



Working moms: Motherhood penalty or motherhood return?

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ABSTRACT

Among many professions, the gender wage gap is a very real and pertinent concern. Research has shown that this gap can be explained in part by the motherhood penalty, which consists of costs associated with the demands of motherhood in professional life. Using a sample of 808 female professional academic librarians, we investigated the motherhood penalty by examining differences between mothers ($n = 343$) and non-mothers ($n = 465$). Within this sample, we found that there were no penalties for mothers compared to non-mothers in regard to salary, position, and perceived well-being. Implications and avenues for future research are offered.

Introduction

Earlier research on the gender wage gap revealed that many researchers attribute at least a part of the gender wage gap to the motherhood penalty. The motherhood penalty refers to a loss of human capital when women become mothers and subsequently take time off work, divide their attention between their jobs and home, and make other potentially detrimental career decisions based on their children. However, many of these studies compare men to women, and some make the erroneous assumption that most women are mothers. In our sample of professional academic librarians, the majority of our sampled females were not mothers. Furthermore, a recent study on academic librarians revealed that the adjusted gender wage gap between women and men in ARL Libraries was relatively small, with women making 97.80% of what men made (Galbraith, Callister, & Kelley, 2019). This suggests that generalization regarding the gender wage gap and motherhood penalties may not apply to academic libraries.

With this study we aimed to investigate the following research questions: Is there a significant wage gap between women who are mothers and women who are not, and what is the gender wage gap if compared between men and non-mothers? Additionally, we questioned whether we would see additional differences between mothers and non-mothers, including position and perceptions of well-being. For the sake of brevity, throughout this paper the terms *mothers* (referring to working women who have children) and *non-mothers* (referring to working women who do not have children) will be used.

Literature review

Studies often emphasize the difficulties experienced by working mothers. According to existing research, mothers struggle to maintain a healthy work-life balance due to the many pressures they experience both in the workplace and at home (Dugan & Barnes-Farrell, 2018; Wattis & James, 2013). After interviewing working mothers in the United Kingdom, Wattis, Standing, and Yerkes (2013) described this work-life balance as “not a fixed state but a complex and contradictory set of processes” (p. 3).

Family-work conflict and family-work enrichment

Researchers have coined the term ‘work-family conflict’ to describe how work responsibilities might interfere with family responsibilities. In their landmark study, Greenhaus and Beutell (1985) defined work-family conflict as “a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (p. 77). Similarly, family-life researchers have also studied “family-work conflict,” described by Nohe, Michel, and Sonntag (2014) as arising when the pressures of family life hinder employee productivity at work, negatively affecting organizations (p. 351). Whether it is “work-family conflict” or “family-work conflict,” when multiple roles are competing for time and energy, neither role can receive the full attention necessary for optimal success (Verbruggen & Van, 2013).

Greenhaus and Powell (2006) looked at the other side of this conflict by examining work-family enrichment and family-work enrichment—that is, the ways working may improve family relations and

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the ways having a family may improve work experiences. Gareis, Barnett, Ertel, and Berkman (2009) wrote that analyzing enrichment, as well as conflict, allows researchers to “paint a fuller picture of the work-family interface” (p. 697). Jijena-Michel and Michel (2012) explained that when family is the most important aspect in a person's life, work-family conflict and enrichment can lead to personal fulfillment as well as success within an organization (p. 9). These ideas correspond with Barnett and Hyde's (2001) expansionist theory, which points out that there may be benefits from taking on multiple roles. These benefits depend on the quality of the roles, the number of roles, and the time demands associated with each role.

Taking on various roles becomes necessary when considering the dual-earner households prevalent in contemporary society, and Barnett and Hyde's theoretical model represents such households. Similarly, Alonso-Almeida (2014) shows that the number of women working outside the home continues to increase, and as Kelly et al. (2014) explained, many employers have not yet adjusted to accommodate families with two working partners. Such family circumstances often oblige at least one partner to take on dual roles as employee and caregiver, leading to greater work-family conflict (p. 486). Thus a traditional single-earner model in the workplace may cause friction, particularly for mothers with full-time jobs.

