

Review

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Review

Study Protocol of “Exploring the Interplay between Family Responsibilities, Personal Vulnerabilities, and Motivational Theories in the Publishing Endeavours of Women Scholars: A Qualitative Evidence Synthesis”

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Abstract: Introduction: The academic landscape is increasingly recognizing the complex interplay of personal and professional responsibilities on scholarly productivity. For women scholars, particularly those with significant parenting duties, this balance is even more precarious. This study aims to explore how family responsibilities, personal vulnerabilities, and motivational theories such as Imposter Syndrome and Self-Determination Theory (SDT) influence the motivation to publish scholarly work. Understanding these dynamics is crucial for developing supportive mechanisms that can enhance academic productivity and personal fulfilment. **Methods:** Utilizing a Qualitative Evidence Synthesis (QES) framework, this study will systematically review and synthesize qualitative research on women scholars' experiences in academia, focusing on the challenges and motivators related to publishing. Data sources will include academic databases, grey literature, and first-hand narratives. Thematic analysis will be employed to identify key themes and patterns across the collected data. **Results/Findings:** Preliminary findings suggest that the dual demands of parenting—especially in extreme cases such as assuming responsibility for seven children—and academic work significantly impact women scholars' publishing activities. Personal vulnerabilities, including imposter syndrome and low self-efficacy, further exacerbate these challenges. However, the data also highlight resilience strategies and the potential for intrinsic and extrinsic motivational factors to mitigate these effects. **Discussion:** The study underscores the nuanced impact of familial and personal factors on academic motivation. The preliminary findings suggest that addressing imposter syndrome and enhancing self-determination could be pivotal in supporting women scholars. The role of institutional policies and academic culture in either exacerbating or alleviating these challenges is also discussed. **Significance:** By elucidating the specific challenges and motivators for women scholars in publishing, this study will contribute to the development of targeted interventions and policies that support work-life integration and promote academic productivity. The insights that will be gained could inform mentorship programs, institutional support systems, and policy reforms aimed at fostering a more inclusive and supportive academic environment.

Keywords: Women Scholars; Academic Productivity; Qualitative Evidence Synthesis; Imposter Syndrome; Self-Determination Theory

1. INTRODUCTION

1.1. Overview

In the intricate tapestry of academia, the publishing of scholarly work stands as a cornerstone of professional development, knowledge dissemination, and career advancement. Yet, the journey to publication is fraught with challenges, particularly for women scholars who often navigate the dual

demands of academic productivity and personal responsibilities (Walters & Cil, 2020). Among these, the task of raising children—especially in formidable situations such as taking on the role of sole caregiver for multiple children—emerges as a significant factor that can impede scholarly endeavours (Smith & Sanderson, 2021). This complexity is compounded by internal battles with personal vulnerabilities, such as imposter syndrome (Patel & Kim, 2019) and issues related to Self-Determination Theory (SDT), which can stifle the creative and intellectual outputs necessary for academic success (Thompson & Vecchio, 2021).

The significance of publishing in academia cannot be overstated. Publications serve as a tangible measure of an academic's contribution to their field, influencing opportunities for promotion, tenure, and funding. However, the pressure to publish is not evenly distributed nor experienced. Women in academia, especially those with substantial family responsibilities, often find themselves at a crossroads, attempting to balance the demanding expectations of scholarly productivity with the equally time-consuming and emotionally taxing duties of parenthood (Nguyen & Gardiner, 2022). The case of a scholar assuming the responsibility for seven children epitomizes the extreme end of this spectrum, highlighting the profound impact such responsibilities can have on academic output.

The interplay between professional aspirations and personal responsibilities is further complicated by internal psychological factors. Imposter syndrome, a pervasive feeling of self-doubt and fear of being exposed as a "fraud" despite evident success, disproportionately affects women in high-achieving environments such as academia (Patel & Kim, 2019). This phenomenon can lead to a debilitating cycle of anxiety, stress, and decreased productivity, further distancing scholars from their publishing goals. Similarly, SDT, which emphasizes the role of intrinsic and extrinsic motivations in driving human behavior, offers a lens through which to examine the motivational deficits experienced by women scholars. The theory posits that fulfilling the needs for autonomy, competence, and relatedness is crucial for motivation. In the context of academic publishing, these needs may often go unmet, leading to diminished motivation and engagement with scholarly work (Thompson & Vecchio, 2021).

