.2	31.1	25.4

Other Religion	6.8	11.3	8.1
Christianity	4.9	7.7	5.6
Health Rating %			
Poor	4.0	2.4	3.5
Fair	18.5	16.9	18.1
Good	38.7	41.1	39.4
Very good	29.3	25.4	28.2
Excellent	9.6	14.1	10.8
Participant Number	659	248	907

Undergraduate Education and Career Goals

The first set of survey questions asked undergraduate women to identify their educational motivations. Figure 1 shows the primary reason why undergraduate women in Utah went to college. About 30.0% wanted to learn skills necessary or required for a desired job. One of four respondents said that they felt an undergraduate degree was necessary regardless of their career or life goals. In addition, about 17.0% chose college to increase potential earnings.

Figure 1: Primary Reason for Going to College



We also asked about women’s career goals after graduation, which are reflected in Figure 2. More than half of undergraduate women planned to find a job related to their degrees. It is also worth noting that about one out of four women wanted to find a job that could be combined with family responsibilities or to focus solely on family responsibilities without holding a job. In addition, a high proportion of women who chose the “Other” category mentioned their plans for going to graduate school after college graduation. Many of them specified a very clear career and educational plan, such as attending law, medical, or dental school, or obtaining a license to become an educator or teacher.

Table 2 further reveals the life goals of Utah women pursuing an undergraduate degree. When asked about how they envision themselves in 10 years, about 40.0% showed a strong career orientation (employed full-time). Interestingly, about 45.0% of respondents combined stated that they pictured themselves raising a family (16.7%) or that their situation

would depend on work and family circumstances (27.5%). Most women who chose the “Other” category also mentioned desiring a blend of work and family (e.g., working full-/part-time while raising a family). The combined findings from Figures 1 and 2 show that although job/career opportunities influence why Utah women choose college education, family is a major factor that will likely affect their career and life trajectories.

Figure 2: Career Goal after College Graduation

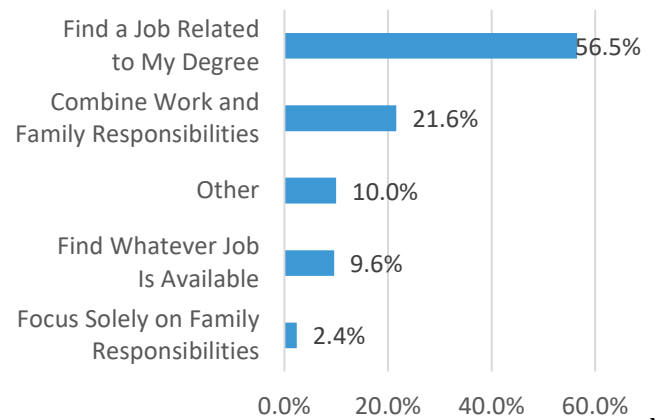


Table 2: How Undergraduate Women Envision Themselves in 10 Years

Category	%
Employed, Full-Time	40.1
Employed, Part-Time	7.0
Depends on Work and Family Situations	27.5
Raising a Family	16.7
Not Sure	2.4
Other	6.4

To better understand Utah women’s educational aspirations and goals, we asked whether women plan to go to graduate school. We found the following (see Figure 3):

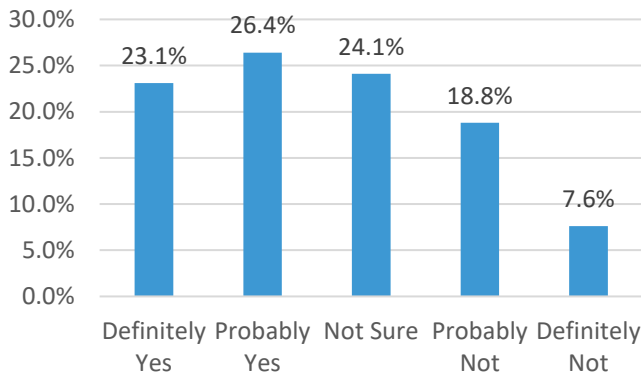
- 49.5% chose “definitely yes” or “probably yes”
- 24.1% women were not sure
- 26.4% chose “probably not” or “definitely not”

Almost half of respondents consider going to graduate school. This result is somewhat surprising, given that Utah is the state with the largest gender gap in advanced education among all states.¹¹ It suggests that challenges and circumstances, not ambition and desire, are influencing the gap.

