Feminine, feministic, feminists, and feminisms

Edited by
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Feminine, feministic, feminists, and feminisms

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Table of
contents

Editorial: Feminine, feministic, feminists, and feminisms

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Editorial on the Research Topic
Feminine, feministic, feminists, and feminisms

Introduction

Globally, an estimated 736 million women—nearly one in three—have experienced physical or sexual violence in their lifetimes (World Health Organization, 2024), and economic participation of women sees slow progress; significant pay and opportunity gaps remain globally, especially in labor force participation and income (World Economic Forum, 2023). Meanwhile, political representation lags at roughly 27% of parliamentary seats held by women, and anti-gender backlash is on the rise (Human Rights Watch, 2023). In this context, a pluralist, intersectional feminism gains urgency: one that attends to local struggles while recognizing global links. Global Feminism—a dynamic and multifaceted evolving constellation of struggles—seek to dismantle genderized, religionized, emotionalized, racialized, colonized, regionalized and digitized forms of asymmetrical domination. While the early histography of feminism often privileges the "waves" model rooted in Euro-American contexts— ranging from the first wave's focus on suffrage to the second's equality and reproductive rights, from third wave's identity and intersectionality to fourth's digital activism—global feminism spans across these temporal and geopolitical boundaries. From its inception, global feminism has sought to forge solidarities across borders while grappling with critiques of Eurocentric and the hegemonic tendencies of Western feminist discourse and a decolonized feminist praxis attentive to the specific socio-historical contexts of women in Global South. Contemporary global feminism is deeply intersectional, transnational and anti-capitalist in orientation. It urges us to reconcile the politics of recognition, redistribution and revision of women's rights. It continues to prioritize the urgency of addressing systemic violence, climatic stewardship, bodily autonomy, mobility and digital representation.

In exploring the continuum from the feminine to feminism, this Research Topic—aptly titled *Feminine, feministic, feminists, and feminisms*—reveals how diverse approaches converge on the pursuit of gender justice. The purpose of this Topic is to offer authors and readers an enriching opportunity to deepen their knowledge of global feminism along with the cultural, ethnic, digital, legal, personal and philosophical dimensions of women engaging with intersecting fields of aesthetic, ethics, morality, positionality, intellectual traditions, ideology, oppression, patriarchy, and sexuality.

This Research Topic of 13 essays aims at bringing together research writings across various disciplines to deliberate on how women as philosophical, aesthetic,

political and religious categories are represented, negotiated, and transformed in today's lifeworld. The essays are broadly categorized under five interrelated themes highlighting local struggles and global solidarities.

Gendered-labor and the political economy of mental health: contradictions in neoliberal subjectivities

Following three essays "*Work-Family Conflict, Overwork and Mental Health of Female Employees in China*" (Ma et al.), "*Career Women's Mental Wellbeing in the Era of Population Decline*" (Zhou et al.), and "*What's in Store for Females After Breaking the Glass Ceiling?*" (Cheng and Wang) interrogate the gendered contradictions of neoliberal capitalism, where discourses of empowerment coexist with the intensified precarities in both professional and domestic spheres. Drawing from feminists' political economy and sociology of work, the authors critically examine how overwork, shrinking population regimes and post-glass-ceiling dynamics recalibrate women's labor as sites of emotional exhaustion and silent suffering. Mental wellbeing emerges as a contested terrain, not merely individual but shaped by structural asymmetries and symbolic violence embedded in masculine corporate cultures. These essays unfold the complicated idea of meritocracy on the one hand and reveal the double burden and psychic costs of navigating gendered institutions under global capitalism at the other hand.

Existence and resistance across borders: feminist spatiality

Essays "*Feminism in the Borderscape: Juarense Women Against Injustice*" (Mehan and Dominguez), "*Informal and Revolutionary Feminist Placemaking*" (Mehan), and "*A Psycho-ethnography of the Self at #PoWESconf*" (Silverio), foreground feminist spatial theory and sociology of place to explore how women contest and reimagine spatial orders. From the militarized borders of Ciudad Juárez to informal feminist urban interventions and academic conference spaces, the authors demonstrate how gendered space is both constructed and contested. Drawing on Doreen Massey's conceptualization of space as relational and dynamic, and the notion of borders as sites of both exclusion and potentiality, these studies highlight women's spatial agency in the face of structural and epistemic violence. The psycho-ethnographic lens further introduces a reflexive turn, mapping the emotional geographies and aging of feminist selves within institutional setting.

The dynamics of embodied agency, reproduction and leisure: feminist health rights

Centered on the feminist health studies and Sociology of body, essays "*The Need for Assisted Reproductive Technology Regulations: A Case for Women in the Philippines*" (Biana), "*Befriending the Body Through Clothes: The Role of Clothing in Secular and Religious Women's Body Appreciation*" (Stolovy), and "*Young Women's Leisure Time Physical Activity (LTPA) Determinants: A Mixed Methods Approach*" (Fernandez-Lasa et al.) reveal socio-religious and bio-technological regulation of women bodies—whether through state of religion and secularism, aesthetic regimes or public health discourses. These essays interrogate how clothing, movement, leisure and technological advancements become entangled with individual identity, religious agency, and state control. The call for ART regulation, for instance, speaks to broader questions of reproduction justice, while the other studies foreground bodily autonomy as personal act situated within normative regimes of femininity. Far from being passive recipients, women emerge as negotiators of embodied subjectivity, enacting their agency within and against the dominant frameworks.

Politic, prejudice and masculinities: contested feminism

Essays "*Attitudes of Women Politicians Toward Their Roles in Politics: Northern Cyprus*" (Artaç and Ogurlu), and "*A New Variation of Modern Prejudice: South Korean Young Men's Anti-Feminism and Male-Victim Ideology*" (Jung) examine the emerging counter-narrative of anti-feminism masculinities within the domain of feminist political ideology and sociology of emotions. How do women in formal politics navigate gendered expectations, performative roles, and institutional inertia. Essay in south Korean context unpacks a growing ideological backlash among young men characterized by male victimhood discourse and ressentiment. Recognition of systematic gender hierarchies offer a nuanced critique of political subjectivity in a time marked by populism, re-traditionalization, and the contested legitimacy of feminist gains.

Intimate violence, memory and portrayal: the intersectional feminism

Essays on "*Differences in Help-Seeking in Intimate Partner Violence: Jewish and Arab Women in Israel*" (Ne'eman-Haviv and Shafran) and "*Shoah Pornography: The Stalag Phenomenon in Israel in the 1960s,*" delve into the sociology of violence, ethnic stratification and memories through an intersectional lens. The essays addresses the questions, i.e., how do social capital, cultural scripts, and state relations mediate access to health care and protection? How differential help-seeking behavior may vary across ethnonational lines? Evidence from both research essays engage with historical trauma and representational violence. Both essays confront the haunting persistence of gendered trauma in public and private spheres.

Together, these essays reflect the conceptual breadth and methodological richness of contemporary feminist sociology. Research Methodologies particularly from Global South rely heavily on the extended case method. They speak across disciplines, geographies, and positionalities, yet converge in their shared commitment to interrogating power, disrupting

normative knowledge systems, and imagining emancipatory future of feminism.

Conclusion: from feminine roots to feminisms reimagined

Feminine, feministic, feminists, and feminisms offers a pluri-vocal atlas of gendered power and resistance. By weaving together studies on work, body, violence, and identity, it demonstrates how feminisms evolve—from the feminine as everyday practice to feminist movements that traverse borders. The title encapsulates this arc: acknowledging feminine experiences, interrogating feministic frameworks, amplifying feminist actors, and envisioning new feminisms. Together, these contributions chart pathways toward justice, solidarity, and transformative change for all women. A crucial part of this Research Topic is to underscore that feminism is not owned by any one identity. Men can be feminists. Non-binary individuals can be feminists. Feminism is not a closed ideology but an evolving conversation rooted in the desire for equity and dignity. The editorial team was especially keen to include contributions that demonstrate how feminism must adapt to new forms of injustice—from algorithmic bias to ecological precarity—while remaining anchored in a commitment to care, equity, and justice.

