Experiences and Challenges Encounter Among Female Academics During Covid-19 Pandemic: A Systematic Review

Thandar Soe @ Sumaiyah Jamaludin¹, Mohd Said Nurumal²*, Nursyafini Mohd Zahir³, Mohd Danish Fu Mohd Ridzwan⁴, Muhammad Kamil Che Hasan¹ & Resti Yulianto Sutrisno⁵

¹Department of Medical Surgical Nursing, Kulliyyah of Nursing, International Islamic University Malaysia, Pahang, Malaysia.

²Department of Critical Care Nursing, Kulliyyah of Nursing, International Islamic University Malaysia, Pahang, Malaysia.

³Gleanagles Hospital Kuala Lumpur, Kuala Lumpur, Malaysia.

⁴Gleanagles Hospital Kota Kinabalu, Sabah, Malaysia.

⁵Department of Medical Surgical Nursing, School of Nursing, Universitas Muhammadiyah Yogyakarta, Yogyakarta, Indonesia.

ABSTRACT

The declaration of COVID-19 as a pandemic demonstrated the extent of virus contamination worldwide. The pandemic made people in dilemma. The COVID-19 pandemic gave off a huge impact towards face-to-face or physical learning and the world now is going to virtual online learning and teaching until this pandemic settles down. In the academic sector, academics are challenged by virtual teaching to deliver lectures and determine the most effective method. This systematic review aimed to identify the available studies on experiences and challenges encountered among female academics during Covid-19. Searching the literature was systematically done using the PRISMA flow diagram, and the inclusion and exclusion criteria of the study were set prior to the literature search. The quality assessment was conducted by using the CASP and MMAT. There are five themes synthesised from the 21 articles included in this study. Those are experiences encountered by female academics as a mother, challenges encountered by academics as women, impacts of the Covid-19 pandemic on academic females, opinions from academicians on Distance Education during Covid-19, and strategies, coping mechanisms and solution to overcome the barriers among female academics. This study recommended for the faculty and university have a serial discussion on how to increase the effectiveness of online teaching. Beforehand, a feedback survey can be given to the female academics to analyse their current condition such as insufficient technology or standardized guidance for them to enhance online teaching. It was advisable to review the calibre and efficacy of the teaching modalities and infrastructure for the academics, even though the university had previously provided the guidelines for online teaching.

Keywords: Challenges; Female Academics; Lecturers; COVID-19 pandemic; Job satisfaction; Perceptions and Higher Education

INTRODUCTION

The Covid-19 pandemic has already given a huge impact on the education sector where several changes need to be taken into account. This is because the pandemic has caused all schools and universities have been closed in order to stop the spreading of the coronavirus. To replace the normal face-to-face classes, online learning has been introduced to academicians and students as a new teaching and learning adaptation during the Covid-19 pandemic.

For online classes, Google Meet and Zoom are the common platforms used to deliver teaching. In comparison with physical classrooms, the student will have effective learning if they access the right technologies as they have more learning materials with the lesser time consumed. Academics, on the other hand, are the ones who assist in the uploading of learning materials such as assignments, study materials, and multimedia resources, setting submission deadlines, and conducting quizzes and assessments (1). Aside from that, online learning has some conveniences for academics, but it also has some drawbacks. While senior academics are still learning to adapt to new technological devices, the rapid shift to online teaching makes it harder to equip with the online teaching method.

However, working women in general have reported that the global crisis has revealed a significant gender gap in household work (2). Despite the increase in women working in professional careers, the distribution of labour in a household has not progressed significantly over the last several decades (3). Despite significant shifts in gender roles in work and family life, traditional notions that a woman's primary task should be child and family care continue to cause stress for working mothers (4). It is heavier for female academics with children where they need to balance their academic work and household responsibilities (3 & 4). Women in academia, regard their 'failure' to attain work–life balance as a personal issue rather than a societal one (5). There is a lot of pressure to be productive, and it appears that the pressure is much greater for women who have children (4 & 5). It is because apart from academic work, they have to deal with the never-ending responsibilities of

research and publishing together with teaching, attending seminars, workshops, and other tasks (5).

Thus, this study aimed to look for the literature that related to experiences and challenges encountered among female academics, especially during the Covid-19 pandemic. The specific objective of this systematic review is: firstly, to identify the available studies on experiences and challenges encountered among female academics during Covid-19. Second, to review studies that related to the impact of Covid-19 on female academics. Besides that, the objective of this review is also to identify the studies that provide evidence towards gendered challenges encountered by female academics. Furthermore, this review is to explore the extent to distance education or online teaching among academicians. Lastly, to identify solutions and coping mechanisms among female academics to encounter the challenges.

METHOD

This study applied the systematic literature review approach starting from the literature search, analysis of the collected literature and synthesizing themes for the analysed literature. The reason for using the systematic review method in this study was to maximize the inclusion of studies and to preserve the integrity of the findings of the different types of study findings (6 & 7).

Search Engines

In this study, we use electronic databases to search articles on experiences and challenges encountered among female academics during the Covid-19 pandemic. The databases used in this review are Wiley Online Library, MDPI, Science Direct and ProQuest.