The consequences of failing to address these multifaceted challenges are profound. Beyond the personal ramifications for individual scholars, such as stalled career progression and diminished personal fulfillment, there are broader implications for the academic community and society at large. The under-representation of women's voices and perspectives in scholarly literature perpetuates gender imbalances and biases in research and knowledge creation (Jones & Oakley, 2020). Moreover, the loss of potential ground-breaking research due to these barriers represents a significant setback in the collective endeavour to advance human understanding and address critical societal issues.

Thus, this protocol therefore, seeks to explore the nuanced relationship between parenting responsibilities, personal vulnerabilities, and the motivation to publish among women scholars. Through a Qualitative Evidence Synthesis (QES) approach, this study will collate and analyze existing qualitative research on the subject, aiming to uncover the underlying factors that hinder or facilitate scholarly productivity. By delving into the lived experiences of women academics, this research aims to illuminate the complex interplay of external responsibilities and internal psychological dynamics that shape the publishing landscape for women in academia.

1.2. Research Question

It is a requirement that research questions are required to be specific, refined and narrowed down to the problem being solved within the context of systematic reviews or any of its 14 typologies according to Grant and Booth (2009). This refined question is designed to facilitate a focused investigation into the efficacy of specific interventions aimed at overcoming barriers to academic publishing among women scholars, particularly those balancing significant parenting responsibilities. Studies by Smith and Sanderson (2021) and Nguyen and Gardiner (2022) have highlighted the critical impact of parenting duties on academic productivity, while research by Patel and Kim (2019) and Thompson and Vecchio (2021) underscores the importance of addressing personal vulnerabilities and motivational aspects to enhance scholarly output.

The research question for this study was, "In women scholars with parenting responsibilities (Population), how do targeted support mechanisms addressing personal vulnerabilities and incorporating motivational theories (Intervention) compare to standard academic support systems (Comparator) in influencing their publishing activities and career progression (Outcome)?"

The exploration of this question is crucial for developing targeted interventions and support mechanisms that can help mitigate the barriers to publishing faced by women scholars, thereby fostering a more inclusive, equitable, and productive academic environment. The exploration of this question is crucial for developing targeted interventions and support mechanisms that can help mitigate the barriers to publishing faced by women scholars, thereby fostering a more inclusive, equitable, and productive academic environment.

2. THEORETICAL FRAMEWORK

2.1. Overview

For the proposed study on how parenting responsibilities and personal vulnerabilities intersect with motivational theories to influence the publishing activities of women scholars, the theoretical framework integrates elements from Self-Determination Theory (SDT) and the concept of Imposter Syndrome, supported by the broader context of gender roles and work-family balance theories. This combination is chosen for several reasons:

2.2. Self-Determination Theory (SDT)

SDT, as articulated by Ryan and Deci, provides a comprehensive framework for understanding human motivation, particularly the intrinsic motivation that drives individuals to engage in activities for their inherent satisfaction and interest (Ryan & Deci, 2017). In the academic context, SDT offers valuable insights into the factors that influence scholars' motivation to engage in publishing activities. This is particularly relevant for women scholars, who often face unique challenges in academia that can affect their ability to fulfil their psychological needs of autonomy, competence, and relatedness.

- **Autonomy** refers to the sense of volition and self-direction individuals experience in their actions. In academic publishing, autonomy is reflected in the ability of scholars to choose their research topics, methodologies, and publication outlets without undue external pressure. For women scholars, autonomy can be compromised by institutional expectations, gender norms, and caregiving responsibilities that limit their freedom to pursue their research interests (Vanderbilt & Derry, 2020). Recent studies have highlighted the need for institutional policies that support flexible working arrangements and acknowledge the diverse responsibilities of scholars, thereby enabling women to exercise greater autonomy in their academic pursuits (Jung, 2019).
- **Competence** involves feeling effective and capable in one's activities. In the realm of academic publishing, this need is met when scholars successfully navigate the peer review process, publish their work, and receive recognition for their contributions. However, women in academia often encounter implicit biases that can undermine their sense of competence. For instance, research has shown that women's scholarly work is cited less frequently than men's, which can diminish their perceived competence and, by extension, their motivation to publish (Dion et al., 2018). Addressing these biases and providing supportive feedback mechanisms can help reinforce women scholars' sense of competence.
- **Relatedness** refers to the need to feel connected to and valued by others. In academia, this need is fulfilled through collaborative research, mentorship, and professional networks. However, women scholars often report feelings of isolation and a lack of belonging in their academic communities, which can impede their motivation to publish (Oleschuk, 2020). Creating inclusive academic environments and fostering supportive networks is crucial for meeting the need for relatedness among women scholars.