Penalties for working mothers

Budig and Hodges (2010) found an inequality of earnings that affects working mothers, particularly mothers with low-wage jobs. Dechter (2014) concluded “that the post-motherhood loss in hourly wage is driven entirely by reduced human capital accumulation,” due in part to time taken off work for maternity leave (p. 124). Similarly, Budig and England (2001) described the fatigue experienced by working mothers as potentially causing them to be less productive at work (p. 220). Looze (2014) offered another perspective into the wage disparity between working, childless women and working mothers, finding that non-mothers are more willing to relocate for a pay-increase than mothers are (p. 693).

In addition to mothers making fewer wage-enhancing movements, Aranda and Glick (2014) suggested that employers are less likely to hire and promote mothers than other female or male candidates. They conclude from their study that the motherhood penalty occurred when “family-devoted mothers” received lower recommendations for hiring than both work-devoted parents and “family-devoted fathers” (p. 96). Correll, Benard, and Paik (2007) described these false perceptions of mothers in the workplace as constructing a “glass ceiling,” preventing wage equality and mothers' career advancement (p. 1334).

The literature further claims that some of these penalties are stronger for working mothers with large families than working mothers with small families. For example, Budig and England (2001) found that a woman's earnings decrease with each child born because of a loss of human capital. Kahn, Garcia-Mangano, and Bianchi (2014) also found that women's earnings are penalized with each child, although the penalty is minimal for women with just one child.

Work-life balance, job satisfaction, and happiness

Due to the reciprocal nature of how work influences family and family influences work, it is important to analyze mothers' work-life balance. Work-life balance is a complicated issue, and one that is very relevant to a motherhood penalty. Wattis and James (2013) explained this complication, pointing out that work-life balance depends on the woman and her particular situation. In their study, working women were more likely than working men to take on the primary responsibility for domestic work, even though such women varied in position and hours worked. Thus work-life balance varied from person to person.

Work-life balance may be related to job satisfaction. Many

researchers have attempted to analyze this variable and have reached a variety of conclusions. Hanson and Sloane (1992) found that having children did not affect job satisfaction and wrote, “Perhaps working women with young children do experience role conflicts, but that does not mean that they do not derive satisfaction from their work” (p. 809). A more recent study by Kifle, Kler, and Shankar (2014) found that mothers with young children had much higher job satisfaction when employed part-time as opposed to being employed full-time.

Job satisfaction and work-life balance are both highly correlated with a woman's overall happiness (Guzi & de Pedraza Garcia, 2015). Social science literature is divided over whether or not motherhood increases a woman's happiness; Nelson, Kushlev, and Lyubomirsky (2014) described this dispute, affirming that the relationship between happiness and having children can be extremely complex (p. 888). Nelson and her team analyzed other peer-reviewed studies and found that many factors influence parental happiness, revealing the problems with giving “blanket answers” about how parenthood and well-being are interrelated (p. 888). However, a good deal of research shows that employment often improves overall well-being in mothers (Zabkiewicz, 2010). While there is no shortage of research about the differences between stay-at-home mothers and working mothers (Barnett, 2004), little research has been done specifically on the differences in general happiness between working women who are mothers and working women who are not.

Motherhood in academic libraries

Relatively little literature exists concerning the association between academic librarianship and motherhood (Connell, 2013; Gallin-Parisi, 2015). The research available suggests that provisions for parents may be harder to obtain for academic librarians than for university faculty, and parental provisions are more likely to be available for librarians who are tenured or on tenure-track (Connell, 2013). Graves, Xiong, and Park (2008) found that librarians typically did not believe that the tenure and promotion track affected their ability to be parents, but women were more likely to believe there was an effect than men, and some librarians reported that they delayed or forwent having children altogether in order to pursue tenure instead. In contrast, Gallin-Parisi's (2015) qualitative study indicated that women who are both librarians and mothers believe that these two roles complimented each other: these women believed that librarianship made them better mothers because they could spend time away from their children, be emotionally fulfilled through their career, and be better role models for their children. They also felt that they could be better librarians because they were more emotionally aware of the needs of students, had a wider perspective on life, and were motivated to be more productive during work time.