Search strategies

There are eight keywords used during article searching which are Experiences, Challenges, Female Academics, Lecturers, Covid-19 Pandemic, Job Satisfaction, Perceptions and Higher Education.
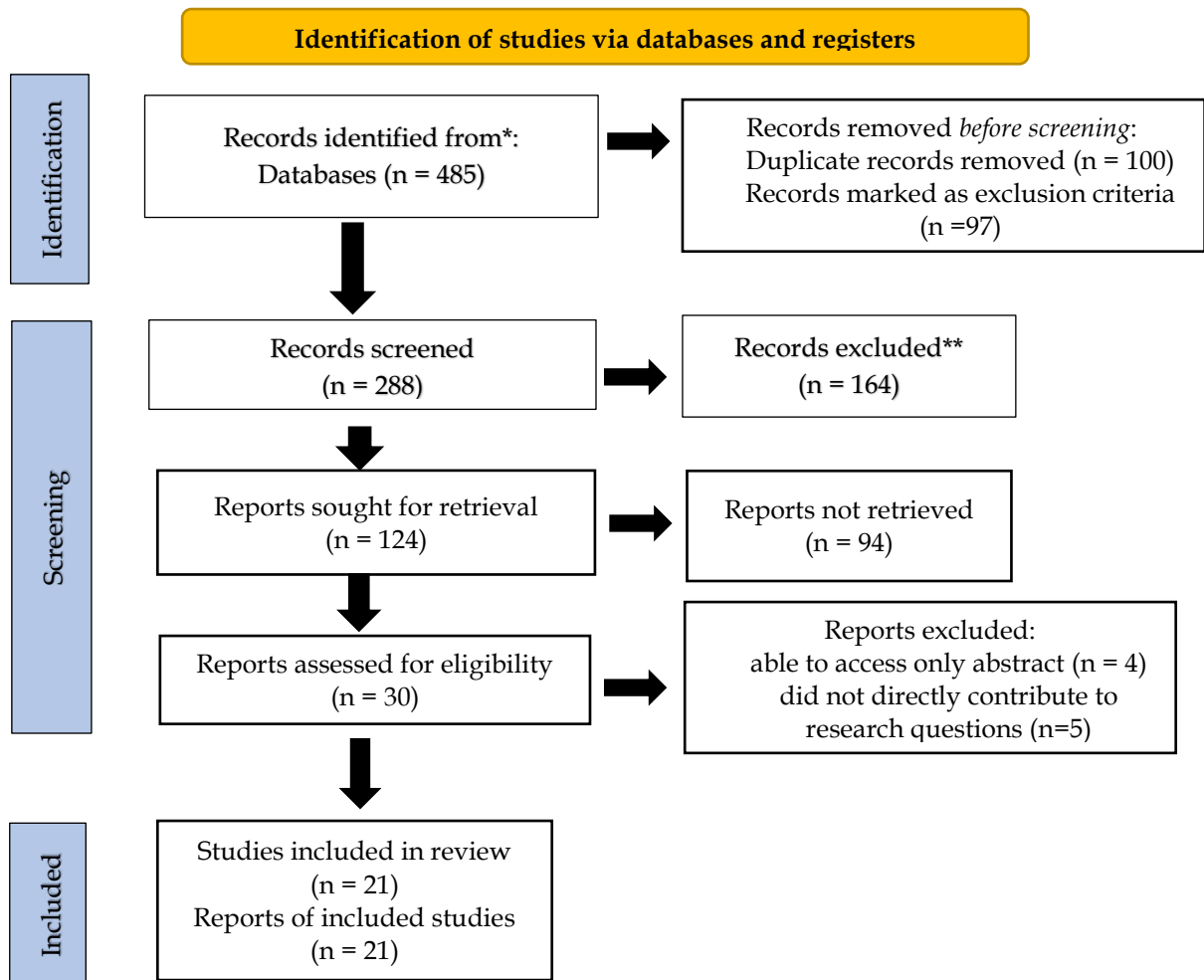
Inclusion and exclusion criteria

For the inclusion criteria of article selection, the articles must be published between 2016 and 2022 and the articles must be in English, full-text and peer-reviewed articles. Besides, the articles must be primary studies, studies done on female academician experiences during COVID-19 and the population and sample must be from female academicians. The exclusion criteria for the searched articles are studies done before the year 2016, grey literature, secondary research, and newspapers. Then, the researchers screened the articles based on suitability with the topic of interest and problem statement. These previous studies are beneficial to this study to gather information and as guidelines to achieve all objectives of this study.

Literature search outcomes

The literature search was systematically done by using the PRISMA flow diagram in this systematic review as shown in **Figure 1**. By using the eight keywords stated above, 485 articles were found initially. The process of searching the articles was continue with the review of abstracts from the articles found. After reviewing, there were a lot of articles that were not related to the study which require to be excluded from the study. Firstly, the articles found were not fulfilled the inclusion and exclusion criteria stated above. The excluded articles are not focusing on female academician experiences. After a few screenings, only 21 articles were chosen for this literature review as they suited the inclusion criteria stated. After that, the articles are summarized into a table that consists of authors, year, titles, and methodology of the study, tools and instruments and also the findings of the study. The article's details can be reviewed in **Table 1**.

Figure 1: The review process using PRISMA 2020

Identification of studies via databases and registers

Identification

Records identified from*:
Databases (n = 485)

Records removed *before screening*:
Duplicate records removed (n = 100)
Records marked as exclusion criteria (n =97)

Screening

Records screened
(n = 288)

Records excluded**
(n = 164)

Reports sought for retrieval
(n = 124)

Reports not retrieved
(n = 94)

Reports assessed for eligibility
(n = 30)

Reports excluded:
able to access only abstract (n = 4)
did not directly contribute to research questions (n=5)

Included

Studies included in review
(n = 21)
Reports of included studies
(n = 21)

Quality Assessment

In this study, all the included 21 articles were screened by two authors independently. Disagreements were resolved between the two authors and if it was not solved other team members were also called for discussion in the review process. The authors used the key criteria for the quality assessment of the selected articles. Those were study design, data collection methods, confounders, blinding, withdrawals and dropouts, selection bias, intervention integrity, findings and recommendations for future study. The quality assessment was conducted by using the CASP checklist and mixed methods appraisal tools (MMAT) (8&9). The process of quality assessment for included articles was done by following the checklist provided by CASP and MMAT. The reason for using the CASP checklist and MMAT was there were quantitative, qualitative and mixed methods studies included in this study.

RESULT

There are a total of 21 articles identified for this study. Among them, 7 quantitative studies which using a cross-sectional study approach. While there are 11 qualitative studies conducted. The other 3 studies are mix-method studies approach. For the quantitative studies, there are some methodological limitations across the studies. The sampling method used in most of the studies might be under or over-collected to represent the population. Besides, cross-sectional studies are also unable to deeply explore the thought of the participants. The summary of the included studies can be reviewed in Table 1. Besides, most of the included articles mentioned clearly their various descriptive data such as the context of the research, setting, sample, sample size, sampling method, inclusion and exclusion criteria, interview procedure and topics. However, only one qualitative study did not clearly brief the aims, setting, sample size and interview procedure. Thus, the trustworthiness of their study is questionable. Moreover, all the included studies were done in Western countries except one study from Pakistan and another study from India.

In this study, there are five themes synthesised from the 21 articles based on the objectives stated above. Those are experiences encountered by female academics as a mother, challenges encountered by academics as women, impacts of the Covid-19 pandemic on academic females, opinions from academicians on Distance Education during Covid-19, and strategies, coping mechanisms and solution to overcome the barriers among female academics. The following session explains the details findings for the five themes.

Experiences encountered by female academic as mother

There were studies related to the challenges of being a mother among academicians. Two settings from this study are identified, which are before Covid-19 and during Covid-19. In Kenya, a qualitative study was conducted related to the theme before Covid-19 hits the world (10). The study revealed that the 16 women academics feel compelled to fulfil their obligations in the home while also meeting professional demands. Because they were women, the majority of the respondents said they worked long hours into the night to take care of household duties. Most of them mentioned situations in which they had given up or missed opportunities to develop their careers owing to family duties, as is traditional in Kenyan society. In addition, senior female academics have failed to help other incoming younger women.