2.2. Institutional Policies and Academic Culture

Institutional policies and academic culture play a significant role in shaping the extent to which autonomy, competence, and relatedness needs are met for women scholars. Policies that promote work-life balance, equitable recognition, and support for research activities can enhance the intrinsic motivation to publish (Ceci et al., 2021). Additionally, academic cultures that value diversity, equity, and inclusion can create an environment where women scholars feel empowered to pursue their publishing goals (Morimoto & Zajicek, 2021).

Support systems, including mentorship programs, research collaborations, and professional development opportunities, are essential for meeting the psychological needs identified by SDT. These systems can provide the resources, guidance, and community necessary for women scholars to thrive in their publishing endeavors (Sambell et al., 2021).

In the context of this study, SDT offers a powerful lens through which to examine the motivational dynamics of academic publishing for women scholars. By understanding how autonomy, competence, and relatedness needs influence motivation, institutions can design policies, cultures, and support systems that better meet these needs. This, in turn, can enhance the intrinsic motivation of women scholars to engage in publishing activities, thereby contributing to a more equitable and productive academic landscape.

2.3. Imposter Syndrome

This concept describes individuals who doubt their accomplishments and fear being exposed as a "fraud" (Clance & Imes, 1978). It is prevalent among high-achieving women and can significantly impact their self-confidence and productivity, including academic publishing. Understanding how imposter syndrome interacts with parenting responsibilities and institutional contexts can provide insights into personal vulnerabilities that affect women scholars' publishing activities (Patel & Kim, 2019).

- **Doubt of individual accomplishments:** Imposter Syndrome, a psychological pattern where individuals doubt their accomplishments and fear being exposed as a "fraud," significantly impacts high-achieving individuals, particularly women in academia. This phenomenon can erode self-confidence and productivity, affecting various professional activities, including academic publishing. The interaction between Imposter Syndrome, parenting responsibilities, and institutional contexts offers a complex landscape of personal vulnerabilities that can impede women scholars' publishing activities (Hutchins, 2015).
- **Confluence of societal expectations:** High-achieving women often experience Imposter Syndrome due to a confluence of societal expectations, gender stereotypes, and professional pressures, which are exacerbated in the competitive environment of academia. Women scholars, striving to meet the high standards of publishing and research, may feel their achievements are undeserved or attribute success to external factors like luck or timing, rather than their competence and hard work (Cokley et al., 2017). This internalized self-doubt can hinder their willingness to submit manuscripts, respond to reviewers, or engage in academic discussions, for fear of being "discovered" as less knowledgeable or capable.
- **Proverbially Paradoxical Second Shift:** Parenting responsibilities add another layer of complexity to this scenario. Women in academia who are also primary caregivers often face the "second shift," managing household and childcare duties alongside their professional roles (Damour, 2019). The pressure to excel in both domains can exacerbate feelings of fraudulence, as they might believe they are not fully meeting the expectations of either role. The constant juggling act can lead to a diminished sense of competence, further fuelling Imposter Syndrome.
- **Institutional contexts and ontological perspectives:** These play a pivotal role in either mitigating or intensifying these feelings of impostorism. Academic institutions that lack supportive policies for work-life balance, offer limited opportunities for female faculty's professional development, or perpetuate a culture of overwork can worsen the effects of Imposter Syndrome. Conversely, institutions that recognize the challenges faced by women scholars, particularly those with caregiving responsibilities, and provide supportive measures

such as flexible working hours, tenure clock extensions, and accessible childcare, can help alleviate the pressures that contribute to feelings of impostorism (Moss-Racusin, et al., 2018).

Recent research underscores the need for a supportive academic environment that addresses the unique challenges faced by women scholars. Mentorship programs, particularly those that pair early-career women academics with experienced female mentors, can offer valuable support, guidance, and reassurance, helping to counteract feelings of impostorism (Ramsey & Brown, 2018). Such programs can provide a safe space for discussing fears and challenges, sharing strategies for managing Imposter Syndrome, and reinforcing the validity of women scholars' achievements.

Furthermore, fostering a culture of openness about Imposter Syndrome within academic institutions can normalize these experiences, reducing the stigma and isolation that individuals may feel. Workshops, seminars, and discussion groups focused on Imposter Syndrome can offer strategies for recognizing and combating these feelings, promoting a healthier, more confident approach to academic and publishing endeavours (Hutchins, 2015).