We invite readers, scholars, and activists alike to engage deeply with the following contributions and to reflect on three questions:—Where do gender inequalities still persist in your discipline, institution, or context?—What feminist responses have proved most effective—or most limited?—How might we imagine a more just, inclusive, and feminist future?

This Research Topic is a testament to the fact that the political is still personal, and the personal remains profoundly political. It insists that feminism is neither obsolete nor fully achieved—but ongoing, multivocal, and transformative. By tracing experiences from everyday life to the institutional spaces, notable strides toward gender equality and advancement of women in leadership roles, much remains to be done to fully acknowledge and valorize the diversity, complexity, and contextual specificity of women's lived experiences. In doing so, this Research Topic contributes to a global and pluralist feminist praxis—attuned to difference, embedded in context, and radically committed to justice and inclusivity leaving no one behind.

Author contributions

SI: Writing – original draft, Writing – review & editing. BN: Writing – original draft, Writing – review & editing. AS: Writing – original draft, Writing – review & editing.

Conflict of interest

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Differences in help-seeking tendency in intimate partner violence between Jewish and Arab women in Israel

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Objective: Intimate partner violence (IPV) has many consequences for the physical and mental health of the victims. One strategy for coping with IPV is to turn to formal and informal sources for help. The purpose of the present study was to examine the differences in help seeking tendency in cases of IPV between Jewish and Arab women in Israel and the connection to their mental health.

Method: We administered a structured quantitative questionnaire to a sample of 357 Jewish (44.8%) and 439 Arab (55.2%) women.

Results: The findings indicate that Jewish women tend to seek help more often than do Arab women, and that there are differences in the targets they approach. Jewish women turn more frequently to unofficial sources, such as friends, relatives, and associations, whereas Arab women approach more often official sources such as social workers and clergy.

Conclusions: We propose an explanation for the differences based on socio-cultural factors. This study illustrates that it is necessary to act with cultural sensitivity and adapt the help options offered to the culture to which the women belong. This adjustment may encourage more women to apply for support to escape the world of violence.

Introduction

Intimate partner violence (IPV) refers to behavior that occurs in a current or previous intimate relationship, which causes physical, psychological, or sexual harm. It includes acts of physical aggression, sexual coercion, and various forms of psychological or emotional abuse (Potter et al., 2021). The latter may include humiliating, threatening, and coercive behaviors designed to control the victim and limit her autonomy (Stark and Hester, 2019). Exposure to IPV is a cause of injuries and physical harm, and it contributes to mental health problems including depression, post-traumatic stress disorder (PTSD), and suicidality (Spencer et al., 2019).

Many studies, that examined IPV in different societies and cultures found that it is present regardless of social class, religion, sector, country, or continent, and it exists for many psychological and sociological reasons (Gilbar et al., 2022). In the present study we argue that help-seeking in the wake of IPV, like IPV itself, is the product not only of individual psychological

aspects but also of social structure, which includes clear role definitions, norms, and stereotypes. The study focuses on the differences in the tendency to ask for help in cases of IPV between Jewish and Arab women living in Israel, with the understanding that help-seeking depends, among others, on cultural and social codes.

Literature review

Sectoral differences in IPV against women in Israel

Israeli society consists of many sectors and population groups, but the phenomenon of IPV is present in all of them (Shwartz et al., 2022). Studies that examined the differences between the diverse groups have found that Arab women born in Israel have the highest rate of IPV victimization, 21%, in the Israeli population (Ben-Porat et al., 2021). In a survey conducted among women of childbearing age in Israel, considerable differences were found in the prevalence of IPV among Arab women born in Israel, Jewish women born in Israel, and immigrants to Israel (67, 27, and 30%, respectively). All types of IPV were more frequent among Arab women and recurrence was higher than the other two groups (Daoud et al., 2020).

Arabs are a minority in Israel. The Arab population of Israel, which includes Muslims, Bedouins, Christians, and Druze, constitutes about 21% of the total population of the country (Central Bureau of Statistics, 2020). The Arab society is different in many respects from Jewish Israeli society. Although the differences are not completely dichotomous and unequivocal, in general, the Arab society is more traditional, collectivist, and patriarchal, and the Jewish society is more individualistic and liberal (Benita, 2017). Despite the modernization processes that Arab society is undergoing, and the increase in the rate of Arab women working outside the home and acquiring higher education, Arab society remains patriarchal, which places women in a low position in the family hierarchy. The woman's roles as a wife and mother, and expectations of her, remain the same even if she carries the additional burden of working outside the home (Ne'eman-Haviv, 2021a). According to Sweet (2019), romantic relationships are the arena where traditional gender ideologies are upheld most strongly. This is also reflected in the phenomenon of violence and murder for the sake of family honor in Arab society in Israel (Ne'eman-Haviv, 2021b).

Tendency to seek help

IPV has many implications, both physical and mental-emotional (Lo, 2023). Women who are at risk from their partner are likely to experience increased levels of stress, tension, and anxiety, and are required to develop strategies for coping with their physical, mental, and emotional state. At times, they are required to defend their lives (MacGregor et al., 2021). Coping is a regulatory process used to reduce the negative emotional effects of stressful events (van Berkel, 2009). Coping strategies refer to methods adopted and practiced by people as means of dealing with various

stressors. Multiple coping strategies are influenced by intrapersonal and environmental factors. One of them is seeking external support and help. The present study examined the probability of seeking external support by Jewish and Arab women, as well as the possible sources of support.

Several articles have proposed a theoretical framework explaining the inclination to seek help in cases of IPV. Lelaurain et al. (2017) conducted a systematic literature review and identified three phases in IPV help-seeking: (1) problem identification; (2) decision to seek assistance; and (3) determining whom to engage for urgent aid.

However, these processes do not occur in isolation but within a social-cultural framework. Liang et al. (2005) assert that the definition of IPV and a person's recognition of being a victim of IPV are influenced by the societal and cultural norms that shape the interaction between gender, class, and culture, as suggested by Waller et al. (2023) in 'The Theory of Help-Seeking Behavior.' This theory takes into account survivors' sociocultural context, intersectionality, and beliefs, examining how these factors influence the nature and extent of their help-seeking behavior. It postulates that women's beliefs and experiences with available support, as well as their individual agency, impact how and when they seek crisis aid. The Theory of Help-Seeking Behavior includes three key constructs: (1) social context, which explains how survivors' sociocultural context influences their efforts to seek help; (2) beliefs, particularly their lived experiences and reflections on available services and support; and (3) agency, encompassing the strength or power they employ to secure assistance.

Hence, the cultural and social environment is closely linked to the decision to seek help, the barriers that hinder it, and the factors survivors choose to turn to (Padilla-Medina et al., 2023). The barriers encountered during help-seeking depend on survivors' sociocultural context and whether they seek aid from formal providers. These barriers range from shame and stigma to denial of the abuse occurring and aligning with the perpetrator (Waller et al., 2023).

According to this theoretical concept, several studies have shown that the decision to seek help and the decision to whom to turn are affected by social-cultural perceptions (Elias et al., 2019; Lo, 2023; Padilla-Medina et al., 2023; Selestine et al., 2023). Studies conducted in collectivist and patriarchal societies found that women are expected to retain their honor by remaining hidden and maintaining a low profile, restricting their autonomy, and abiding by various constraints to uphold their reputation and that of their family (Aboulhassan and Brumley, 2019).