A study was done in Turkey to explore challenges encountered by six Turkish academic women especially those with pre-school age children (11). The study shows that the participants experienced a hard time to adapt with the faculty since they did not get sufficient from the management of their faculty. It is also difficult for them to strike a balance between academic work and home life, and in order to accomplish so, women studied much harder than their male counterparts. They also stated that parenting forced them to take a hiatus from their academic pursuits.

A mix-method study was conducted in Nagaland among 27 women academics through a questionnaire and in-depth interviews (5). The result shows that only four of them had completed their PhD. Many of them lack sufficient abilities to do research in their fields. As a result, many were caught

between meeting the changing university standards and teaching and household duties, knowing that they needed research experience and publications to qualify for academic promotion. The women also feel that their career progression is limited after having children, hardly struggling between mother roles and academic roles and tend to devote more time to online teaching which slows their research work. Not only that, but the women also had spouses that were "supporting" on a personal and professional level but had limited involvement in household and childcare responsibilities.

During the Covid-19 crisis, several studies were conducted to explore the related theme. An ethnography study showed that their studied participant's experiences were struggling in blending the two roles of being a mother and an academician during the Covid-19 pandemic (12). They also stated that they became less productive in their academic work since they have to embrace all new roles such as a mother, an elementary school teacher, a wife, a college professor, a homemaker, a chef, a writer, and a doctor at the same time.

Another study related to the theme was conducted on 21 Turkish female academics (13). The participants stated that they have difficulties adapting in the early days of the pandemic, especially in carrying out household responsibilities, childcare and academic responsibilities at the same time. The majority of the participants also shared that they struggled to develop strategies to handle household tasks for which their husbands do not feel they have any responsibilities. On the other hand, the study also reveals that the participants had limited time in their academic responsibilities because the spouses did not take responsibility for housework and childcare. Similarly, the female academics stated that their husbands accused them of not fulfilling the roles attributed to women by society.

The same experiences happened to 13 women academics in a study conducted in Pakistan (14). The participants shared that they were overwhelmed by the workload at home, struggling between their official duties and familial responsibilities, had limited time for academic writing and received a lack of support from their spouses and faculty. There are also some participants that complain about being overworking and desperately need personal time.

Another study described that 84% of the participants expressed that they lacked the necessary expertise, ability, and/or confidence to take on individual initiatives, or they had not yet obtained or had recently completed their PhD. 87.2% of participants stated that recent PhD grads in academic jobs, particularly those in the social sciences and humanities, identified teaching loads as a major barrier to research (15).

Challenges encountered by academics as women.

A survey done with 200 women academics found that 99% of the participants reported that strong hierarchies in the workplace made their chance of getting a desired position and promotions low, and a higher chance of getting excluded from formal and informal networks, compared to their male colleagues (16).

Another study was conducted among academic women in Science, Technology, Engineering, and Mathematics (STEM) (17). Because of their appearance and overt sexual objectification, they were treated differently. To fit in and get ahead, many participants emphasised having to "act like a guy" or "have a thick skin". Some participants also expressed discomfort about discussing sexist issues and sexism in general at work, particularly in front of their male co-workers. In addition, they also expressed that leadership in STEM fields is dominated by men and that they don't see many women in those positions. Not only that, but many participants also experienced actively discouraged from having children if they wanted to pursue a career in STEM, with science and children being viewed as binary decisions.

A study was done on eight Bahamian women in higher education (18). In their study, a participant expressed that some people still believe that women aren't as capable as males when it comes to leadership. Many participants stated that they did not receive any formal mentoring during their time at the University of The Bahamas and formerly the College of The Bahamas. Similarly, every participant in

the study shared challenges related to the dual demands of balancing work and family life.

According to a study conducted with 13 Black women faculty members at associate rank experienced race and gendered challenges in their workplace they acknowledged their challenges in balancing extremely heavy teaching and service loads while being active with their research agendas (19). Due to a significant underrepresentation of race and gender minorities among faculty members in their departments, they had fewer mentors and role models to whom they could turn for assistance and advice. In addition, their interactions were frequently tainted with undertones of discrimination based on race and/or gender. However, there are also some participants that were fortunate enough to work in a department where their co-workers got along, while others had to deal with microaggressions from co-workers. Some participants were able to tap into institutional assistance from their institution or department, while others sought refuge in forming networks outside of it.

Similarly, a study in South Africa showed that most of the participants stated that they were always being silenced and marginalised whenever they attempt to voice their injustices in the workplace (20). They also have a feeling of not belonging until they have to constantly check whether they are still in line with the institution's requirements or not. However, one of the participants give a different point of view when she spoke about how black women should create a home for themselves and continue to speak up for themselves. In addition, the black women also shared about not being allocated a mentor when doing their postgraduate studies. The participants also mentioned that allocated work is given more to them than their white counterparts which also caused them to fall behind in their studies and article writing. The ladies in this study discussed how their gender and ethnicity have influenced the impact of the glass ceiling they are constantly breaking.

A study was carried out in the UK with 217 female academics and 337 male academics from 23 universities (21). This study found that female university teachers are marginally more satisfied with their jobs when compared with their male counterparts with an overall job satisfaction score was 4.220 for females versus 4.206 for males. The survey also found that women in academia are slightly more satisfied with their professions than males, and that job satisfaction in academia rises with rank and age.

Impacts of Covid-19 pandemic on female academics

Several studies mention the impacts of the Covid-19 pandemic on academic females. A study found some mental health challenges that academic mothers encountered due to the Covid-19 pandemic (12). The participants expressed that they feel empty and vulnerable to not earning others' respect, affirmation, and connection as a result of lack of productivity. One of the participants also mention that she feels even more alone, anxious and grief when her co-workers had older children or no children, as well as spouses who worked from home and could take turns caring for them. The participants also reveal that they had to pretend to be put-together professionals because they were afraid to mention their fears and uncertainty.

Two studies showed the same findings where academic females express tiredness, burnout, depression and inadequacy since they were stuck in children and family care and online teaching during the Covid-19 pandemic (13 & 14). However, even before the pandemic, a study shows no different impacts happened for 16 academic women in Kenya (10).

A study also stated that distance education during Covid-19 bring emotional impacts towards 97 university teachers in Italy (22). The emotional aspects of the participants were surveyed by a short version of the Beck Depression Inventory-II (BDI-II). The study shows that female teachers had more trouble concentrating than their male counterparts, resulting in significant sleep disturbances and energy loss. While a quarter of teachers showed depressive symptoms of varying severity. Teachers who were most stimulated by DE ($r = 0.752$, p 0.000) were the most satisfied, and they had a lesser impact on depressed symptoms ($r = 0.289$, $p = 0.005$).