A study conducted in 2005 that is in some ways similar to the current study examined the impact of having children on promotions. The study found that library directors with and without children were comparable in number of previous directorships, degrees attained, and years in position. This study also found that only 35% of respondents believed that motherhood affected librarianship, although those librarians who felt that they had not achieved their professional goals were more likely to accredit this to motherhood than those librarians who had achieved their goals (Zemon, 2005). Overall, these studies indicate a complicated relationship between librarianship and motherhood that deserves further study, which we hope to address in part here.

Current study

The primary aim of our study is to look at the differences in salary and other factors between mothers and non-mothers in academic libraries. Based on our review of the literature, we hypothesized:

- (1) Mothers would have lower salaries and be concentrated in lower positions when compared to non-mothers.
- (2) Removing mothers from the data would result in a smaller wage gap between non-mothers and men.
- (3) Mothers would have lower work-life balance and work fewer hours than their childless counterparts, which would spill over into lower job satisfaction.
- (4) Despite this, we hypothesized that mothers would report greater overall happiness derived from their fulfillment of multiple varied roles.

Methods

Survey creation and sample selection

Our sample consisted of only professional academic librarians, all of whom held advanced degrees. While this allowed us to learn more about the wage situation among female academic librarians, it also allowed us to control for differences inherent in different professions. After a thorough literature review, we created a survey of approximately 55 questions. The Institutional Review Board at our university reviewed and approved this survey.

We emailed directors from 110 English-speaking academic libraries who were members of the Association of Research Libraries (ARL) and invited them to participate in a survey that would “measure variables that relevant literature indicates may explain gender and minority salary difference.” Library participation was incentivized by offering a custom report of the data, comparing their school's responses to the collective results of the survey. Of the 110 contacted libraries, 44 libraries agreed to participate in the study.

We then sent a questionnaire to the 44 directors (or their appointed contacts within the library) and used their responses to customize the survey to each library's organization and tenure processes. After customizing the survey, we sent a link for the customized survey to each in-library contact, asking them to forward the survey link and invitation letter to each of their professional librarians. To protect the integrity of the data, participants were required to affirm that they met certain criteria specific to professional librarians in their institution; criteria included having an advanced degree and being on tenure track at the schools which offered tenure to librarians. Approximately half of the libraries in our sample offered tenure-track to librarians. Librarian participation was incentivized with an opportunity to enter a drawing for an iPad Air 2.

We collected 808 usable female responses from the survey. Of these women, 465 were not mothers and 343 respondents were mothers. Of the mothers, 132 had one child, 176 had two children, and 35 had three or more children. The breakdown of racial background, while not representative of overall demographics, is consistent with the population of professional librarians, with 703 being white, 39 being black, 38 being Asian, and 28 reporting another race.

Measures

Demographics

Participants were asked to respond to various demographic questions, including their sex, age, race, marital status, education level, and weekly hours worked in their current position. Essential to our study, participants were asked if they had children and the approximate ages of each child.

Income and job position

The survey likewise included various questions regarding income and job position. For instance, participants were asked their starting annual salary as well as their current annual salary. They were asked to

mark their current job title from a list of academic librarian positions, as well as how many years total they had worked at their current institution. Each librarian was further asked, “How likely would you be to consider library positions outside your current institution?” “How much of a salary increase would convince you to accept an external position that required you to relocate?” and, if she were married, “If you were offered an external position that required you to relocate, how supportive and willing to relocate would your spouse be?”

Work-life balance, job satisfaction, and general happiness

In addition to these questions, the survey also invited participants to describe perceptions of their work-life balance, job satisfaction, general happiness, etc. These self-report variables were measured on a seven-point Likert scale. For example, we measured work-life balance by asking, “How easily are you able to balance your work with your personal or family responsibilities?” and providing a seven-point scale where one was defined as “Not Easily” and seven was defined as “Very Easily.” Four represented the neutral point on the scale. The scale used was continuous, allowing participants to specify their answer up to two decimal points. Using the same seven-point scale, job satisfaction was measured by asking, “How satisfied are you with your current job?” with one being “Very Dissatisfied” and seven being “Very Satisfied.” General happiness was measured by the statement, “Please indicate your level of general happiness,” with one being “Very Unhappy” and seven being “Very Happy.”