When asked an open-ended question about reasons why they were considering graduate school, many respondents identified concrete career goals (e.g., I want to be a doctor, lawyer, nurse, veterinarian, or school counselor) or expressed strong career aspirations (e.g., I want to have a better career). In addition, women cited an increase in earnings as the reason to go to graduate school. In contrast, those who answered

“definitely not” and “probably not” noted the financial burden and the time investment as barriers to going to graduate school.

Figure 3: Plan to Go to Graduate School



Quite a few women mentioned plans for starting or raising a family, such as, “I plan on getting pregnant once I graduate,” “I want to start a family,” and “Focusing on family.” Some women also expressed a lack of interest in school (e.g., I am tired of school, I do not like school). For those who were not sure about going to graduate school, many of them similarly mentioned potential financial burdens, the time commitment, and family responsibilities as deterrents. Some respondents indicated they do not have clear career and life goals yet (e.g., I do not know if I need it, I am not sure what I want to do yet). Other women showed a lack of understanding of graduate education, such as, “I do not really know what it is.”

In summary, women currently in undergraduate programs that have clear career goals appear to be aware of the benefits of graduate degrees and how they can advance their careers and economic prospects. Conversely, those with unclear career goals and/or strong family orientations are less interested in graduate school. Also, financial and time burdens associated with graduate programs are major barriers for Utah women who may consider pursuing a graduate degree.

Undergraduate Challenges and Resources

One of the main purposes of this study was to examine the challenges and resources that Utah women have when they pursue higher education. For this purpose, we asked whether respondents have ever considered leaving college. Half of the women (50.4%) in undergraduate programs said they have thought about leaving college. The primary reason they considered leaving school was financial difficulties (58.3%).

Figures 4 and 5 show the sources of financial and emotional support that helped respondents stay in school. As for financial resources, the most frequent source of financial support for Utah undergraduate women was school (e.g., grants and programs), followed by family and spouse/partner. Women who responded “Other” noted (private) scholarships and work/employment as financial resources. Respondents received emotional support mostly from family, followed by friends as well as spouse/partner. In addition, some women reported that they received emotional support from religious

or other nonprofit organizations. Quite a few women who selected “Other” mentioned that they sought therapy and counseling for emotional support.

Figure 4: Financial Resources for Undergraduates¹²

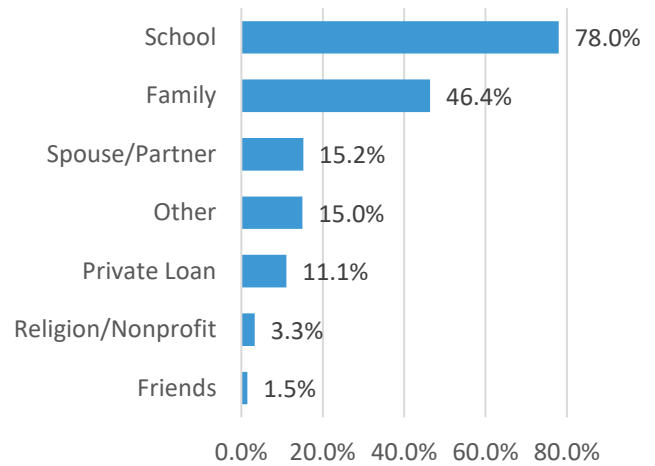
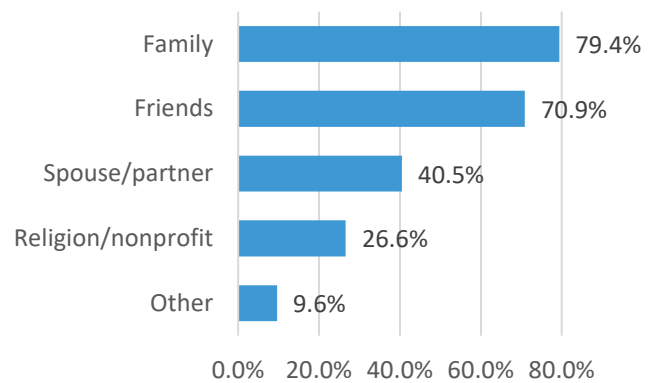


Figure 5: Emotional Resources for Undergraduates¹³



Graduate Education and Career Goals

Turning now to results from graduate students, analyses indicated that 63.0% of Utah women in graduate programs went to graduate school to learn skills necessary for the job that they want to get (32.5%) or to learn more about what they are interested in (30.5%). In addition, about one of five said they were in a graduate program to increase potential earnings. Compared to undergraduate women (see Figure 1), those in graduate programs (see Figure 6) were more likely to pursue education for necessary job skills or earning potential (54.5%) than women in undergraduate programs (47.6%). Those who responded “Other” indicated they pursued graduate school for reasons such as gaining personal fulfillment, leaving a positive legacy, or making a difference in their community.