A study about the differential impact of Covid-19 on female and male academics during lockdown (16). The study reported that women are more affected than males in terms of their childcare (p 0.01) and household (p 0.1) routines. Women with children have claimed that the epidemic has affected their housework routines at higher rates than women without children. In contrast, in couples without children, the gender disparity is statistically indistinguishable.

Besides that, a study found that 120 participants had severe distress while 116 participants do not have distress (23). The study also discovered that younger academics scored high on the K10 survey, indicating that they are in distress. They also discovered that lecturers who are discouraged while instructing online are experiencing moderate to severe distress. According to the survey, 38 respondents were on medication for their distress. The infection of COVID-19 is reported by 215 lecturers as a source of distress, whereas social isolation is reported by 211 respondents as a source of anguish.

On the other hand, a study found that the pressure of many competing roles for working women with children created a sense of guilt (24). The participants also described their situation as "overwhelming" and "unbearable" when academic work is escalating alongside domestic commitments. Female academics also feel guilty when they assumed they neglect their children and self-care. Not only is there a guilt-inducing conflict between work and family, but there is also a conflict between the two core university responsibilities of teaching and research.

Opinions from academicians on Distance Education during Covid-19

A study examined the opinions of distance education during Covid-19 among 93 academics and found that 48.4% of academicians participating in the study stated that students did not participate in the lessons through distance education, and the vast majority (67.7%) thought that students were not as active as the formal education lessons compared to distance education (25). In addition, 68.9% of the participants think that practice-based courses will not be effective with distance education. In reality, 83.9% of the academics who took part in the survey said they had not undergone any remote education orientation training.

Another study on 97 university teachers found that 65.9% of university teachers expressed frustration with reduced interaction with students during lessons, while 18.8% reported a distracting effect due to the student's study environment (22). The study also shows that 35.3% of university teachers, particularly professors of medical and health professions courses, said it was impossible to organise laboratory professions activities. A total of 45.9% of university teachers experienced additional expenses in conducting DE from their homes, with an average cost of 348 euros. Overall, more than 50% of university teachers scored higher than 6 when evaluating the experience of DE during Covid-19.

A study explored several factors influencing the implementation of DE among 200 lecturers from four universities in Zimbabwe (26). Firstly, the result shows that most universities lack proper ICT infrastructure, leadership support and training opportunities are limited, and ICT regulations regarding DE are unclear. The researchers also found that the respondents lack enough internet access and bandwidth to allow online instruction. The lecturers also stated that lack of ICT infrastructure, internet bandwidth, and technology competency abilities among lecturers, all of which may influence lecturers' intentions to teach online. The gender of lecturers also has a substantial impact on lecturers' behavioural intentions to teach online during COVID-19 and beyond, according to the study.

A quantitative survey also discovered that while almost half of the instructors had never taught online before the pandemic and another third only taught on occasion, only 10% of lecturers lectured online during the lockdown (27). The study also discovered that about half of the participants thought the institution was not suitable for online instruction at all, while about 40% thought the university was just "minimally" ready. The following were the main barriers to e-learning in the university, according to the qualitative data analysis: electricity power supply, inadequate or lack of

internet connectivity and infrastructure, lecturers' level of knowledge, cost of ICT devices and digital technologies, and lecturers' attitude/ resistance to change.

Strategies, coping mechanism and solutions to overcome the barriers among female academics.

Studies revealed in their study how the participants cope with trauma due to the Covid-19 pandemic (3, 12). The participants mentioned that they virtually support each other and brainstorm ideas with their colleagues through a group chat. They also negate their fear and embarrassment of saying that they have alone time. While the participants from a study mentioned that they bought technological devices to ease their household chores (13).

A study conducted among Bahamian women in higher education explores several strategies that the participants utilised to overcome the barriers to success (18). The participants mentioned that prioritizing and scheduling to manage the intricacies of work and family commitments is essential. They also suggested that succession planning is required from the university to groom the next generation of female leaders and senior academics at the institution effectively.

While some findings from a study mentioned that contribution from family members such as mothers, fathers, and siblings played an important impact in the respondents' early academic and career development (10). The participants also describe that childhood family and educational experiences affected their self-concepts, attitudes, and the typical duties allocated to women in Kenyan culture, as well as their perspectives on work, family, and academic positions.

A study found that mentorship is essential in the academic world, especially for female academics (28). It is because the participant opined that a more senior faculty woman can influence each participant's decision to pursue academia as they are the minorities in the faculty in terms of gender. Support from the faculty to return to work after maternity leave also is essential to encourage female academics in pursuing their academic work. Next, the participants also suggested that the leave policies from the institutions should be clear, standardized and developed because they felt that the policy was disarray intentionally against female academics.

DISCUSSION

Based on this review's findings, a few aspects can be taken into consideration as critical indicators to reduce experiences and challenges encountered by female academics. The following sessions will describe further discussion on experiences and challenges encountered by female academics during the COVID-19 pandemic. The discussion will follow the themes described in the finding session.

Experiences encountered by female academic as mother

The review finding for experiences and challenges in academic motherhood were varied. Several studies revealed that female academicians had difficulties with their obligations as a mother while meeting academic demands either before or during the Covid-19 pandemic (10 & 12). This finding was supported by other studies which found that the female academics had a hard time adapting to their faculty's management since they did not get support from the faculty, caught between the changing of university standards (5 & 29). Not only that but the findings are also supported by studies those female academicians did not get enough support and help in household and childcare responsibilities from their spouses (5, 13, 14). In contrast, a finding found that teaching loads become a major barrier to research due to a lack of expertise and confidence to take on individual initiatives (15).

Challenges encountered by academics as women

For gendered challenges encounter by female academics, five studies explored that females are not getting exceptional from being discriminated against even in the education profession (16-19). The finding is supported by other findings which that female academics also feel injustice in academic work due to strong hierarchies in the workplace where they had to put in more effort and given more work

compared to their male counterparts (16 & 20). This finding is in contrast with a study where it found that women in academia are marginally more satisfied with their jobs compared to their male counterparts only in rank and age (21).

Impacts of Covid-19 pandemic on female academics

Covid-19 also gives impact towards female academics mentally, emotionally and physically. Seven studies revealed that female academics express inadequacy, burnout, depression (10, 13, 14, 23) and guilty (24) during the pandemic when they have a conflict between house chores and academic responsibilities (12 & 16). The finding is supported by a study showing that female academics had sleep disturbances and energy loss (22). Furthermore, the study also shows that female academics had a lesser impact on depressive symptoms as they were most stimulated by distance education (22).