Analysis plan

A multiple linear regression analysis was used to test for difference in salary between the two groups. The regression equation was defined as $\ln(\text{Salary}) = \alpha + \beta \cdot \mathbf{X} + \varepsilon$ where $\ln(\text{Salary})$ is the natural logarithm of the respondents' reported yearly salary before taxes. The intercept of the equation was represented by α , and \mathbf{X} represents a matrix of the explanatory variables that could affect salary (years of experience, years of experience squared, position, race, marital status, education, and an indicator for whether or not the individual was a mother). β represents a vector of coefficients that tie each of the explanatory variables to salary, and ε represents a random error term. In conducting our analysis on salary, we opted to exclude deans and directors, as their salaries represented extreme outliers in the data set. Both years of experience and years of experience squared were used because “each additional year of experience does not result in an equivalent increase in pay” (Mani, 2013, p. 27). For example, if a library offers tenure after six years, the pay raise from year six to year seven will be greater than the pay raise from year seven to eight.

We chose to not control for institution or location, as it reduced the predictive power of our model by creating too many small groupings. Additionally, we could not control for rank or tenure because each library's rank and tenure system varied greatly from one another—some libraries did not have a rank system while others had a three-, four-, or five-tier rank system. Because of these differences, it was impractical to try to control for rank.

Our analysis of the self-report variables on perceptions of well-being was limited. Standard two-sample *t*-tests were used to determine whether statistically significant differences existed between the two groups' general level of happiness, job satisfaction, and work-life balance, with statistical significance set at the $p < .05$ level.

Results

Table 1 provides the descriptive statistics of the average salary, years of experience, age, and weekly hours worked of our sample population. Though the mothers in this sample made nearly \$10,000 more than non-mothers, they also had an average of five years more experience and were older than non-mothers.

Table 1
Descriptive statistics.

Status	Salary	Experience	Age	Weekly hours
Mothers	\$77,455	22 years	50	42.2
Non-mothers	\$68,456	17 years	43	42.7

Contrary to our hypothesis (H1), mothers (M = \$77,481.57) actually had a higher mean salary than their childless counterparts (M = \$68,164.80). However, after running a multiple regression analysis which controlled for position, years of experience, years of experience squared, race, marital status, and education, mothers still made more than non-mothers, but the difference between the two groups was no longer statistically significant ($p = .852$).

Although not the focus of this paper, it is important to note that including race in our model had a very small effect on the predictive power of the model. While some reports show that women who are also racial minorities often face an even bigger disadvantage with salary, we did not find that to be the case in our study. This is, however, in line with a recent study examining the racial wage gap of ARL librarians over 35 years, which showed that the racial wage gap in ARL Libraries has slowly closed to the point where it was no longer statistically significant in 2015 (Galbraith, Kelley, & Groesbeck, 2018).

As researchers have found position to be the best predictor of salary in libraries (Dowell, 1988, pp. 94–95), we also include a breakdown of the proportion of mothers and non-mothers in each major library position (see Table 2). As there were fewer mothers than non-mothers in our sample, to make the numbers comparable we first calculated the percentage of mothers in each position and the percentage of non-mothers in each position. We then added those percentages together and divided them by the percentage of non-mothers to get percentages which represented the composition of each position if the number of mothers and non-mothers were equal, in order to more easily compare the two groups. This analysis is limited in that it assumes that the only thing separating the mothers and non-mothers in position is whether they do or do not have children. However, we find this analysis to still be insightful in supporting the null hypothesis, that there are no differences in position due to motherhood.

There were a higher proportion of mothers in the top three highest paying positions (Deans/Directors, Associate Deans/Directors, and Assistant Dean/Directors). This provides evidence against both our first hypothesis (H1) and the motherhood penalty, which poses that mothering responsibilities often prevent mothers from advancing to top positions. However, given our limited analysis, we refrain from drawing any conclusions regarding whether motherhood might help women advance in their careers. As mentioned previously, the mothers in this

Table 2
The percentage of mothers and non-mothers in academic libraries by position.