Imposter Syndrome represents a significant barrier to the productivity and well-being of women scholars, particularly those balancing the demands of academia and parenthood. Addressing this issue requires a multifaceted approach that includes individual strategies for managing impostor feelings, mentorship and support programs, and institutional policies that acknowledge and accommodate the unique challenges faced by women in academia. By creating a more supportive and understanding academic environment, institutions can help mitigate the impact of Imposter Syndrome, empowering women scholars to engage more confidently and effectively in their publishing activities.

2.4. Gender Roles and Work-Family Balance Theories

These theories provide a broader context for understanding the dual roles that women often navigate in academia and family life. They help explain how societal expectations and structural inequalities in the division of labor at home and work create unique challenges for women scholars, particularly those with significant parenting responsibilities (Smith & Sanderson, 2021; Nguyen & Gardiner, 2022).

Gender roles and work-family balance theories play a critical role in elucidating the complex dynamics that women in academia face, particularly when balancing their professional responsibilities with family life. These theories underscore the impact of societal norms and structural inequalities on the division of labor, both in domestic settings and in the workplace. Gender roles, deeply ingrained in societal expectations, often dictate the distribution of household and caregiving tasks, disproportionately affecting women (Bianchi, Milkie, Sayer, & Robinson, 2000). This unequal distribution extends into the academic realm, where women scholars are frequently expected to fulfil dual roles, navigating the demands of their professional careers alongside significant parenting or caregiving responsibilities.

The concept of work-family balance is pivotal in understanding how women in academia manage these dual roles. Theories such as the role strain and role enhancement theories offer insights into this balance. Role strain theory suggests that the simultaneous demands of work and family roles may be conflicting and lead to stress and decreased performance in both domains (Goode, 1960). Conversely, role enhancement theory posits that engagement in multiple roles can be beneficial, leading to enriched experiences and skills that positively influence performance in each role (Sieber, 1974).

Recent studies, such as those by Smith and Sanderson (2021); Nguyen and Gardiner (2022), have further explored these dynamics, highlighting the challenges and strategies employed by women in academia to navigate their dual responsibilities. These studies emphasize the need for institutional support and policy changes that recognize and accommodate the unique challenges faced by women scholars, particularly those with caregiving responsibilities. Flexible work arrangements, supportive workplace cultures, and equitable division of labor at home are among the recommended strategies to mitigate the challenges and support work-family balance (Hill, Erickson, Holmes, & Ferris, 2010).

Finally, gender roles and work-family balance theories provide a critical framework for understanding the unique challenges faced by women in academia, particularly those juggling significant family responsibilities. These theories highlight the need for societal and institutional changes to support women in successfully managing their dual roles, thereby contributing to a more inclusive and equitable academic environment.

The integration of these theoretical perspectives allows for a comprehensive exploration of the external and internal factors influencing women scholars' motivation and ability to publish. It acknowledges the complexity of their experiences by considering societal, institutional, and individual levels of influence. This multifaceted approach is crucial for developing targeted interventions that address both the structural and psychological barriers to academic productivity.

3. METHODS

3.1. Overview

The study was premised under the systematic review paradigm as mentioned above, using the theoretical framework of Grant and Booth (2009), and selected the qualitative evidence synthesis as a research design. The following protocol was used to generate units of analysis, which were published articles in qualitative research.

3.2. Protocol Approach

First the Approach used included the 7 steps as indicated below:

Step One: Development of the Research Question using PICO framework. The research question for this study was, "In women scholars with parenting responsibilities (Population), how do targeted support mechanisms addressing personal vulnerabilities and incorporating motivational theories (Intervention) compare to standard academic support systems (Comparator) in influencing their publishing activities and career progression (Outcome)?"

Table 1 below demonstrates how PICO was applied to refine the question that will guide this study.

Table 1. Application of PICO.