Hulley et al. (2023) conducted a qualitative meta-synthesis of 47 papers, analyzing samples of women from diverse cultures, including African, Hispanic/Latina, and Asian backgrounds. The study revealed that women in traditional societies often carry symbolic representations of purity within their respective cultures. However, when they deviate from the established cultural norms, they may face consequences such as ostracization, restrictions, or abuse, all of which can destabilize family dynamics. As a result, these women feel immense pressure to adhere to societal expectations and may avoid seeking help from external sources in cases of intimate partner violence (IPV) to protect family stability and avoid further threats.

A study that examined help-seeking by young Arab women in Israel found that they face three categories of barriers: intra- and interpersonal, sociocultural, and sociopolitical (Elias et al., 2019). Beyond the cultural reasons that prevent Arab women from seeking help, other barriers arise from belonging to a minority group in Israel and the existing political conflict between Israel and the Palestinians. Some of these have to do with a lack of trust in the Israeli authorities and with cultural and language gaps. These sociopolitical difficulties may affect both the women's willingness to ask for help and the sources to whom they can turn.

The ways in which women choose the source of support and coping may change and vary between turning to official state agencies (counseling, welfare, legal services) and agents of unofficial support like family and friends. According to Selestine et al. (2023) for women who do decide to seek help, selecting an appropriate source of support brings more challenges. A study that examined help-seeking on a sample of 6,589 American women who experienced domestic violence, and compared women who were part of a social minority with those of a higher social status, revealed that women who were in a social minority sought less help from state aid agencies (Cheng and Lo, 2015). Another study examined the willingness to turn to informal sources of help (family and friends) compared to official sources on a sample of 152 Indian women belonging to a social minority, and found that most of them would prefer to turn to informal sources of assistance (Kim and Hogge, 2015). Additional findings revealed that although women approach informal sources of assistance, they do so with relatively low frequency because they fear that their status in the family will be harmed (Frías and Carolina Agoff, 2015). By contrast, women who are not part of a minority, are more likely to seek assistance in general, mainly from official aid agencies, because they do not encounter the barriers faced by minority groups (Tengku Hassan et al., 2015).

Hence, Arab women in Israel are trapped. On one hand, they are afraid to turn to unofficial sources of assistance within Arab society because they fear damaging the status of the family in the community. On the other hand, turning to formal authorities in Israel is problematic because of the political complexity caused by belonging to a minority group.

The ability to seek help and gain access to sources of support is of great importance (Robinson et al., 2021). It is essential for mental health, protecting a person from the effects of stress (Turner and Brown, 2010). In the case of IPV, the protection is not only for the person's mental state, but often also for her life.

Research objective

This study examined the willingness of Jewish and Arab women in Israel to ask for help in case of IPV. The cultural differences between the sectors and the differences arising from being part of majority vs. minority groups may affect their tendency to ask for help as well as the sources they choose to approach. Understanding these factors may help devise accurate and culturally appropriate interventions for each group, taking into account and lowering the barriers that prevent seeking help.

Hypotheses

1. Jewish women will show a greater tendency to seek help than Arab women. Moreover, Jewish women are more likely to seek help from unofficial sources (family and friends), whereas Arab women are more likely to approach official sources that identify with their community (such as Arab-identified social workers).
2. A positive correlation exists between the tendency to seek help and mental wellbeing.
3. A negative correlation exists between the tendency to seek help and demographic variables (age and level of religiosity).

Methods

Participants

Seven hundred and ninety-six Israeli women participated in the study, including 357 Jewish (44.8%) and 439 Arab (55.2%) women. Participants' ages ranged 18-75 years (M = 27.33, SD = 9.16) years; 495 (62.1%) of the participants were single, 278 (34.9%) married, and 23 (3%) widowed or divorced; 41.4% defined themselves as religious, 31.8% as traditional, and 23.2% as secular.

An a priori power analysis was conducted using G*Power version 3.1.9.7 (Faul et al., 2007) to determine the minimum sample size required to test the study hypothesis. Results indicated the required sample size to achieve 90% power for detecting a medium effect, at a significance criterion of $\alpha = 0.05$, was $N = 191$ for each group for independent t-test. Thus, the obtained sample size of $N = 796$ is adequate to test the study hypothesis.

Tools

The study was based on a quantitative questionnaire consisting of three parts:

1. *Demographic questionnaire*, including questions about the participants' age, religion, level of religiosity, and marital status.
2. *Willingness to seek help questionnaire*, which asked participants: "If you were a victim of domestic violence, whom would you be willing to tell about it?" Participants were presented with a list of 11 options and were asked to mark on a scale ranging from 1 (not at all) to 5 (to a very large extent) the likelihood that they would turn to each of them for help. The list of options is shown in Table 1. Cronbach's alpha for the questionnaire was 0.82.
3. *Mental Health Continuum Short Form* (MHC-SF) (Lamers et al., 2011; Shrira et al., 2016). The questionnaire consists of 14 items, each one containing a statement describing mental wellbeing. Participants were asked to rate the frequency with which they experienced each item in the preceding month, on a scale ranging from 1 (not at all) to 6 (every day). Examples of statements: "I felt that my life had meaning and purpose," "I felt I had a warm and trusting relationship with others." Cronbach's alpha for the questionnaire was 0.92.

TABLE 1 The probability of seeking help from various sources, by ethnicity.

	Jewish women (N = 357)			Arab women (N = 428)			T (df)
	Low probability	Medium probability	High probability	Low probability	Medium probability	High probability	
Father	54.9%	15.4%	29.7%	56.3%	14.5%	29.2%	0.485 (783)
Mother	71.4%	12.9%	15.7%	77%	9.8%	13.3%	1.108 (785)
Brother/sister	64.7%	15.7%	19.6%	71.1%	14.4%	14.6%	1.064 (787)
Other relatives	46.5%	29.4%	24.1%	72.8%	14.3%	12.9%	7.426* (745)
Friend	21.3%	16%	62.7%	48.6%	19.1%	32.3%	11.691* (783)
Teacher	59.1%	21%	19.9%	57.1%	18.5%	24.4%	0.472 (782)
Social worker	40.3%	22.4%	37.3%	39.2%	19.1%	41.7%	0.391 (784)
Physician/nurse	40.6%	22.4%	37%	51.7%	19.6%	28.9%	3.743* (766)
Religious leader	71.1%	11.5%	17.4%	56.3%	15.9%	27.8%	4.317* (783)
Social organization	26.1%	19.6%	54.3%	50%	13.5%	36.5%	7.336* (782)

*p < 0.001.

Research procedure

The study was approved by the University Ethics Committee. The research questionnaires were administered to a convenience sample of Jewish and Arab women in Israel in the course of 2022. Although the sample was not a representative one, it includes representation of participants from various areas in Israel. Emphasis was placed on including participants from Arab, Jewish, and mixed localities (where Jews and Arabs live together). The questionnaires were distributed in Hebrew and Arabic by research assistants from both communities through social networks.

Participants were guaranteed that the survey was anonymous, and that it was intended for research purposes only. The participation in the research was voluntary. We clarified to participants that there were no correct answers to questions and participants were asked only to express their opinions.

Findings

Help-seeking in case of IPV

Confirming our first hypothesis, t-tests for independent samples revealed that there were significant differences between groups in the probability of seeking help for IPV, and the probability of Jewish women seeking help (m = 3.01, df = 0.811) was significantly higher than that of Arab women (m = 2.76, df = 0.795) doing so (t = 4.171, df = 763, p < 0.001).

Table 1 presents the likelihood of seeking help from various sources by Jewish and Arab women in Israel.