Position	% Non-moms	% Moms
Administrative lib.	40%	60%
Archivist or curator	50%	50%
Assistant dean/director	15%	85%
Associate dean/director	29%	71%
Cataloger or metadata analyst	52%	48%
Dean/director	31%	69%
Digital specialist	62%	38%
General R/R/I	57%	43%
Head of department	48%	52%
Other	51%	49%
Preservation/conservation	50%	50%
Subject librarian	55%	45%

Note. This sample includes 470 non-mothers and 347 mothers. We define a leadership position to be Assistant or Associate Dean/Director, Dean/Director, or Head of Department. Notice that 33.15% of mothers are in leadership positions, while 22.98% of non-mothers are in leadership positions.

dataset were substantially older than the non-mothers, and the larger proportion of mothers in higher positions is likely primarily a reflection of that age difference. Thus, we only state that we see no evidence in this sample of motherhood preventing women from achieving high positions. This data may also partially explain why in Table 1 mothers made more than non-mothers, as position is one of the highest predictors of salary.

We ran the same regression model on the men's salaries as we ran on the women's salaries, using men's salary as a comparison to explore the gender wage gap when mothers and non-mothers were disaggregated (we chose not to disaggregate fathers from non-fathers as the literature does not suggest that there is any penalty for fatherhood). We found that mothers made 97.14% and non-mothers made 95.31% of what men made. When mothers and non-mothers were separated, the difference between mothers and men was only marginally statistically significant ($p = .058$), but the difference between non-mothers and men remained statistically significant ($p < .001$). Although we hypothesized a smaller wage gap upon removing mothers from the data (H2), disaggregating mothers did not lower the wage gap between non-mothers and men.

Contrary to our hypothesis (H3), when comparing mothers and non-mothers we found no statistically significant difference in the two groups' perceptions of their work-life balance ($p = .207$). However, after analyzing mothers' work-life balance by the age of their children, results showed that non-mothers and mothers with children aged 19 and older had significantly higher work-life balance than mothers with children aged 5 and younger (see Fig. 1). Consistent with the literature (Kifle et al., 2014, p. 292), we found that work-life balance increases consistently as children grow older. Even so, all groups of women had a mean work-life balance of at least four (the neutral point on our seven-point scale). Furthermore, the mean varied by no more than one point between any of the groups, which was less variance than expected.

In conjunction with work-life balance, it is also interesting that all groups of women worked a comparable number of hours per week. Mothers worked an average of 42.2 h per week, whereas non-mothers worked an average of 42.7 h per week. Although these numbers vary slightly, the difference is not significant ($p = .220$), suggesting that mothers' "second shift" of child care (Ward & Wolf-Wendel, 2004) does not keep them from completing a full 40-h work week within the academic library profession.

We did find a statistically significant difference ($p < .001$) in job satisfaction between mothers (M = 5.28) and non-mothers (M = 4.86), with mothers reporting higher job satisfaction, contrary to our hypothesis (H3). Similarly, mothers with children at home reported that they were not very likely to consider an external position (M = 3.33), whereas their childless counterparts reported higher willingness to leave their current institution for a promotion (M = 4.06), which was also statistically significant ($p < .001$).

Finally, there was a significant difference between mothers' and non-mothers' self-reports of overall levels of general happiness, in conjunction with our hypothesis (H4). The mean score for all mothers was 5.38, whereas the mean score for non-mothers was 5.13. This too was statistically significant ($p = .003$); however, it is important to note that the difference between the two means remains quite small.

Although mothers reported a statistically significant higher level of general happiness and job satisfaction, we cannot conclude that they are happier or more satisfied with their job solely because they are mothers, as there may be other variables which contribute to general happiness and job satisfaction. However, the data does suggest that motherhood does not lead to lower happiness and job satisfaction among these working women. Table 3 shows the standard *t*-test comparisons between mothers and non-mothers on happiness, job satisfaction, and work-life balance.