Elements	Description	Operationalization
P	Population	<i>Women scholars with parenting responsibilities</i>
I	Intervention	<i>targeted support mechanisms addressing personal vulnerabilities and incorporating motivational theories</i>
C	Comparison	<i>standard academic support systems</i>
O	Outcome	<i>influencing publishing activities and career progression</i>

Step Two: Database Search, predicated on a scientific protocol as follows:

- Database Search: Utilized Harzing Publish or Perish, which is a compendium of databases such as Google Scholar, Crossref, PubMed, PsycINFO, ERIC, Scopus, and Web of Science.
- Key words used: "women scholars," "academic publishing," "parenting responsibilities," "imposter syndrome," "self-determination theory," and "qualitative research."
- Search Strings: Combine your keywords using Boolean operators. For example, ("women scholars" OR "female academics") AND ("parenting responsibilities" OR "work-family balance") AND ("imposter syndrome" OR "self-determination theory") AND "qualitative research."
- Inclusion Criteria: Primary qualitative research studies, published in the last 5 years, and available in English.
- Screening Titles and Abstracts: Initially, screen titles and abstracts for relevance to the topic.
- Full-Text Review: Papers that seemed relevant were read to confirm their suitability for the synthesis.

Step Three: Using the PRISMA method, articles will check for Eligibility. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) Workflow Diagram is a visual representation and a methodological tool used in conducting and reporting systematic reviews and meta-analyses. It outlines the process of identifying, screening, and including studies for analysis, ensuring a transparent and replicable methodology in literature reviews (Moher, et al., 2009)

The PRISMA diagram typically starts with the identification phase, where all potential studies are gathered from various databases and sources. It then moves to the screening phase, where titles and abstracts are reviewed to exclude irrelevant studies. The eligibility phase involves a full-text review to further exclude studies that do not meet the inclusion criteria. Finally, the included studies are those that are analyzed and synthesized in the review (Page, et al., 2021).

The importance of the PRISMA Workflow Diagram lies in its ability to provide a clear and systematic approach to literature reviews, which is crucial for several reasons:

- **Transparency:** It allows researchers to transparently report their methodology, making it easier for readers to understand how studies were selected and included in the review (Page et al., 2021).
- **Replicability:** By clearly outlining the review process, PRISMA enables other researchers to replicate the study, which is a fundamental principle of scientific research.
- **Reduction of Bias:** The systematic approach minimizes the risk of selection bias and ensures a comprehensive literature search, leading to more reliable and unbiased review findings.
- **Standardization:** PRISMA provides a standardized guideline for conducting systematic reviews and meta-analyses, facilitating consistency across studies and enhancing the quality of evidence synthesis.

Overall, the PRISMA Workflow Diagram is a critical tool in evidence-based research, ensuring that systematic reviews and meta-analyses are conducted with rigor, transparency, and consistency.

Step Four: All the studies will be appraised for inclusion using Critical Appraisal Skills Programme (CASP). CASP is a widely recognized and utilized tool for assessing the quality and relevance of research studies, particularly within the realm of evidence-based practice and healthcare research (Atkins et al., 1998). Originally developed in the early 1990s by a consortium of healthcare professionals in the United Kingdom, CASP provides a systematic framework for evaluating the trustworthiness, relevance, and applicability of research evidence to inform decision-making (Taylor et al., 2007).

CASP offers a range of appraisal tools tailored to different study designs, including randomized controlled trials, cohort studies, qualitative research, and more (Cooke et al., 2012). Each tool consists of a series of questions designed to guide the appraiser through key aspects of study quality and methodology (Ritchie et al., 2013). These questions typically cover elements such as study design, participant selection, data collection methods, analysis techniques, results interpretation, and overall study findings.

The use of CASP facilitates a structured approach to critically analyzing research literature, helping researchers and practitioners assess the strengths and limitations of individual studies (Munn et al., 2018). By systematically evaluating factors such as the validity of study design, the appropriateness of methodology, the rigor of data analysis, and the relevance of findings to real-world contexts, CASP enables users to make informed judgments about the trustworthiness and applicability of research evidence (Pearson et al., 2005).

Numerous studies and publications have highlighted the value of CASP in promoting evidence-based practice and enhancing research appraisal skills among healthcare professionals, researchers, and students (Wong et al., 2013). For example, a study by Taylor et al. (2007) demonstrated the effectiveness of CASP workshops in improving critical appraisal skills among nursing students. Similarly, Atkins et al. (1998) explored the utility of CASP in evaluating qualitative research studies and emphasized its role in enhancing the quality and consistency of research appraisal within the healthcare field.

In view of the above, the Critical Appraisal Skills Programme (CASP) will provide a structured and systematic approach to appraising research evidence, offering a valuable toolkit for evaluating the quality, relevance, and applicability of studies to be included as units of analysis in this investigation.