As shown in Table 1, the rate of help-seeking by both Jewish and Arab women from first-degree family members was not high. About 30% would turn to their fathers with high probability, and less than 20% would turn to their mothers or siblings for help. But there were significant differences between the groups. Most Jewish women (62.7%) indicated that they would turn to a friend, whereas only 32.3% of Arab women did so. Jewish women also indicated greater willingness to seek help from non-first-degree relatives than

Arab women did (24.1 vs. 12.9%), physicians or nurses (37.3 vs. 28.9%), and social organizations (54.3 vs. 36.5%). By contrast, Arab women indicated greater willingness than did Jewish women to seek help from social workers (41.7 vs. 37.3%) and of religious leaders (27.8 vs. 17.4%).

Correlations between variables

Tables 2, 3, concerning hypotheses 2 and 3, present statistics of the study variables and the correlations between them. We examined the correlations between likelihood to seek help, mental wellbeing, and age using Pearson's test, and the correlations with the level of religiosity with Spearman's correlation.

As shown in Tables 2, 3, and confirming hypothesis 3, the probability of seeking help correlated significantly with the sense of mental wellbeing. The correlation was stronger in Jewish than in Arab women.

We found a significant correlation between the probability of seeking help in the case of IPV and the participants' age, with opposite trends between Jewish and Arab women. For Arab women, we found a negative correlation, in accordance with hypothesis 4, whereas for Jewish women, we found a positive correlation. Thus, the younger Arab women were, the greater the probability was of their seeking help, whereas for Jewish women, the probability of seeking help was higher for older women.

This finding may be explained by the level of religiosity of the participants. Contrary to hypothesis 4, for Jewish women we found no correlation between the probability of seeking help and level of religiosity. By contrast, for Arab women, we found a negative correlation between these variables. The significant correlation between age and level of religiosity of Arab women explains why older women were less likely to seek help. For Jewish women, the correlation between age and the level of religiosity was negative, therefore we found no correlation between the level of religiosity and the tendency to seek help.

TABLE 2 Statistics of research variables.

		Probability of seeking help	Mental wellbeing	Age	Level of religiosity
Complete sample	N	764	795	793	795
	Mean	2.88	3.13	27.34	2.18
	SD	0.81	0.78	9.15	0.78
	Min	1	1	18	1
	Max	5	471	75	3
Jewish women	N	357	357	357	357
	Mean	3.01	3.17	25.75	2.02
	SD	0.81	0.73	8.05	0.87
	Min	1	1.14	19	1
	Max	5	4.71	65	3
Arab women	N	407	438	436	438
	Mean	2.77	3.09	28.65	2.31
	SD	0.79	0.82	9.78	0.68
	Min	1	1	18	1
	Max	5	4.71	75	3

TABLE 3 Correlations between research variables.

		Probability of seeking help	Mental wellbeing	Age
Jewish women	Mental wellbeing	0.272**		
	Age	0.182**	0.153**	
	Level of religiosity	0.098	0.066	−0.191**
Arab women	Mental wellbeing	0.120*		
	Age	−0.175**	0.143**	
	Level of religiosity	−0.157**	0.147**	0.125*

*p < 0.05, **p < 0.001.

Discussion

IPV has many consequences for the physical and mental health of the victims (Spencer et al., 2019; Lo, 2023). One of the victims' strategies for coping with IPV is turning to formal and informal sources for help (van Berkel, 2009; Selestine et al., 2023). The present study examined the tendency of Jewish and Arab women in Israel to seek help in case of IPV. The findings revealed a significant connection between the willingness to ask for help and the women's mental health. The mere knowledge that the women have someone to turn to in case of violence appears to lead to better mental wellbeing. An understanding of the barriers that women face in seeking help and of the entities they can approach for help can guide service providers in developing solutions that are culturally appropriate for each community, in accordance with its cultural codes.

The findings of the study reveal that, in general, Jewish women's willingness to seek help is significantly higher than that of Arab women. This gap originates in the differences between the two cultures. Although Jewish society contains, among other, conservative groups, and the differences between the Jewish and the

Arab societies do not constitute an extreme dichotomy, the Jewish society is considered to be more liberal, Western, and egalitarian than the Arab society. Arab society in Israel, despite the change it is undergoing, remains traditional, collectivist, and patriarchal (Daoud et al., 2020). Arab culture expects women to be submissive, subservient to men, to uphold family honor, and not approach actors outside the community (Ne'eman Haviv, 2020, 2021a,b). The fact that Israeli Arab women are part of a minority group, which has conflicts with the legal authorities, reduces their trust in the authorities and the chance that Arab women will approach either internal or external sources of help.

As noted, Arab society is in the process of transitioning from traditionalism to modernity. The change includes urbanization, structural changes in participation in the labor market and work patterns (especially in the case of women), a rise in educational levels, exposure to media, and detachment from the extended family and traditional social institutions (Elias et al., 2019; Vitman-Schorr and Ayalon, 2020; Lo, 2023). Our findings indicate that there is a negative correlation between the age of the Arab women and their willingness to ask for help, with younger women being more likely to seek sources of support. The change also reflects a

willingness on the part of the women to extricate themselves from the cultural trap in which they are.

The women in both groups tend not to turn to their parents for help, especially not to their mothers. Possibly, they do not perceive the mothers as having sufficient social power to help them. But there are differences between the groups in whom they approach for help. As noted, 62.7% of the Jewish women stated that they would turn to a friend for help, whereas only 32.3% of the Arab women indicated that they would turn to a friend. Jewish women were also much more likely to seek help from non-first-degree relatives (24.1% compared to 12.9% of Arab women), from a physician or nurse (37.3 vs. 28.9%), and from a social organization dealing with IPV (54.3 vs. 36.5%).

By contrast, Arab women indicated that they would approach two sources of help more than Jewish women would: social workers (41.7 vs. 37.3%) and religious leaders (27.8 vs. 17.4%). This finding indicates the tendency of Arab women to turn to formal authorities. Over the past decade, there has been a notable rise in awareness among the Arab public in Israel regarding the urgency to establish programs aimed at preventing domestic violence. Consequently, numerous organizations have emerged within Arab society, providing essential support services for women. In many instances, social workers within Arab communities are Arab women themselves, which not only enhances accessibility but also helps to alleviate mistrust.

The tendency of Arab women to seek help from external parties rather than their relatives attests to the sway of traditional culture, which silences women victims. Cuesta-García and Crespo (2022) reviewed numerous studies showing that family reactions and women's fear about what their family members and friends might think acted as a barrier to help-seeking. For example, Abu-Ras (2007) found that Arab immigrant women in the US showed fear of disapproval and of being stigmatized by their families for their decision to seek help.

Shechtman et al. (2018) explained the reluctance to seek help from parties in the community both by the social stigma and the self-stigma associated with it. Public stigma refers to the negative stereotypes that individuals perceive that their society maintains about those who seek help. In previous studies, public stigma has been associated with decreased help-seeking attitudes and intentions (Vogel et al., 2017; Hulley et al., 2023). Individuals internalize these stereotypes and attach negative attitudes to their self-concept, a phenomenon known as self-stigma, which includes feelings of shame, fear of losing self-respect, and isolation (Liang et al., 2005; Shechtman et al., 2018). This explanation clarifies why the Arab women in the present study are less likely to ask for help, underestimated the ability of their mothers to provide support. The choice to turn to official bodies provides women with protection and gives them the strength to face the social pressures in their community.

Limitations

The main limitation of the study lies in the fact that the women were not directly asked whether they had been victims of IPV. The purpose of the study was to learn about the cultural and social differences in the help-seeking tendency between Jewish and Arab women. Therefore, the study addressed the general population. But, it is possible, that some of the women who participated in the study, were IPV victims, creating a bias in their answers. Moreover, the study examined the women's perception of a theoretical case of IPV: "If you were a victim, whom would you turn to?" Therefore, our results indicate an expectation of behavior rather than actual behavior.