Opinions from academicians on Distance Education during Covid-19

The opinions from academicians on distance education during Covid-19 were varied in four studies. Two studies found that the lecturers have difficulties with distance education due to a lack of internet access, lack of digital technologies and lack of technical knowledge (30), and additional expenses (22) to allow online classes. In addition, the finding supported by a study in which they found that the lecturers expressed having difficulties in distance education due to the reason not having undergone proper orientation training and ICT regulations regarding distance education is unclear (26). The finding also is supported by two studies showing that the lecturers thought that practice-based courses or laboratory activities are not effective with distance education (22 & 25). In addition, a study show that the lecturers expressed frustration when their students were not active and distracted in distance education (22).

Strategies, coping mechanism and solutions to overcome the barriers among female academics

The female academics were able to find strategies, coping mechanisms and solutions to overcome the barriers among them. Two

studies revealed that female academics coped with their trauma during the pandemic by disclosing their problems and virtually supporting each other, negating the fear and embarrassment to say that they need alone time and buying technological devices to ease their house chores (12 & 13). This finding is supported by other studies that recommend that female academics can overcome the barriers by scheduling properly to manage the intricacies between work and family (18), receiving adequate support from family members in their early academic career (10), and receiving support from their senior faculty woman and from their own faculty (28). In addition, a study suggested that the policies from institutions should be clear and standardized without intention against female academics (28).

Limitations

Nevertheless, this review also has its limitations including the broad range of the study years, full text and use of English-based articles, which might miss out on other important articles related to the study.

CONCLUSION

Based on this review findings, many studies have been done on experiences and challenges encountered among female academics during Covid-19 globally such as in Pakistan, Turkey, and India. However, there are fewer studies that explore experiences and challenges encountered among female academics during the Covid-19 pandemic in Southeast Asia countries such as Malaysia, Singapore, Brunei, Thailand, Myanmar, Indonesia, Vietnam, Laos, Philippines and Cambodia are still limited. Thus, the experiences and challenges encounter among female academics during the Covid-19 pandemic will be further studied in Malaysia. Female academics experienced burnout, distress, depression, sleep disturbances and guilty while doing their job as academics and mothers during the COVID-19 pandemic. However, they also might find strategies, solutions and coping mechanisms to stay balanced physically and mentally throughout the lockdown. Strong support from particular parties was needed to ensure female academics have the confidence to keep publishing

academics and continue their noble job as lecturers.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTION

TS@SJ & MSN: participated in the review of pertinent literature and drafted the manuscript
NMZ, MDFMR: review literature and edited on the manuscript
MKCH & RYS: worked on the manuscript's finalisation and peer review before publication.

REFERENCES

1. Parlak S, Celebi CO & Oksuz GF. Gender roles during COVID-19 pandemic: The experiences of Turkish female academics. Gender, Work & Organization. 2021;28:461-83.
2. Gross T. Pandemic makes evident "grotesque" gender inequality in household work. National Public Radio, May 21. https://www.npr.org/2020/05/21/86009 1230/pandemic-makes-evident-grotesque-gender-inequality-in-household-work. 2020.
3. Utoft EH. 'All the single ladies' as the ideal academic during times of COVID-19? Gender, Work & Organization. 2020;27(5):778-87.
4. Walters C, Ronnie L, Jansen J, & Kriger S. "Academic guilt": The impact of the pandemic-enforced lockdown on women's academic work. Women's Studies International Forum. 2021; 102522. https://doi.org/10.1016/j.wsif.2021.10252 2.
5. Amer M. Combining Academic Career and Motherhood: Experiences and Challenges of Women in Academia. International Research Journal of Social Sciences. 2013; 2(4), 12–15. www.isca.in.
6. Harden A. Mixed method systematic review: Integrating qualitative and quantitative findings. A publication of the national center for the dissemination of disability research. 2010. Accessed from http://www.ktdrr.org/ktlibrary/articles.
7. Jamaludin TSS & Chan CM. (2019) Influence of Perceive Social Support or Pre-Operative Support Program on Quality of Life in Patients Awaiting Coronary Artery Bypass Grafting (CABG) Surgery: Mixed Method Systematic Review. International Journal of Care Scholars. 2 (1).
8. Critical Appraisal Skills Program. 2021. Accessed from https://casp-uk.net/casp-tools-checklists/.
9. Hong QN, Gonzalez-Reyes A, Pluye P. Improving the usefulness of a tool for appraising the quality of qualitative, quantitative and mixed methods studies, the Mixed Methods Appraisal Tool (MMAT). Journal of evaluation in clinical practice. 2018;24(3):459-67.
10. Raburu PA. Women Academics ' Careers In Kenya. Institute of Education MA (Psychology of Education) - University of London Institute of Education This thesis is submitted in partial fulfillment of the requirement of the degree of Doctor of Philosophy. 2011.
11. Günçavdı G, Göktürk Ş & Bozoğlu O. An Insight into the Challenges Faced by Academic Women with Pre-school Age Children in Academic Life. Universal Journal of Educational Research. 2017; 5(6), 953–959. https://doi.org/10.13189/ujer.2017.05060 7.
12. Guy B & Arthur B. Academic motherhood during COVID-19: Navigating our dual roles as educators and mothers. Gender, Work and Organization. 2020; 27(5), 887– 899. https://doi.org/10.1111/gwao.12493.
13. Parlak S, Celebi Cakiroglu O & Oksuz Gul F. Gender roles during COVID-19 pandemic: The experiences of Turkish female academics. Gender, Work and Organization. 2021; 28(S2), 461–483. https://doi.org/10.1111/gwao.12655.
14. Ali R & Ullah H. Lived experiences of women academics during the COVID-19 pandemic in Pakistan. Asian Journal of Social Science. 2021; 49(3), 145–152. https://doi.org/10.1016/j.ajss.2021.03.003.
15. Bazeley P. Defining'early career'in

research. Higher Education. 2003;45(3):257-79.

16. Yildirim T M & Eslen-Ziya H. The differential impact of COVID-19 on the work conditions of women and men academics during the lockdown. Gender, Work and Organization. 2021; 28(S1), 243–249. https://doi.org/10.1111/gwao.12529.

17. O'connell C & McKinnon M. Perceptions of barriers to career progression for academic women in stem. Societies. 2021; 11(2), 1–21. https://doi.org/10.3390/soc11020027.

18. Munroe-farrington BI. Strategies for Bahamian Women in Higher Education to Overcome Challenges to Success. 2021.

19. Kerr DE. Academic Gladiators: experiences of black women associate professors and their perceptions of full professorship. 2021.