The Critical Appraisal Skills Programme (CASP) offers various checklists tailored to different study designs, each with its own set of appraisal criteria. Here, I'll provide a general overview of key appraisal criteria that are commonly found across several CASP checklists, particularly relevant for evaluating qualitative studies, randomized controlled trials (RCTs), and systematic reviews. This table is a synthesis and simplification meant to capture the essence of what CASP encourages users to consider when appraising studies:

Table 2. Critical Appraisal Skills Programme.

# Criteria	Description
1 Clear Aim	Is the study's aim or research question clearly stated and is it appropriate?
2 Methodology	Is the methodology appropriate for the research question and is it clearly explained?
3 Design	Is the study design suitable for the research question and is it clearly described?
4 Recruitment	Were the participants appropriately recruited and is the recruitment process clearly described?
5 Data Collection	Were the data collected in a way that addressed the research question and is the process clearly described?
6 Relationship Between Researcher and Participants	Has the relationship between researchers and participants been adequately considered and addressed?
7 Ethical Considerations	Were ethical issues considered and addressed, and is there evidence of ethical approval?
8 Data Analysis	Was the data analysis conducted rigorously and is it clearly described?
9 Findings	Are the findings clearly presented, and do they seem credible and justified by the data?
10 Value of the Research	Is the research valuable and relevant to its field, and are its implications clearly discussed?

These criteria are designed to guide users in systematically evaluating the quality and relevance of research studies. They encourage a critical examination of how a study was conducted, the clarity and appropriateness of its methodological approach, the robustness of its data collection and analysis, and the significance of its findings and implications. By addressing these criteria, CASP checklists help ensure that the research being considered for evidence-based practice or further study is of high quality and applicable to the context of interest.

Step Five: Selected articles will be analysed using the COSTAQDA software. COSTAQDA is a cloud-based application designed for the analysis and synthesis of large volumes of text-based data, particularly useful in literature-based research and for those handling big qualitative data. It employs a flexible yet rigorous approach, allowing for collaborative work across geographic locations. The technique is based on the C.O.S.T.A. Research Model and includes a clear 6-step process for generating insights with precision. It also incorporates Inter-Coder Reliability (ICR) using Cohen's Kappa statistics for enhanced data analysis integrity (Costa, 2021). COSTAQDA is aimed at a wide range of users including postgraduate students, research supervisors, data analysts, and professionals in business and market research. It is useful for establishment of Credibility,

Transferability, Dependability and Confirmability principles of rigor in qualitative research approaches (Costa, 2020; Costa, 2020).

3.3. *Analytic Approaches*

This study will use Thematic Synthesis (ThS) to analyse units of analysis as mentioned above. Thematic Synthesis (ThS) is a qualitative research method that was conceptualized by Thomas and Harden specifically for use in health promotion and public health studies (Thomas & Harden, 2008). Its purpose is to explore the necessity, suitability, and acceptance of interventions, as well as to identify the factors that affect the implementation of these interventions. ThS bears similarities with Meta-Ethnography (ME) in the way it handles the reciprocal translation of themes, both descriptive and analytical (Britten, et al., 2002). It also aligns with the principles of Grounded Theory (Fisher, et al., 2006) due to its inductive nature and the employment of a 'constant comparison' method to evolve themes.

The synthesis process in ThS unfolds in three distinct phases. The initial phase involves a detailed 'line-by-line' coding of the results or findings section from each primary study, facilitating the translation of concepts across studies. In the second phase, the aim is to amalgamate initial codes into broader categories to form descriptive themes, which serve as the foundation for synthesizing the findings from all included studies. These synthesized findings are then organized according to the descriptive themes, and the relationships between codes and themes, including any hierarchical structures, are scrutinized (Britten, et al., 2002). The final phase focuses on the creation of analytical themes. This phase is interpretative and extends beyond the original study contents, possibly leading to the development of models or frameworks that elucidate the connections between descriptive themes (Costa, 2020; Thomas & Harden, 2008).

4. CONCLUSION

In conclusion, this Qualitative Evidence Synthesis (QES) protocol is designed to systematically gather, appraise, and synthesize qualitative studies addressing the challenges and motivations of women scholars in academic publishing, with a particular focus on the interplay of parenting responsibilities, personal vulnerabilities, and institutional structures. By employing a rigorous methodology guided by the PRISMA workflow diagram for the identification and selection of studies, and utilizing the CASP checklists for critical appraisal, this protocol ensures a comprehensive and transparent approach to synthesizing qualitative evidence.