External validity and generalizability

The study examines differences between two population groups: Jewish and Arab women. Two cultural groups differ from each other: Jewish society is more modern, Western and liberal, whereas Arab society is more conservative, traditional, collectivist and patriarchal. Although the differences between the groups are not necessarily dichotomous, but rather on a continuum, this study can be broadly generalized. The research findings may be relevant to many societies that are in the process of modernization and change, such as traditional immigrant communities living in Western countries.

Future research

A follow-up study should be conducted among women who identify themselves as victims of IPV, to examine whether they sought help and from which sources. In addition, it is important checking what influenced the decision to contact or not to contact a certain source.

Prevention and policy implications

Both state agencies and women's organizations in Israel have made attempts to raise awareness of IPV and encourage women to seek help in the case of victimization. It appears, however, that cultural barriers significantly reduce the willingness to seek help. This study shows that it is necessary to act with cultural sensitivity and adapt help options to the culture to which the women belong. Furthermore, the understanding of the barriers facing Arab women, which result in low rates of help seeking within their community, suggests the need to develop intervention programs, that raise the community awareness of the difficulty of escaping the cycle of violence, and offer an enabling place for receiving support. To create a fundamental change, it is necessary to start with educational programs from a young age in schools, with the aim of encouraging solidarity against violence.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding authors.

Ethics statement

The study involving human participants was approved by the Ariel University Ethics Committee (Approval no. AU-criminology-CRI033-APR-2021). Written informed consent to participate in this study was not required from the participants in accordance with the national legislation and the institutional requirements.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

Conflict of interest

YS was employed by Michal Sela Forum.

The remaining author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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A new variation of modern prejudice: young Korean men's anti-feminism and male-victim ideology

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In South Korea, anti-feminism is now rapidly spreading online among young men, who have started to identify themselves as a social minority or "victims" of female power. Despite its ramifications, theoretically, anti-feminism is indistinct from the racism and sexism of White men that emerged more than half a century ago. In view of this, it shares the same root as typical modern racism or sexism, although it appears to be a novel phenomenon. Such a hypothesis was buttressed by quantifying the attitudes of anti-feminists toward various outgroups based on the transference of prejudice theory. Moreover, the subtle sexist undertones hidden in their arguments have been discussed using various psychological theories and empirical data/statistics. Additionally, various potential factors that may shape or accelerate their attitudes or behaviors have been discussed on the basis of the threat-defense theory. Through comprehensive literature review based on this theory, this study proposes the features related to Korean anti-feminism, encompassing behavioral/situational (overindulging violent or degrading Internet contents, verbal aggression), relational/epistemic (ostracism, attachment insecurity, pseudo-rationalism), and group-level (provocative interactions, polarization) attributes, some of which may also influence groups other than young men and ingrain or exacerbate the extreme ideologies of other groups, including young women. Scrutinizing Korean online anti-feminism and male-victim ideology may improve our understanding of the psychological origins of various social extremities or radical ideologies beyond cultural barriers.

KEYWORDS

motivated social cognition, online group polarization, symbolic racism, insecure attachment, violent video games, pornography

Introduction

In January 2023, the Ministry of Gender Equality of the Republic of Korea announced a plan to revise the current rape law in Korea to incorporate "non-consensual rape," but this plan was retracted within just a few hours (Lee, 2023a). This plan was an attempt to change the current rape law, which considers only violence or intimidation as requisites for rape or sexual assault, to meet the global standard recommended by the United Nations, but this attempt was soon after overturned by the President's Office of the current conservative government. Moreover, they declared that the law would not be amended under the current government of President Yoon Suk-Yeol, closing off further discussion over this issue (Kim and Lee, 2023). Not surprisingly, such decisions were based on the current government's anti-feminist direction of policy. A floor leader of the ruling party of Korea clarified that

there was an anti-feminist basis behind the decision. He asserted that such a bill would trigger gender conflict and increase false rape allegations, claiming that the bill originated from the "distorted consciousness of some politicians to discipline others"; he said that such movements have fostered the gender conflict in South Korea and that they will be careful not to let such a "misadventure" happen again (Ha, 2023).

Most Koreans agree that such a decision from the government was greatly influenced by men in their 20–30s with strong anti-feminist ideology, who are among the primary supporters of the current government (Kim, 2023; Lee, 2023b). Based in online communities, these groups argue that feminist movements have been discriminating against men and forcing people to treat men unfavorably. Their antipathy to feminism is one of the biggest social issues in South Korea today, and there have been several attempts to analyze this phenomenon from diverse perspectives (Kwon, 2019; Kang, 2022a). Their anti-feminism seems especially unusual given that they express their hostility toward feminist movements in strong and aggressive ways, not only stipulating feminism as female egotism but also recognizing themselves as "victims" of female power. Such tendencies were salient in a recent survey conducted by local news outlet SisaIN (Chun and Jeong, 2019). This survey aimed to identify why men in their 20s had exceptionally low approval ratings for the liberal government compared to other groups. The results showed almost 60% of Korean men in their 20s *strongly* agreed that feminism is female supremacy. Many young men were found to think that current society is unfavorable toward men in many ways, including dating and marriage, employment and promotion, and law enforcement, especially for sexual offenses. Based on these results, they argued that approximately a quarter of men in their 20s are "anti-femme warriors" who take anti-feminism and victim ideology as their core identities. They suggested that young Korean men are strongly motivated to think and act based on antagonism toward feminism, believing that they have always been mistreated by a society that is unfavorable to men. Therefore, they have designated this phenomenon as the emergence of the male minority identity. These young men firmly believe that current Korean society discriminates against men, which is far from the so-called "male privilege," considering themselves innocent victims scapegoated by feminist power.

Their arguments are a frontal attack on the common social perspective that women are a social minority and constitute the strongest backlash ever against women's movements in Korea, which has bewildered the majority of Koreans. In fact, the reactions within Korean society were remarkably poor. Although some feminist scholars have interpreted the male-minority ideology in Korea as a narrative that was triggered by and developed from online communities with misogynistic or hostile sexist views (Kim and Lee, 2017), this consciousness—shared by most of the young men—has led to many Koreans being inclined to hold these views(Cho, 2019). Later, some politicians started to sympathize with their arguments, resulting in the election of a young anti-feminist politician as the leader of the main conservative party of Korea and a candidate who pledged the abolition of the Ministry of Gender Equality as the president of the Republic of Korea (Gunia, 2022; Lee, 2022a). Their claims, which were apparently setting back gender equality in Korea, finally reached mainstream Korean society.

It is a huge paradox that a country with a gender wage gap of more than 30%, which constitutes an overwhelming top rank among the OECD countries (Lee, 2022b), now has a leadership that advocates men's rights rather than women's rights. Feminism has literally become the "f-word" in Korea, and personal attacks and bullying against feminists are becoming a new issue in Korean society (Hines and Song, 2021; Bicker, 2022). Indeed, Korean anti-feminist men assert that the gender pay gap in Korea is derived from women's lack of endeavor or competence and is, therefore, fair (Chun and Jeong, 2019). Furthermore, they say that Korean society retains many issues that are obviously unfair to men, such as military duty imposed only on men (Bicker, 2022; Lee, 2022c). Their claims are nothing more than a collection of personal experiences shared within their own exclusive communities, which are not evidenced by data (Bicker, 2022; Lee, 2022a). Nevertheless, such phenomena cannot by itself prove that the anti-feminism and victim ideology of young Korean men are completely preposterous. They say that the foreign views that aim to "educate" have stemmed from a lack of awareness of the unique circumstances of Korea. They argue that, at least in South Korea, sexism is only an antiquity from the past and is no longer present in current society and that their antagonism toward feminism is a legitimate resistance to a myriad of unjust demands from radical feminists, not sexism or misogyny (Chun and Jeong, 2019; Lee, 2022c).