20. Mahlaula MV. Black African Women Academics at Gauteng Universities: Experiences, Challenges and Aspirations for the Future: University of Johannesburg (South Africa); 2019.

21. Oshagbemi T. Gender differences in the job satisfaction of university teachers. Women in Management Review. 2000; 15(7), 331–343. https://doi.org/10.1108/09649420010378133.

22. Casacchia M, Cifone MG, Giusti L, Fabiani L, Gatto R, Lancia L, Cinque B, Petrucci C, Giannoni M, Ippoliti R, Frattaroli AR, Macchiarelli G & Roncone R. Distance education during COVID 19: an Italian survey on the university teachers' perspectives and their emotional conditions. BMC Medical Education. 2021; 21(1), 1–18. https://doi.org/10.1186/s12909-021-02780-y.

23. Akour A, Al-Tammemi AB, Barakat M, Kanj R, Fakhouri HN, Malkawi A & Musleh G. The impact of the COVID-19 pandemic and emergency distance teaching on the psychological status of university teachers: A cross-sectional study in Jordan. American Journal of Tropical Medicine and Hygiene,. 2020; 103(6), 2391–2399. https://doi.org/10.4269/ajtmh.20-0877.

24. Walters C, Ronnie L, Jansen J, Kriger S, editors. "Academic guilt": The impact of the pandemic-enforced lockdown on women's academic work. Women's Studies International Forum; 2021: Elsevier..

25. Aksoğan M & Duman MÇ. A research on academician opinions on distance education in the COVID-19 process. Naturengs. 2020:38-49.

26. Rudhumbu N, Parawira W, Bhukuvhani C, Nezandoyi J, Majoni C, Chikosha F, Zvokuomba K & Chingwanangwana B. Insight into online teaching behaviour of lecturers in Zimbabwean universities during the COVID-19 era and beyond: issues and challenges. International Journal of Information and Learning Technology. 2021; 38(5), 518–539. https://doi.org/10.1108/IJILT-07-2021-0104.

27. Gabster BP., van Daalen K, Dhatt R & Barry M. Challenges for the female academic during the COVID-19 pandemic. The Lancet. 2020; 395(10242), 1968–1970. https://doi.org/10.1016/S0140-6736(20)31412-4.

28. Riley LH. A Narrative Inquiry of Work-Life Balance Among Faculty Mothers in Higher Education: Mercer University; 2021.

29. Günçavdı Ö, Kayam SS. Unravelling the structure of Turkish exports: Impediments and policy. Journal of Policy Modeling. 2017;39(2):307-23.

30. Essien A. Utilisation Of E-Learning Among Nigerian University Lecturers in The Covid-19 Era. Global and local distance education. 2021; 7(2).

Appendix

<div align="center">Table 1: Summary of the reviewed study</div>

Author, Year, Setting, and Language	Aims/ Objectives	Study design	Participants	Measurements	Outcomes	Remark (Critique)
Aksoğan & Çalış Duman, 2020	To examine the opinions of educators and experts on distance education, which has become a part of education in the Covid-19 process.	Quantitative study	(n=93) The academicians who participated in the survey consisted of 42 female and 51 males.	A questionnaire prepared by the researchers was used to determine the views of academics about distance education.	The findings: 1) Approximately half of the academicians participating in the study (48.4%) stated that students did not participate in the lessons taught by distance education, and the vast majority (67.7%) thought that students were not as active as the formal education lessons in these lessons 2) A large part of the participants (68.9%) thinks that practice-based courses will not be effective with distance education. 3) As a matter of fact, 83.9% of the academicians who participated stated that they had not received any orientation training related to distance education	- The criteria for inclusion in the sample clearly defined - The study subjects and the setting described in detail - It is unclear if the exposure measured in a valid and reliable way - The objective and standard criteria is used for measurement of the condition - There are no confounding factors identified. - There are strategies to deal with confounding factors stated - It is unclear if the outcomes measured in a valid and reliable way - Statistical analysis used is appropriate.

Akour et al., 2020, Amman, Jordan (In English)	To assess psychological status, challenges of distance teaching, coping activities and pandemic-related concerns among university teachers in Jordan in the midst of COVID-19–related quarantine and control measures	Quantitative (Cross-Sectional Study)	(n=382) university teachers in Jordan	Data were collected through online survey Kessler Distress Scale (K10)	- 120 of participants have severe distress while 116 participants reported do not have distress - The study found that younger people have high score in K10 questionnaire.	- The criteria for inclusion in the sample clearly defined - The study subjects and the setting described in detail - It is unclear if the exposure measured in a valid and reliable way - The objective and standard criteria is used for measurement of the condition - There are no confounding factors identified. - There are strategies to deal with confounding factors stated - It is unclear if the outcomes measured in a valid and reliable way - Statistical analysis used is appropriate.
Ali & Ullah, 2021	To explore the experiences of women academics while combining the challenging job of online teaching and familial responsibilities during the COVID-19 pandemic in Pakistan	Qualitative study (empirical)	(n=13) women academics from 4 public universities in Pakistan.	Data were collected through in-depth qualitative telephonic interviews.	The findings; 1) Overwhelmed by the workload 2) Lacked support 3) Endured a tiring struggle to manage their official duties and familial responsibilities. 4) Stressed and stuck in children and family care and online teaching 5) Had hardly any time for academic writing. 6) Expressed being burned out, depressed, exhausted, angry 7) Desperate need of personal time.	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the research - Appropriate recruitment strategy to the aims of the research - Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration

						- The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
Amer M, 2013	To explore the barriers that they encounter and how they respond to them, and what personal and professional supports enable or disallow them to reach their fullest potential in both roles	Mix Method study	(n=27) respondents came from a broad range of disciplinary backgrounds such as Economics, Education, Sociology, Political Science, Botany, Chemistry and English	1) Open-ended questionnaire: - socio-economic background - distribution of the working time between the various faculty responsibilities - challenges faced being a female faculty - how they adjust professional and family life - sources of support and tension in performing the dual role - relationship with spouse and the domestic division of labor within the household, specifically hours spent on childcare and household task In-depth interview to supplement and enrich the interpretation of	The findings: 1. Lack of time of performing multiple roles. 2. Career advancement is limited after having children. 3. Struggling between multiple tasks 4. Majority had husbands who had limited involvement in the household and childcare responsibilities. 5. Tend to devote more time in teaching and advising students lead to less on research work.	Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding

				results obtained from the questionnaire.		
Bazeley, P. 2003	To operationally define 'early career' in a manner suitable for use in determining eligibility for special consideration by granting bodies – in particular, by the Australian Research Council.	Mix methods	- (n=296) academics from (6) representatives from a cross section of (12) Australian universities - (n=82) representing the same sample of six disciplines across 12 universities were interviewed. - Second survey targeted those who had graduated with PhD two years earlier in all disciplines from a cross section of 8 Australian universities	Data were collected through current practice review, survey of academics, and interview.	The findings: 1. Completion of high-level research training 2. Obtaining an academic appointment 3. Balancing the demands of teaching with the need/desire to research 4. Maintaining a research profile when promotion brings increased non-research responsibilities. 5. Achievement of established researcher status	Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
Casacchia et al., 2021	To 1) evaluate the impact of DE by teachers during the Italian national lockdown and 2) evaluate the relationship between DE and the	Quantitative (Cross-sectional study)	(n=97) university teachers.	Data were collected through online cross-sectional survey – on the advantages and disadvantages of DE. 10 items of Beck Depression Inventory-II (BDI-ll)	1) Significant impairments in sleep patterns and loss of energy were reported, with female teachers having greater difficulty concentrating than their male colleagues. A quarter of teachers showed depressive symptoms of varying severity.	

emotional well-being of teachers during the period of home confinement				– emotional condition	2) The teaching load in hours influenced the perception of disadvantages (r = 0.214, p = 0.035) and contributed to a lower appreciation of the challenges of DE 3) The most satisfied teachers were those most stimulated by DE (r = 0.752, p < 0.000), who showed a lower impact of depressive symptoms (r = − 0.289, p = 0.005)	
Yildirim & Eslen-Ziya 2021	To reveal how perceptions of gendered-challenges among women academics are linked to their perceptions of hierarchy at the higher education institution they are affiliated with.	Quantitative study (Cross-sectional)	(n=210) women academics working at geographically diverse universities at different levels (including PhD fellows) and from different disciplines	Online survey with questions if they have experienced 1. receiving biased evaluations 2. injustice in getting the desired position 3. lower chance of promotion, 4. exclusion from formal and informal networks at work.	The results show that those perceiving strong hierarchy in the realm of work is significantly more likely to believe that being woman in academia harms their job prospects.	Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
Essien, 2021	1) To investigate the extent to which lecturers in the Faculty of Education in a public	Mix-method study	(n=77) lecturers in the Faculty of Education in a public university in Southern Nigeria	1) The researcher used an eleven-item semi-structured questionnaire created with	- One of the findings of the study is that the majority of lecturers (nearly equal percentage of female and male) had the requisite training to conduct online teaching.	Data collection addressed the research issue - The relationship between researcher and participants been adequately considered

university in Southern Nigeria engaged in online/distance teaching during the Covid-19 lockdown in Nigeria. 2) To examine factors that hindered online teaching by the lecturers				Google forms to collect data on lecturers' facilitation of online courses during Covid-19 lockdown 2) The 11th item was the only free response/ open-ended one.	- The study further found that while about 50% of the lecturers never taught online before the pandemic, and about 30% taught only occasionally, extremely few lecturers (10%) did any online teaching during the lockdown - The study also found that about half the participants believed that the university was not ready at all for online teaching, while about 40% believed that the university was only "minimally" ready for online teaching - The positive relationship implied that the more the number of university teaching experience, the more frequently the lecturers used online instructional delivery. - From the qualitative data analysis, the following were the key hindrances to e-learning in the university: electricity power supply, inadequate or lack of internet connectivity and infrastructure, level of knowledge by lecturers, cost of ICT devices and digital technologies, and lecturers' attitude/ resistance to change.	- Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding

Günçavdı et al., 2017	To explore the challenges academic women, especially those who were mothers of pre-school age children, went through	Qualitative study	(n=6) academic women participated in this study based on the selection criteria; Having at least one pre-school age children.	Data were collected through open-ended, semi-structured interviews and analysed through thematic analysis.	The findings: 1. Experience of being mothers 2. Overwhelmed by the workload 3. Lacked administrative support 4. Suffered from a never-ending struggle to balance between their academic duties and parental responsibilities	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the research - Appropriate recruitment strategy to the aims of the research - Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding.
Guy, B. & Arthur, B. 2020	To explore the topics of academic motherhood and women mental health as working mothers, framed in the context of the current global health crisis (Covid-19)	Qualitative study (Auto-ethnograpic)	By the researchers	Data were collected through heartful and feminist autoethnographic dialogue between the researchers.	The findings: 1. Navigating dual roles 2. Working from home 3. Mental health challenges Coping with trauma	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the research - Appropriate recruitment strategy to the aims of the research - Data collection addressed the research issue

						- The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
Kerr, D. E., 2021	To explore how 13 Black women faculty members at associate rank experience their time in the academy and how those experiences influence their progression towards and opinion of full professorship.	Qualitative study	(n=13) Black women faculty members at associate rank	Data were collected through open-ended, semi-structured interviews	Findings in this study indicate Black women experience every aspect of the academy through a combination of their race and gender	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the research - Appropriate recruitment strategy to the aims of the research - Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing

						knowledge or understanding
Mahlaula, M. V., 2019	The purpose of this study was to specifically examine the experiences, challenges and future aspirations of black women in academia	Qualitative study	(n=7) black women from different universities in Gauteng told their stories about their experiences and future aspirations within academia.	Open-ended interviews	Various themes emerged from the study such as being silenced and marginalised, to feelings of 'not belonging', insufficient mentoring, work overload, as well as the glass ceiling	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the research - Appropriate recruitment strategy to the aims of the research - Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
Munroe-Farrington, I., 2021	To highlight the lived experiences of these women to uncover the challenges that they face, and the strategies employed by them to overcome such challenges	Qualitative study (phenomeno logical)	(n=8) women who were employed at the University of The Bahamas and who had a wealth of experience working in higher education in The Bahamas.	Researcher used semi-structured interviews to collect data from Bahamian female leaders and academics in higher education in The Bahamas.	The findings revealed that, familial challenges are the primary challenges faced by participants in the study. participants felt there are things that the university can do to assist female leaders and academics including formal mentorship, institution wide succession planning and	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the research - Appropriate recruitment strategy to the aims of the research

					increased opportunities for professional development	- Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
O'Connell & McKinnon, 2021	To outline the experiences of women in STEM in higher education and research organisations and explores their perceptions of the differences between genders in this context.	Qualitative study (exploratory)	(n=78) people from STEM participated in the 14 focus groups.	Guided interview. Participants were invited to reflect upon whether - they felt gender makes a difference in the experience of becoming a scientist; - what have been some of the barriers to career growth and progression; - the top challenges women face in the STEM community.	The findings: 1) Entrenched biases, stereotypes, double standards, bullying and harassment all negatively impact women's confidence and sense of belonging. 2) Face an additional biological burden, often being pushed to choose between having children or a career. Participants felt that their experiences as STEM academics were noticeably different to those of their male colleagues.	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the research - Appropriate recruitment strategy to the aims of the research - Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the