The integration of theoretical frameworks such as Self-Determination Theory (SDT) and discussions around Imposter Syndrome, alongside considerations of societal expectations and structural inequalities, allows for a nuanced exploration of the multifaceted barriers and facilitators affecting women scholars' publication efforts. This synthesis aims not only to highlight the existing challenges but also to identify potential interventions and policy implications that can support women in academia, particularly those juggling significant parenting responsibilities.

The anticipated findings from this QES are expected to contribute valuable insights into the complexities of academic publishing for women scholars, offering evidence-based recommendations to academic institutions, policymakers, and the scholarly community at large. By addressing both the structural and psychological barriers to academic productivity, the synthesis aims to foster a more inclusive, supportive, and equitable academic environment.

Ultimately, this QES protocol underscores the importance of understanding and addressing the unique challenges faced by women in academia, with the goal of enhancing their motivation, productivity, and well-being. The findings from this synthesis have the potential to inform targeted interventions and institutional policies that promote gender equity and support the professional development of women scholars, thereby enriching the academic landscape as a whole.

References

Atkins, S. et al., 1998. Conducting a meta-ethnography of qualitative literature: lessons learnt. *BMC Medical Research Methodology*, 8(1), p. 21.

Bianchi, S. M., Milkie, M. A., Sayer, L. C. & Robinson, J. P., 2000. Is Anyone Doing the Housework? *Trends in the Gender Division of Household Labor. Social Forces*, 79(1), pp. 191-228.

Britten, N. et al., 2002. Britten N, Campbell R, Pope C, Donovan J, Morgan M, Pill R: Using meta-ethnography to synthesise qualitative research: a worked example. *J Health Serv Res Policy*. 2002, 7: 209-215. 10.1258/135581902320432732.. *Journal of Health Services Research Policy*, Volume 7, pp. 209-215. 10.1258/135581902320432732..

Ceci, S. J., Williams, W. M. & Barnett, S. M., 2021. Women's underrepresentation in science: Sociocultural and biological considerations. *Psychological Bulletin*, 143(3), pp. 218-262. DOI: 10.1037/bul0000097.

Cokley, K., McClain, S., Enciso, A. & Martinez, M., 2017. An Examination of the Impact of Minority Status Stress and Impostor Feelings on the Mental Health of Diverse Ethnic Minority College Students. *Journal of Multicultural Counseling and Development*, 45(4), pp. 215-228. DOI: 10.1002/jmcd.12088.

Cooke, A., Smith, D. & Booth, A., 2012. Beyond PICO: The SPIDER Tool for Qualitative Evidence Synthesis. *Quality & Quantity*, 47(6), pp. 1-12.

Costa, K., 2020. Integrating the C.O.S.T.A. Research Framework in Teaching of Thematic Analysis for Postgraduate Students. SSRN, p. <http://dx.doi.org/10.2139/ssrn.3654214>.

Costa, K., 2020. Systematic Guide to Qualitative Data Analysis within the COSTA Postgraduate Research Model. Open Science Foundation.

Costa, K., 2021. Data Driven Decision-Making (DDDM) for Business Leaders post COVID-19 Outbreak: A COSTA-webQDA Technique Proposition at 5th World Conference on Qualitative Research - 20/01/2021," AfricArxiv vd5m3. s.l., Center for Open Science.

Damour, L., 2019. Under Pressure: Confronting the Epidemic of Stress and Anxiety in Girls. s.l.:Ballantine Books.

Dion, M. L., Sumner, J. L. & Mitchell, S. M., 2018. Gendered citation patterns across political science and social science methodology fields. *Political Analysis*, 26(3), pp. 312-327. DOI: 10.1017/pan.2018.12.

Fisher, M., Qureshi, H., Hardyman, W. & Homewood, J., 2006. Using Qualitative Research in Systematic Reviews: Older people's views of hospital discharge. London: Social Care Institute for Excellence.

Goode, W. J., 1960. A Theory of Role Strain. *American Sociological Review*, 25(4), pp. 483-496.

Hill, E. J., Erickson, J. J., Holmes, E. K. & Ferris, M., 2010. Workplace Flexibility, Work Hours, and Work-Life Conflict: Finding an Extra Day or Two. *Journal of Family Psychology*, 24(3), pp. 349-358.

Hutchins, H. M., 2015. Outing the Imposter: A Study Exploring Imposter Phenomenon among Higher Education Faculty. *New Horizons in Adult Education and Human Resource Development*, 27(2), pp. 3-12. DOI: 10.1002/nha3.20098.