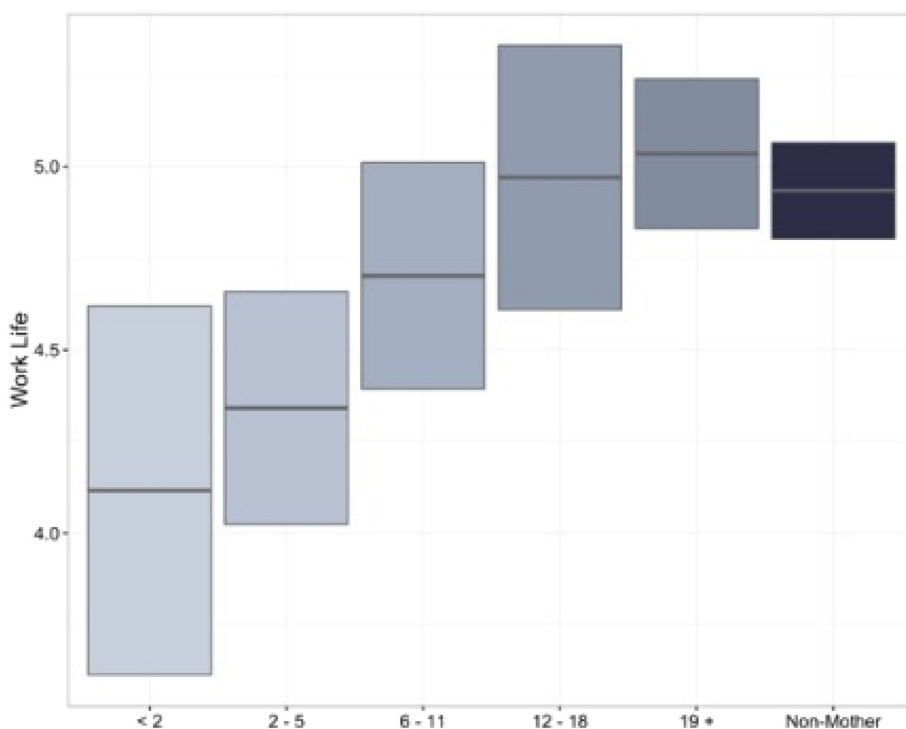


Fig. 1. Reported work life balance by age of children.

Table 3
Results of the *t*-tests.

Question	Mothers	Non-mothers	t-Stat	p-Value
Happiness	5.38	5.13	2.99	0.003*
Job satisfaction	5.28	4.86	4.28	< 0.001*
Work-life balance	4.82	4.94	-1.26	0.207
Outside position	3.33	4.06	-5.95	< 0.001*

* The * signifies that the p-value is significant at the .05 level.

Discussion

Implications

The findings from this study could lead to various important implications. Contesting false perceptions about the penalties of motherhood in the workplace has major implications for young families, as well as society in general. Less than 25% of households in the United States are single-earner married couples, and that percentage continues to drop (Clay, 2005). What's more, the fertility rate in the United States is declining. In 2018 the fertility rate was reported at a record low 1,728 children per 1,000 women, well below the replacement rate of 2,100 (Hamilton, Martin, Osterman, & Rossen, 2019). Some researchers have attributed a large part of this drop in fertility rates to the increase of females in the workforce (Adsera, 2005). Promoting a more comprehensive view of motherhood, with both its negative and positive impacts, may be an influential step in helping families make more informed childbearing decisions and perhaps in reversing the decline in fertility rate. For professional women who are questioning whether having children while in the workplace are worth “the motherhood penalty,” our results suggest that, at least in some professions, women can have children and not suffer penalties in regard to salary and their professional career.

The implications of better understanding a motherhood return is equally pertinent to employers. Many studies have found that employers' perceptions of mothers are more negative than their perceptions of fathers and childless women (Cuddy, Fiske, & Glick, 2004;

Correll et al., 2007). Our results contradict those perceptions by showing that women who are mothers work as many hours as their childless counterparts, have similar levels of job satisfaction, and may be less likely to seek external positions. Increased awareness of the potential advantages of hiring mothers may help neutralize many employers' negative perceptions, whether the perceptions are conscious or unconscious.