The primary career goal for women pursuing advanced degrees was to find a job related to their degree (64.6%), which is 8.1% higher than the same category for undergraduate women. At the same time, 17.9% of women planned to find a job so that they can combine work and family responsibilities. Those who chose the “Other” category primarily wrote in responses about education and career goals. For example, some

women suggested that they would pursue more education (e.g., continue to a PhD program) or start their own business/clinic. See Figure 7 for a full breakdown of career goals for graduate students.

Figure 6: Primary Reason for Going to Graduate School¹⁴

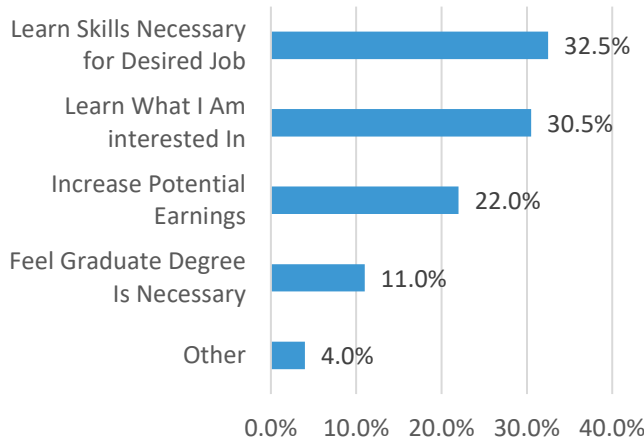
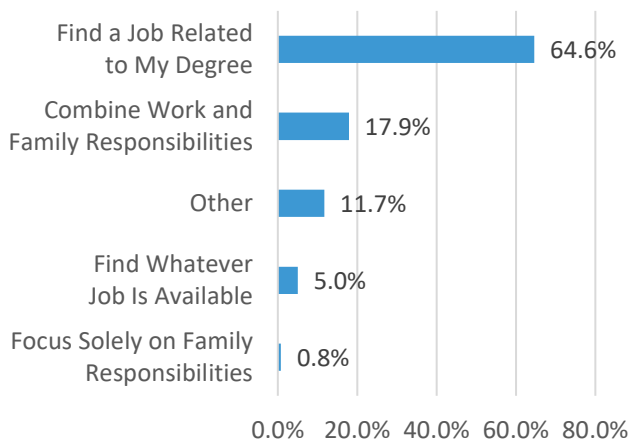


Figure 7: Career Goal after Graduate School



When asked how they envision themselves in 10 years (see Table 3), women in graduate programs indicated a stronger career orientation: 63.3% said that they would be employed full-time (compared to 40.1% of women in undergraduate programs, Table 2). On the contrary, only one of five women in graduate programs mentioned family in their future life goals/circumstances: 6.7% anticipated raising a family, and 16.3% indicated their goals would depend on work and family situations. This may relate to the average higher age of graduate students, many of whom already have at least one child. Compared to undergraduate students, they may more easily envision how to manage career and family or may anticipate child rearing responsibilities lessening within a decade. The majority who responded “Other” envisioned themselves performing both work and family responsibilities (e.g., being employed full-/part-time and raising a family).

Table 3: How Graduate Students Envision Themselves in 10 Years

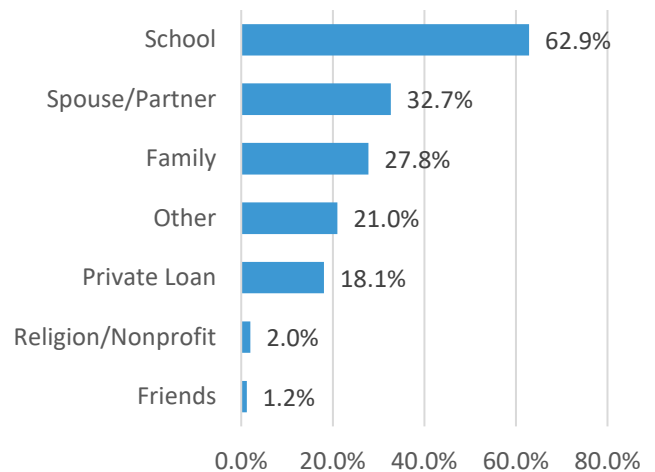
Category	%
Employed, Full-Time	63.3
Employed, Part-Time	7.5
Depends on Work and Family Situations	16.3
Raising a Family	6.7
Not Sure	2.9
Other	3.3

Graduate Challenges and Resources

When asked whether they ever considered leaving graduate school, 47.1% of women responded they had. The primary factor was financial difficulties (42.6%). The second biggest reason was being too busy with work (33.3%), which suggests balancing work, study, and life is difficult. The next reason noted by Utah women in graduate programs was childcare responsibilities (14.8%). As noted in Table 1, about one-third of women pursuing advanced degrees already have child(ren).