It is true that Korean society is unique, and there might be unfavorable policies or treatment of men or "misandry," as they claim. However, at least from a psychological perspective, their claims are completely indistinguishable from the typical patterns of modern prejudice and discrimination, despite their ostensibly unprecedented nature. Although these young men currently have no social power to discriminate against someone, they already have detrimentally sexist views. A recent survey from the Korean Broadcasting System showed that 47% of young Korean men believed rejecting job applications due to the candidate being a feminist to be fair (Song, 2021). Furthermore, 41% of men opposed the legislation of the Comprehensive Anti-Discrimination Act, which corresponds with the Civil Rights Act in the United States. This ideology is comparable to one of White racists and sexists who stood against equality movements in the 1960s–1970s in Western societies. There have been numerous psychological studies regarding this anti-equality backlash, usually among White men. In other words, outside Korea, many scholars and researchers have been observing such groups' modern prejudice and minority ideologies for decades, and they have been studied from the perspectives of racism and sexism. Looking at the astounding similarities between the modern prejudice studied in the West and the anti-feminism and male-victim ideology among young Korean men today, it seems undeniable that sexism is ingrained in their core mindsets.

History of psychological modern prejudice

As mentioned, the psychological explorations of modern discriminatory ideologies date back to more than half a century ago. Sears and Kinder (1971) discerned some White people's unfavorable attitudes toward Black people even after the advent of

the Civil Rights Movement and argued that there are some subtle racist attitudes against Black people that cannot be explained by the existing concept of blatant racism. Through further studies, researchers confirmed that some suburban White people were expressing specific forms of ideological antagonism (*symbolic racism*) against Black people, theorizing its characteristics from the psychological perspective of prejudice (McConahay and Hough Jr, 1976). According to them, some White people's antipathy toward Black rights movements consists of the following arguments: first, racism is not currently as prevalent in the US as in the past; second, today's Black people are enjoying excessive privilege beyond what they deserve; third, Black people's typically lower social status has resulted from their internal problems, not the problems of the social structure; and finally, Black people are continuously demanding special treatment, exploiting equality movements and masking their own incompetence (Sears and Henry, 2003; Tarman and Sears, 2005). Triggered by the studies of symbolic racism in the 1970s, the phenomena of modern racism/prejudice and their origins have drawn the attention of many psychologists and sociologists. Another theory to mention regarding modern prejudice is *laissez-faire* racism, which is a more subtle form of racism based on meritocracy believing that Black people's socioeconomic fails are due to their racial inferiority or lack of effort (Bobo et al., 1997). Such a belief, like symbolic racism, denies the existence of discrimination and shifts the cause of the discriminatory structure to pure personal responsibility. They say that because everyone has equal opportunity and is treated equally in modern American society, it is unfair to blame social structures for their failure (Tarca, 2005).

Therefore, modern racism is considered a union of racial prejudice and ideological beliefs regarding equality of opportunity or fairness of outcome (Bobocel et al., 1998; Sears and Henry, 2003). Later studies regarding modern prejudice have two notable features. First is the expansion of the target of prejudice. Carney and Enos (2017) demonstrated that the survey questions developed for modern racism can also be applied to several outgroups, not only Black people. In other words, the concept of symbolic or *laissez-faire* racism not only applies to racism toward Black people but can also be expanded to prejudice against various minority groups, e.g., ethnic groups other than Black people or homosexuals (Swim et al., 1995; Henry and Sears, 2008). Second is the evolution of the means of expressing prejudice. Berbrier (2000) argued that today's White supremacists and separatists tend to deny their privilege but perceive themselves as "victims," indicating the emergence of White-victim ideology. Such a claim is deemed a more advanced way of expressing their antipathy or resentment toward equality movements, probably to unfold their claims to themselves or others in a more socially desirable manner. This ideology incorporates the tenets that today's society is the "reverse discrimination" society that treats White people unfavorably, applying "double standards" between White people and other groups or alleged minorities (Boehme and Isom Scott, 2020; Isom et al., 2022). Indeed, such an ideology is also not restricted to racism. These beliefs tend to be shared primarily by White men, being associated with two-fold threats to their masculine ideology as well as to White ideology. According to McIntosh (1988), White men tend to deny their privileges (either

to people of color or women), try to rationalize the reasons for the existence of their privileges, and further claim that they are not getting the privileges that they deserve. Similarly, Kimmel (2017) argued that angry White men express their resentment not only toward people of color but also toward other outgroups, such as women, immigrants, and LGBTQ+ groups. Coston and Kimmel (2012) expanded the victim ideology of White men to the "male-victim" ideology, which is identical to the ideology of young Korean men today. They contended that today's White men try to act as victims, veil their actions as Male Rights Movements, and attempt to reverse the apparent power structure and gain social support for their arguments.

Theoretical examinations of Korean anti-feminism and male-victim ideology

The phenomena introduced so far are recapitulated as the reversal of the sense of privilege and the formation of victim ideology, which is an advanced form of resistance to the equality movement (or the unfairly excessive promotion of minority rights). However, still debatable is whether it is cogent to interpret young Korean men's victim ideology as a sort of prejudice as well, applying the psychological interpretations of modern racism and sexism. In fact, Glick and Fiske's (1996) ambivalent sexism theory, which distinguishes between two ambivalent attitudes within sexism, namely, benevolent and hostile sexism, is not very useful in explaining Korean anti-feminism and male-victim ideology. As revealed in Chun and Jeong's (2019) survey, young Korean men tend to be relatively free from traditional values regarding sex roles or gender stereotypes (i.e., benevolent sexism). The levels of benevolent and hostile sexism among young Korean men tend to be similar to or even lower than older-generation men, despite being higher than those of women of similar ages (Ma et al., 2018; Park and Kim, 2022). Their attitudes toward women are, although extremely hostile toward feminists or women supporting feminism, apparently regarded as far from sexist, especially considering that ambivalent attitudes are considered a hallmark of the subtle forms of contemporary sexism (Glick and Fiske, 2011; Connor et al., 2017).

However, it is notable that today's antagonism toward feminists involves a typical repertoire of labeling deviant behaviors (Schur, 1971; Link and Phelan, 2013). Such labeling does not only target radical feminists or social extremists, it also eventually puts pressure on women in general to endorse feminist arguments. In fact, these phenomena have long been observed and scrutinized in various fields, including communism ("McCarthyism"; Johnson, 2006), LGBTQ (Callis, 2013), mental disorders (Link and Phelan, 2013), and women (Schur, 1984). Although they overtly seem to blame only feminists or "female supremacists," they aim to influence women of similar ages to them, who may either be their friends or rivals. Indeed, their ambivalence appears here. They outline the "model women" that correspond to their ideal images of women (even if they might be somewhat different from conventional images of virtuous women) and try to control the same-aged women by praising ideal women and derogating

women who deviate from these standards (Papanek, 1994). They attempt to support the social archetype of "good" and "bad" women and reinforce masculine social systems by controlling women with this dichotomy; such elements are considered one of the prominent principles of sexism (Bareket et al., 2018). They may also adopt somewhat strategic maneuvers to dominate women using this dichotomy: praising women who keep their distance from feminism as "sensible," they implicitly (or sometimes even explicitly) demarcate between model and deviant women. Such a phenomenon has also been observed in other targets of prejudice, for instance, exalting Asians who are stereotyped as being obedient to the system may proliferate racist threats toward Asians and other ethnic groups (Kramer, 2003; Chou and Feagin, 2015). Similarly, highlighting exemplary immigrants may entail a masked intent to implicitly underline the illegitimacy of some immigrants or refugees (see Petterson, 1966; Chu, 1997).