Limitations and recommendations for future research

Although using a professionally homogeneous sample was instructive and allowed us to control for potentially confounding variables, we acknowledge that there were several limitations to our sample, and there are limitations to applying trends among academic librarians to other professions. First, librarianship is typically an older profession, so the majority of women in our sample were older than 35. The average age of mothers was 49.98, which is not representative of the general population. Non-mothers, by comparison, had an average age of 43.20. Similarly, female librarians with children were often older at the birth of their first child than other women are. In 2013, the mean age of an American woman at the birth of her first child was 26 (Centers for Disease Control and Prevention, 2015); in our sample, few women had had children before that age. Additionally, librarianship is a female-dominated profession, while many professions—particularly those requiring advanced degrees—are dominated by males. Thus, it is important to note that these results cannot be fully extended to other populations since our sample includes only academic librarians. Future research is warranted among a more professionally diverse population.

An additional limitation of our sample was that we could not control for rank, as about half of the institutions did not offer rank, and the institutions that did offer rank had many different systems, varying from a three-tier rank system to a five-tier rank system. Due to these differences, we were unable to adequately control for rank and opted to not control for it at all, as rank has been shown to hide discrimination between groups if any exists in rank promotion and advancement programs (Renzulli, Grant, & Kathuria, 2006). Future research should investigate whether there is an association between motherhood and

rank and tenure processes. Additionally, we were unable to control for institution or location in this analysis. As the cost of living and average salary can vary greatly from city to city, this could influence our results and is something that should be considered in future research.

We recognize that our measures were very limited. However, we do note that various studies have shown that the use of a single-item approach in measuring things such as well-being and job satisfaction often produces results very similar to those produced by scales and contains more face validity while being more efficient (De Boer et al., 2004; Nagy, 2002). Still, we recommend that future researchers move beyond respondents' self-reported perceptions and find new ways to measure the possibility of a motherhood return. More specifically, we suggest selecting one variable and comprehensively assessing its differences between working mothers and their childless counterparts.

An additional noteworthy limitation is that this study only looked at working women, and thus does not account for women and mothers who may have faced significant hurdles in pursuing a career in academic librarianship that are not included in this sample. As our analysis only included full-time employees, this would not include women who chose to only work part time or who may not have been hired because they were mothers. Many mothers must weigh the consequences of returning to work for financial gain or the financial loss and burden of childcare (Clark & Gallagher, 2017), and the mothers who found the cost of childcare to outweigh the benefits of returning to work full-time were not included in this study. Future research should seek to include information on women who chose not to work or were not hired. Within this profession, this could be done by looking at the career trajectories of female graduates of various Master's in Library Science programs.

While our study has various limitations, it can act as a foundation for future research to better understand the potential positive influences of motherhood on the careers of working women. Our results, combined with future research, may be used to contest some of the negative perceptions of motherhood.

Conclusion

In summary, we did not find evidence of a motherhood penalty, but rather our findings suggest that a motherhood return may exist in certain situations. Although mothers and non-mothers had no statistical difference in work-life balance, mothers expressed higher job satisfaction and greater happiness than their childless counterparts. These results suggest that women are capable of fulfilling, and excelling in, many roles. The contrasting yet rewarding nature of both motherhood and a professional career may be a reason for the increase in working mother's overall satisfaction. While future research is still needed to determine whether or not a motherhood return exists, our study suggests that the combining motherhood and a professional career may increase a working mother's overall satisfaction.

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Disclosure statement

The authors received no financial benefit of any kind from this study. However, the lead author is a working mother (the basis of the study) and the second author is a working father. The third author is a working woman with no children.

Data availability statement

The data for this study is not publicly available. Because it is owned

by the Association of Research Librarians and deals with sensitive salary information, they have asked that we not share it.

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Declaration of competing interest

The authors received no financial benefit of any kind from this study. However, the lead author is a working mother (the basis of the study) and the second author is a working father. The third author is a working woman with no children. The terms of this arrangement have been approved by the IRB office at Brigham Young University.

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