Mirroring the undergraduate questions, we asked women pursuing advanced degrees what financial and emotional resources they utilized to stay in their programs. Results are summarized in Figures 8 and 9.

Figure 8: Financial Resources for Graduate Students¹⁵

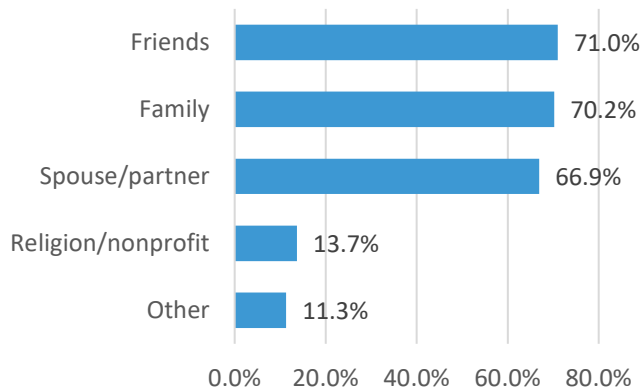


We found the following:

- The greatest source of financial support was school, including grants, programs, and research/teaching assistantships.
- The second- and third-greatest sources of financial support were spouses/partners and family.
- Some responded that they received financial support from their employers and work, such as tuition reimbursement (other category).
- About one in five (18.1%) women had taken out private loans to help finance graduate school.

- As for emotional support, family, friends, and spouses/partners were the three major sources that provided women in graduate programs with support.
- Some graduate students (other category) responded that they received emotional support from professors, advisors, and classmates, as well as therapists and counselors.

Figure 9: Emotional Resources for Graduate Students¹⁶



Compared to undergraduate students, the proportion of graduate students who noted spouse/partner as emotional resources increased a great deal (26.4% difference). However, fewer women in graduate school (13.7%) reported that they received emotional support from religious and nonprofit organizations than those in undergraduate programs (26.6%).

Summary & Recommendations

In this brief, we reported survey results of Utah women enrolled in undergraduate or graduate programs to demonstrate the similarities and differences among women at different stages of their education. Participant demographics showed some characteristics are unique in the Utah context and may affect women’s educational attainment. For example, more than one out of four undergraduate students and almost half of graduate students in our data were married. Overall, about one of five women in our data indicated they have child(ren). Another important factor was employment status. More than one of five women were employed full-time, and almost half were employed part-time. At the same time, our data showed differences between women in undergraduate and graduate programs. Those in graduate programs, for instance, were more racially and religiously diverse than women in undergraduate programs.

Our results showed that women in undergraduate programs often decided to pursue higher education to further their career and job market prospects (see Figures 1 and 2). Many women also thought that a college degree was necessary regardless of their career and life goals. Those with a strong career goal (i.e., to find a job related to a degree) were much more likely to plan for graduate school after obtaining an undergraduate degree (supplementary analyses, results not shown). Even so, many Utah women in college indicated that family formation and responsibilities were important factors when planning for their future career and life goals.

We found that Utah women pursuing advanced degrees had a much clearer career orientation than those pursuing undergraduate degrees. Graduate students’ motivations and career/life goals were more frequently tied to having a job in which they could apply acquired skills and knowledge (see Figures 6 and 7). Accordingly, more graduate students than undergraduate students envision themselves holding a full-time job in the future (compare Tables 2 and 3).

Another important aspect of this study was documenting educational resources and challenges for Utah women. Both undergraduate and graduate students identified school and family (including spouse/partner) as the primary sources of financial support for their education. They also reported receiving emotional support mainly from family, friends, and their spouse/partner. However, one important finding is that half of Utah women in higher education have considered leaving school due mainly to financial difficulties. This result suggests that the level of financial resources that Utah women receive from major sources (i.e., school, family, spouse/partner) as well as employment might not be adequate to cover costs associated with higher education.