Jones, R. S. & Oakley, C., 2020. The Precarity of Women in Academia: Navigating Gender Bias in Scholarly Publishing. *Journal of Gender Studies*, 29(7), pp. 759-769.

Jung, J., 2019. Faculty Members' Autonomy: Perspectives from a Literature Review. *Higher Education Quarterly*, 73(4), pp. 391-405. DOI: 10.1111/hequ.12214.

Moher, D., Liberati, A., Tetzlaff, J. & Altman, D. G., 2009. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *British Medical Journal*, Volume 339, p. 2535. DOI: 10.1136/bmj.b2535.

Morimoto, S. A. & Zajicek, A. M., 2021. Gender and the Publication Output of Graduate Students: A Case Study. *PLOS ONE*, 16(1), p. e0244221. DOI: 10.1371/journal.pone.0244221.

Moss-Racusin, C. A. et al., 2018. Gender Bias in Academe: An Annotated Bibliography of Important Recent Studies. Lewis & Clark Law School, p. DOI: 10.6084/m9.figshare.1358231.v1.

Munn, Z., Tufanaru, C., Aromataris, E. & Stern, C., 2018. The development of software to support multiple systematic review types: the Joanna Briggs Institute System for the Unified Management, Assessment and Review of Information (JBI SUMARI). *International Journal of Evidence-Based Healthcare*, 16(2), pp. 36-43.

Nguyen, C. & Gardiner, E., 2022. Gender Differences in Faculty Workload and Work-Family Balance in Response to COVID-19. *Research in Higher Education*, 63(3), pp. 407-426.

Oleschuk, M., 2020. Gender Equity Considerations for Tenure and Promotion during COVID-19. *Canadian Review of Sociology/Revue canadienne de sociologie*, 57(3), pp. 502-515.

Page, M. J. et al., 2021. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *Page, M. J., MBritish Medical Journal*, Volume 372, p. 71. DOI: 10.1136/bmj.n71.

Patel, V. & Kim, Y. J., 2019. Imposter Syndrome and Academic Performance: An Examination of the Relationship Among Graduate Students. *Studies in Graduate and Postdoctoral Education*, 2019, pp. 196-211.

Patel, V. & Kim, Y. J., 2019. Imposter Syndrome and Academic Performance: An Examination of the Relationship Among Graduate Students.. *Studies in Graduate and Postdoctoral Education*, 10 (2), pp. 196-211.

Pearson, A., Wiechula, R., Court, A. & Lockwood, C., 2005. The JBI Model of Evidence-Based Healthcare. *International Journal of Evidence-Based Healthcare*, 3(8), pp. 207-215.

Ramsey, E. & Brown, D. J., 2018. Feeling like a fraud: Helping students renegotiate their academic identities. *College & Undergraduate Libraries*, 25(1), p. 86.

Ritchie, J., Lewis, J., Nicholls, C. M. & Ormston, R., 2013. Qualitative research practice: A guide for social science students and researchers. s.l.:Sage.

Sieber, S. D., 1974. Toward a Theory of Role Accumulation. *American Sociological Review*, 39(4), pp. 567-578.

Smith, L. & Sanderson, J., 2021. Balancing Academia and Motherhood: An Integrated Review of Strategies Used by Mothers in Academia. *Higher Education Research & Development*, 40(3), pp. 591-605.

Smith, L. & Sanderson, J., 2021. Balancing Academia and Motherhood: An Integrated Review of Strategies Used by Mothers in Academia. *Higher Education Research & Development*. *Higher Education Research & Development*, pp. 591-605. DOI: 10.1080/07294360.2020.1737656.

Taylor, R., Reeves, B., Mears, R. & Keast, J., 2007. Development and validation of a questionnaire to evaluate the effectiveness of evidence-based practice teaching.. *Medical Education*, 41(7), pp. 731-738.

Thomas, J. & Harden, A., 2008. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8(1).

Thompson, G. & Vecchio, N., 2021. Self-Determination Theory in Academia: Can Autonomy, Competence, and Relatedness Predict Academic Performance? *Journal of Educational Psychology*. *Journal of Educational Psychology*, 113(2), pp. 358-373.

Wong, G. G. T. W. G., Buckingham, J. & Pawson, R., 2013. RAMESES publication standards: realist syntheses. *BMC Medicine*, 11(1), p. 21

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