These forms of labeling "some" women or strategic sexism are also observed in contemporary Korean far-right online communities. Um (2016) analyzed the posts on a Korean extremist online community and concluded that although they explicitly argue for equal distribution of responsibility between men and women, misogynistic men practically dehumanize/objectify women, value traditional gender roles of dominant men and obedient women, and, finally, exhibit their misogyny by glorifying subservient and docile women who fit such gender stereotypes. However, one limitation is that this theory cannot explain why anti-feminism and male-victim ideology became the mainstream beliefs among young Korean men. Despite the evidence that extreme anti-feminists have traumatic experiences or obsessions regarding social interactions with women (Chun and Jeong, 2019), Choi's (2018) narrative study revealed that although young Korean men have some expectations of traditional gender roles, they also perceive such roles as a burden. Whatever its motives were, they seem to have repulsion as well as approval for traditional gender roles. In this respect, perhaps the ambivalence of young Korean men is towards their internal minds rather than women. Choo's (2021) qualitative study implies that the conflict of identity derived from pressures of gender roles and competition appears in several different categories, not merely unilateral antagonism toward women or feminism. Although some extremists may substitute the frustration experienced by gender role pressure or failure in competitions or romantic relationships with women with overt or ambivalent misogyny, most young men do not seem to express it beyond internal conflict.

Evidence for transference of prejudice

Despite the paucity of evidence suggesting that young Korean men's prevailing anti-feminism and male-victim ideology are the ambivalent attitudes being emphasized in many sexism theories, evidencing that most young Korean men's attitudes are related to prejudice generalizable to various targets, as other modern racism/sexism is less challenging. If their antipathy toward feminism is only restricted to "excessively radical and female-supremacist ideologies" as they claim, their hostile attitudes will only be shown to feminists but not to other outgroups. In contrast,

according to the recent transference theory of prejudice, certain types of prejudice can transfer into other types of prejudice as well, due to similar psychological motivations for prejudices against different groups (Sanchez et al., 2017). That is, prejudice or its psychological underpinnings do not limit prejudice only to specific groups but lead people to regular negative perceptions or derogations toward multiple outgroups. Therefore, if their attitudes are not specific to feminists but general prejudice, they should have been transferred to other outgroups or minorities as well. In fact, phenomenological evidence regarding it is relatively obvious. For example, Lee Jun-Seok, who was elected as the leader of the now-ruling People Power Party in 2021, attracted attention again the following year by making vigorous statements against the subway protests of people with disabilities, promoting negative opinions about the protests among many young men (Lee and Kim, 2022). Indeed, today's Korean society is rampant with hostility between groups, enough to be called the "age of hatred," and many people agree that such hate speeches are dominant among young generations who are currently the most active in online communities and leading Internet cultures (Kim et al., 2020; The National Human Rights Commission, 2021).

Figure 1 visualizes the attitudes toward outgroups of young Korean men estimated through various sources, compared to older generations and young women. In general, young Korean men generally show more negative attitudes toward outgroups than women of the same age or older generations, despite the particularly conspicuous attitudes toward feminists. They are hostile toward various minorities/outgroups, especially compared to older generations, except for Japanese people, whose likability is associated with political conservatism (Lee, 2023c). Despite the most explicit and salient attitudes toward feminists or "women's power," they have prevalent hostility toward sundry outgroups. In particular, such attitudes cannot be fully explained only by the "consciousness of fairness" that they emphasized; observation of derogations toward the groups unrelated to salient competition/conflict or the groups based on innate characteristics suggests that their behavior should be interpreted from the perspective of more global and typical prejudice.

However, there is some room for objection here. Although young men's attitudes toward outgroups seem clearly negative compared to older generations even after removing outliers such as feminists and Japanese people, their attitudes might not seem significantly more negative than those of young women when removing the groups related to gender issues (e.g., feminists, other gender groups, the LGBTQ community). In this case, we may hypothesize that the overall negative attitudes toward outgroups came from the generation effect rather than gender differences, making the current issue of outgroup exclusiveness the problem of the "MZ Generation," including young women as well as young men (Cho, 2022). Expanding this viewpoint, there is strong outgroup prejudice pertaining to both sexes within the younger generations, and it would be sound to interpret this phenomenon as "gender conflict" rather than mere sexism or misogyny. This argument is ostensibly reasonable, but there are some points to clarify. First, regarding gender issues, young women are not as extreme as young men. In Chun and Jeong's (2019) survey introduced above, the proportion of young women classified as

FIGURE 1
Young Korean men's relative likability toward outgroups. **High-level empirical evidence, *low-level empirical evidence. This is just a rough estimation based on various types of information. Evidence of high-level credibility refers to mass empirical statistics or two or more consistent statistics for both dimensions. Low-level credibility refers to the evidence that it is difficult to reliably estimate both dimensions, based on only one unreliable/low-quality statistic, that the effects can only be estimated indirectly, or with multiple but inconsistent statistics. However, the higher level of evidence may not indicate that the locations on the coordinates are more accurate.

radical feminists was <1%, whereas the proportion of young men classified as extremist anti-feminists or "anti-femme warriors" was a whopping 26%. Kuk et al. (2022) reported that most young women tended to reject radical arguments related to gender issues more than older generations and even to a similar extent to young men. In contrast, one study analyzed comments from major online communities in Korea with an artificial-intelligence-based big data processing algorithm and concluded that misogynistic remarks had been increasing before the emergence of feminism as a major social issue, whose slopes were also not significantly different from recent anti-feminist remarks (Park, 2022). This also counterevidences the claim of most Korean anti-feminist men today that the emergence of radical feminism triggered their anti-feminist backlash: at least for gender issues, the alleged gender conflict should be pondered

from the perspective of structural misogyny or sexism, rather than the vehement combat between the two equally extreme groups.

Second, South Korea is predominantly exclusive to outgroups. Multiple statistics suggest that prejudice against several minority groups is far stronger in Korea compared to most other countries (Haerpfer et al., 2020; U.S. News, 2022). Considering that most Koreans are generally prejudiced against outgroups, even stronger negative attitudes than other Koreans will indicate their extreme levels of exclusiveness, which is especially ominous compared to foreign countries or global standards. As discussed, this phenomenon also affects young women. To illustrate, there was a strong movement against Muslim refugees recently, which has become a major social issue regarding multiculturalism in South Korea, and one of the groups leading this movement consisted of

radical feminist forces mainly composed of young women (Kim, 2018; Lee, 2020). The hostility of young women toward outgroups is as strong as that of young men if irrelevant to gender issues, suggesting that young women also have extreme levels of prejudice toward some outgroups. To summarize, prejudice or sexism against women as a gender issue does exist, prevailing especially among young men, indicating that there are some precursors of prejudice against various outgroups that influence not only young men but also young women. Such precursors may have been stronger for young men, which made them extremely exclusive regarding the most salient gender issues, but some would also have affected young women and made them exclusive toward other outgroups.