Together, findings from our data indicate that Utah women pursuing undergraduate and advanced education face significant challenges and point toward potential strategies to reduce the gender gap in Utah higher education. First, it is critical to relieve financial burdens of women pursuing higher education. It would be helpful to expand programs that cover costs associated with higher education, such as work programs, grants, and scholarships. Many undergraduate women did not consider going to graduate school due to costs and time commitment. These concerns could be alleviated if women understood that many graduate students receive financial support from their programs through assistantships and fellowships.

Second, many women bear family responsibilities that add additional stress when they are working toward an undergraduate or advanced degree. More information on this issue will be available in the second brief, which will summarize findings from in-depth interviews. Still, findings from this survey imply that family responsibilities affect women’s decisions. Utahns should implement measures to mitigate the challenges of balancing family and education. For example, some universities subsidize childcare expenses and offer emergency childcare services for graduate students with child(ren). It would also be very helpful to implement mentoring programs targeting students with child(ren) so as to provide emotional support and examples of how women can successfully prioritize both education and family.

Third, it is necessary to give Utah women in college opportunities to understand their career goals more fully and to provide pathways to realize those goals. Almost half (49.5%) of undergraduate women are thinking about attending graduate school, but we know that substantially fewer are pursuing and completing advanced degrees.¹⁷ We found that undergraduate women who planned to go to graduate school had clearer career goals and aspirations (see Figure 3). Undergraduate students who were less inclined to attend graduate school often lacked knowledge about it (e.g., what graduate school entails,

resources that are available, and potential benefits and return on investment). It is therefore important to raise awareness and address barriers early during secondary and undergraduate education so more women consider and plan to pursue advanced degrees.

Conclusion

Overall, the findings indicate that women in higher education have long-term goals related to career and family. Implementing various programs (e.g., voluntary/involuntary career

workshops, courses, and counseling) could help undergraduate women understand the benefits of advanced education. Institutions of higher education, government agencies, businesses, and individuals need to innovate ways of supporting women in higher education, both financially and emotionally, so more women complete advanced degrees. Taking vital steps will not only mitigate gender disparity observed at the level of advanced education in Utah but will move the needle in other areas of gender inequity in the state, such as the gender wage gap.

¹ Frohlich, T. C. (2014, October 16). *The 10 worst states for women*. 24/7 Wall St. <https://247wallst.com/special-report/2014/10/16/the-10-worst-states-for-women-2/4/>; McCann, A. (2022, August 22). *2022's best & worst states for women's equality*. WalletHub. <https://walletHub.com/edu/%20best-and-worst-states-for-women-equality/5835>

² Hess, C., & Williams, C. (2014, May 1). *The well-being of women in Utah: An overview*. Institute for Women's Policy Research. <https://iwpr.org/wp-content/uploads/2020/12/R379.pdf>

³ United States Census Bureau. (2020). *Educational attainment: American Community Survey 5-year estimates*. https://data.census.gov/cedsci/table?t=Educational%20Attainment&g=0100000US_0400000US49&tid=ACSSST5Y2020.S1501

⁴ McCann, A. (2022, August 22).

⁵ United States Census Bureau. (2020).

⁶ United States Census Bureau. (2020).

⁷ U.S. Bureau of Labor Statistics (2022, September 8). *Education pays*. <https://www.bls.gov/emp/chart-unemployment-earnings-education.htm>; Wang, W. (2015, December 4). *The link between a college education and a lasting marriage*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2015/12/04/education-and-marriage/>

⁸ Madsen, S. R., & Madsen, G. P. (2021, December 2). *Women's equality in Utah: Why Utah is ranked as the worst state, and what can be done*. Utah Women & Leadership Project. <https://www.usu.edu/uwlp/files/wp/no-4.pdf>

⁹ The call for participants and online survey questionnaire were distributed by registrar offices and graduate school offices of Utah State University and Weber State University. Respondents from other universities (i.e., Brigham Young University, Utah Valley University, and University of Utah) were recruited through professional networks and social media platforms associated with universities.

¹⁰ Percentages in some categories do not equal 100% due to decimal rounding.

¹¹ McMann, A. (2022).

¹² Multiple responses were allowed so the sum across categories is higher than 100%.

¹³ Multiple responses were allowed so the sum across categories is higher than 100%.

¹⁴ Figure 6 represents participants' primary reason for going to graduate school. Graduate student selections differed from undergraduate selection so the categories listed in Figure 6 do not match the categories listed in Figure 1.

¹⁵ Multiple responses were allowed so the sum across categories is higher than 100%.

¹⁶ Multiple responses were allowed so the sum across categories is higher than 100%.

¹⁷ United States Census Bureau. (2020).

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