					contribution the study makes to existing knowledge or understanding
Oshagbemi, 2000	To investigate the effects of gender on the job satisfaction of UK academics.	Quantitative study	(n=554) respondents are university teachers in the UK.	To measure job satisfaction, a questionnaire comprising a slightly modified form of the Job Descriptive Index (Smith et al., 1969, 1985) and some demographic questions was constructed	The findings: 1) Found from the frequency distribution that female and male academics were more or less equally satisfied with their jobs. 2) The multivariate statistical analysis showed that, on the effects of gender on job satisfaction, gender by itself does not affect job satisfaction, consistent with the findings of, for example, Gaertner and Ruhe (1983), Senatra (1988) and Larkin (1990). 3) Female academics at higher ranks find themselves more satisfied than their male colleagues of comparable ranks may be due, in part, to the relatively low numbers of female academics at higher ranks within UK universities.	- Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
Parlak et al., 2021	To explore the COVID-19 experiences of Turkish female academics in	Qualitative study (Interpretative phenomenol	(n=21) female academics working from home, along with their spouses.	Semi-structured telephone interviews. (3) key interview questions are as follows:	The findings: - Adaptation to quarantine day routines - Struggled to develop strategies to handle household tasks for which	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the

| | terms of gender roles | ogical analysis) | | a) Could you describe your typical day during the COVID-19 quarantine?
b) What has changed in your life with the COVID-19 pandemic?
c) What are your experiences related to your family and academic life in this process? | their husbands do not feel they have any responsibilities
- Experienced a feeling of inadequacy and were in search of any support due to the absence of nannies and housekeepers during the pandemic.
- Bought technological devices to make household tasks more comfortable
- Limited time for academic life
- Experienced various adverse feelings—such as tiredness, burnout, and inadequacy
- Experience tension due to the increased time spent with their family members, while others considered this process as an opportunity to get to know family members more closely
- Their husbands accused them of not fulfilling the roles attributed to women by society | research
- Appropriate recruitment strategy to the aims of the research
- Data collection addressed the research issue
- The relationship between researcher and participants been adequately considered
- Ethical issues been taken into consideration
- The data analysis sufficiently rigorous.
- There is a clear statement of findings.
- The researcher discussed the contribution the study makes to existing knowledge or understanding |
| Raburu, P. A., 2010 | The study is a contribution to knowledge and the extant literature on women academics' career experiences which have been under- | Qualitative study | (n=16) women academics from 3 universities in Kenya while drawing from a feminist perspective | Face- to- face in-depth interviewing technique | With the use of thematic analysis, the data generated five themes; family socialisation, educational attributes, motivational factors, challenges and strategies | - Clear statement of the aims of the research
- Appropriate to use qualitative methodology
- Appropriate research design to address the aims of the research
- Appropriate recruitment strategy to the aims of the research |

researched, especially in Kenya.						- Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
Riley, L. H., 2021	To explore the work-life balance experiences related to maternity leave and/or family policies of female employees on the path to higher education leadership.	Qualitative study	The desired participant group was two to three faculty mothers who had taken maternity leave in the last five years, but final selection included all four faculty mothers who expressed interest and proved eligible.	Data were collected through in-depth participant interviews. The theoretical framework for this study was Women's Ways of Knowing theory (Belenky et al., 1986)	The findings of this study implied that faculty mothers are disadvantaged by the Family Medical Leave Act, while desiring the creation of university level leave policies specific to pregnancy and motherhood	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the research - Appropriate recruitment strategy to the aims of the research - Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the

						contribution the study makes to existing knowledge or understanding
Rudhumbu et al., 2021	This study aims to establish the online teaching behaviour of university lecturers as well as examine issues and challenges for online teaching in universities in Zimbabwe during the COVID-19 era and beyond.	Quantitative study	(n=200) lecturers from 4 universities	Employed a structured questionnaire for data collection. Structural equation modelling using AMOS version 22 and independent samples t-test were used for data analysis. Confirmatory factor analysis was used for data purification	Findings: - Organisational factors - Technological factors - Pedagogical factors - Lecturer factors - Student factors - Behavioural intentions to use technology for online teaching - Online teaching behaviour.	- Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
Walters et al., 2021	To analyse feelings of guilt experienced by women working in the academic enterprise during the pandemic-enforced lockdown in South Africa where freedom of movement	Qualitative Study (Open-ended survey)	(n=2029) women at different stages in their academic careers all female academic staff in a nationwide study of South Africa's 26 public universities during the period of the lockdown.	The questionnaire contained 13 Likert-scale questions, followed by an open-ended section with unlimited space for respondents to comment on any aspect of the impact of the lockdown on their academic work	Findings: 1) Escalating volume of academic work alongside increasing domestic commitments placed women in situations they variously described as "overwhelming" and "unbearable" 2) Pressure of many competing roles for working women with children created sense of guilt. 3) The guilt-inducing conflict lies not only	- Clear statement of the aims of the research - Appropriate to use qualitative methodology - Appropriate research design to address the aims of the research - Appropriate recruitment strategy to the aims of the research - Data collection addressed the research issue - The relationship between researcher and participants been adequately considered

					between work and family, but in the tension between the two primary university obligations, teaching and research 4) The emotion of guilt is also expressed relationally—that is, in comparison to those who do better in their academic work because of an advantage perceived to be unfair 5) The inattention to self-care features prominently as a source of guilt 6) Feeling of neglecting a child as the cause of "immense guilt" in her life working from home.	- Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings. - The researcher discussed the contribution the study makes to existing knowledge or understanding
was severely limited.						
Yildirim & Eslen-Ziya, 2020	To explore the extent to which the effect of the lockdown on childcare, housework and home-office environment vary across women and men.	Quantitative study	198 of 460 respondents completed the survey. Over the 198 respondents, 65 per cent were women and 55 per cent were social scientists. 90 per cent of sample consist of academics	Fielded an online survey using sociodemographic questions via a cloud-based survey platform specifically on the social media pages of various academics' organizations.	Results show that a number of factors are associated with the effect of the lockdown on the work conditions of academics at home, including gender, having children, perceived threat from COVID-19 and satisfaction with the work environment.	Data collection addressed the research issue - The relationship between researcher and participants been adequately considered - Ethical issues been taken into consideration - The data analysis sufficiently rigorous. - There is a clear statement of findings.

			working in France, Germany, Italy, Norway, Sweden, Turkey, UK and the United States.			- The researcher discussed the contribution the study makes to existing knowledge or understanding