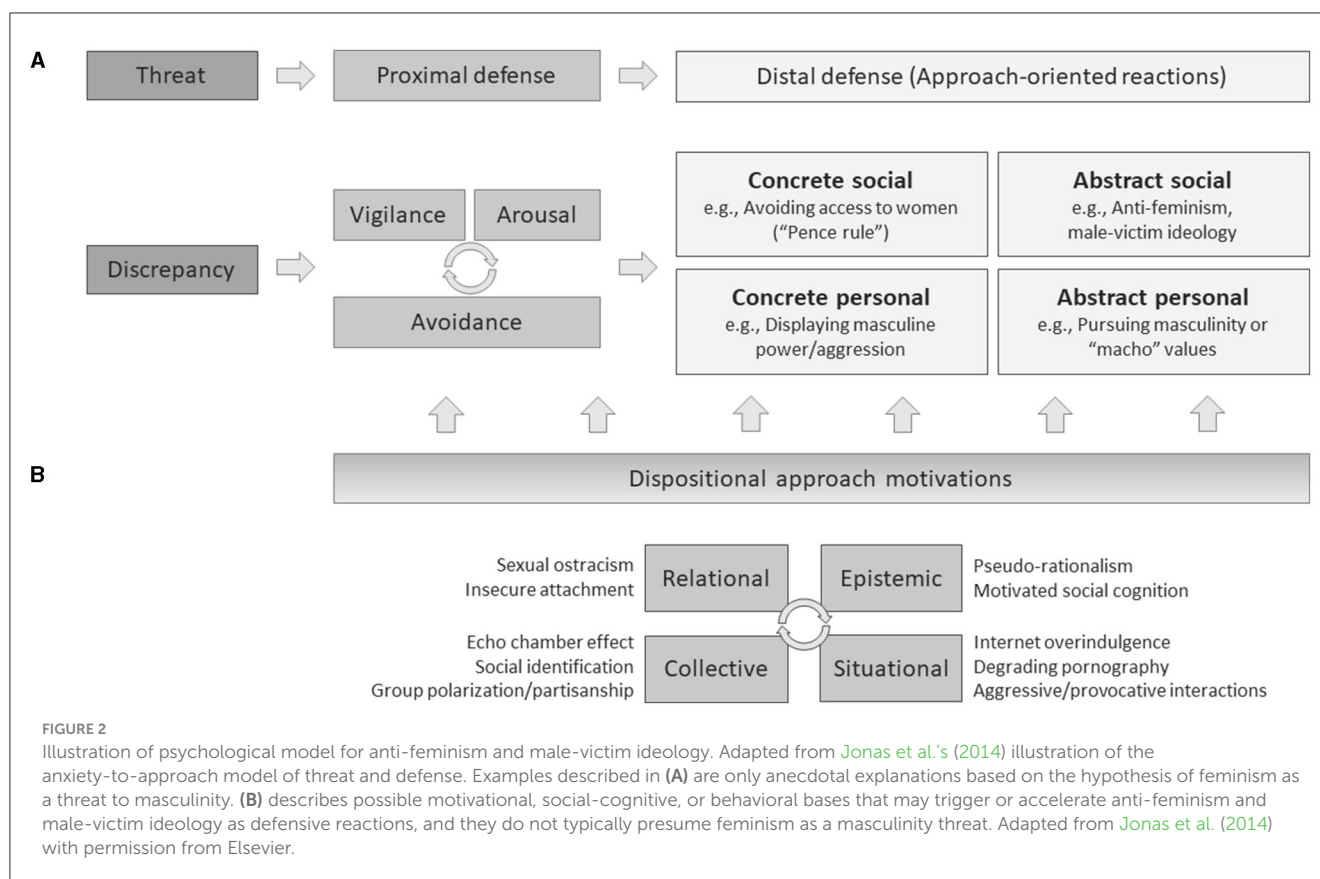# Potential psychological underpinnings of Korean anti-feminism and male-victim ideology

young Korean men's anti-feminism and male-victim ideology today are indistinguishable from the modern racism and sexism in Western societies that have been theorized for more than a half-century. Despite some uncertainties, the case in Korea also seems to have been derived from attitudes related to prejudice, which are identical to Western modern racism/sexism. As a social psychologist, my next goal will be to find the psychological origin of this case. Unfortunately, however, studies on the prejudice of today's young Korean men mostly remain at the level of phenomenological analyses, with few studies focusing on the psychological frameworks. Nevertheless, it is possible to contemplate the psychological backgrounds of many young Korean men's prejudices today depending on multimodal theories or evidence. Hence, here, we delve deeper into the etiology of young Korean men's anti-feminist and minority ideology through various psychological theories and discuss their plausibility based on empirical evidence.

To provide social psychological explanations for extremist ideologies, the easiest theory to present would be that of defensive reactions to threats. Humans are inherently designed to automatically produce defensive reactions when they perceive external (or sometimes internal) uncertainties that contradict their goals. In other words, salient circumstantial threats and the perceptions that such threats challenge their needs induce physical/emotional anxiety or cognitive dissonance, which motivates people to relieve it by changing their attitudes or behaviors (Nash et al., 2011; Reiss et al., 2021). Studies in this area have been conducted in diverse forms in psychological fields with varied nomenclature, but Jonas et al. (2014) integrated such theories with biological/neuroscientific explanations and managed to establish a general process model of threat and defense. According to them, perceptions of threat first create *proximal* defensive reactions, which are relatively immediate physical or emotional anxiety reactions composed of vigilance, arousal, avoidance, or the interactions between them. The dissonances created by proximal defense stimulate people to produce more *distal* defensive reactions: Such reactions signify more active or approach-oriented responses to dissolve the dissonances. The distal defense encompasses either individual (personal) or

interpersonal/group (social) levels and either pursues tangible incentives (concrete) or intangible changes in attitudes or ideologies (abstract). Finally, the entire process of proximal and distal defense reactions is moderated by the individuals' underlying dispositional motivations.

According to this theory, Korean anti-feminism and male-victim ideology are only one form of reaction to a certain threat (i.e., abstract-social). The presence of threat (and the perception of such threat) can engender various types of defensive reactions, which applies to reactions to the threat of feminism as well. In fact, the theory that explains anti-feminist backlash as a reaction to the threat of feminism to masculinity has widely been accepted by feminist scholars as well as psychologists (Faludi, 2006). Figure 2A describes examples of defensive reactions to the feminism threat, positing this theory. However, even positing this theory, at least three points should be noted. First, not all people or men regard feminism as a threat to their masculinity. This applies to anti-feminist men as well as pro-feminist men; as discussed above, young Korean men tend not to strongly pursue conventional masculine roles or values, at least explicitly, which may negate the theory of threat to masculinity. The feminist threat may not make all people defensive (at least in terms of masculinity), and there should be some other origins beyond the threat to masculinity. Second, thinking conversely, threats irrelevant to feminism or gender issues may also be the origin of anti-feminism. In practice, ingroup favoritism and exclusiveness toward outgroups are typical reactions to general threats, such as mortality salience (Li et al., 2015). Moreover, considering the social-cognitive mechanism of attitude change, the source of the threat and the target of its reactions may not always be parallel (see Gawronski and Bodenhausen, 2006). In other words, anything known as difficulties of today's young generations in Korea, e.g., frustration, relative deprivation, or the sense of alienation caused by the hostile social structures (Yeom and Nam, 2021), could be a threat that becomes the origin of outgroup prejudice or anti-feminism. This seems somehow similar to the "unfairness" discourse mentioned above. However, in general, the threat-defense theory does not take into account whether the threat perceptions and the sense of deprivation or alienation here are genuine or distorted consciousness. In other words, regardless of whether society really is hostile toward them or whether it is merely a false consciousness, the perception that the threat is hostile (and therefore, that it contradicts their goals) can by itself trigger threat processing; therefore, this is wholly a matter of internal coping.

Finally, and most importantly, even perceiving feminism (or something spuriously admissible as feminist things) as a threat does not seem to always result in anti-feminist defensive reactions. In fact, individuals have various unique modalities in coping with threats, encompassing every domain of human behavior as well as social/collective ideologies. Furthermore, even assuming that such reactions are predictable, at least in the realm of social attitudes, they seem to move in a way to reinforce existing beliefs rather than to lead people in certain directions. Although some studies conclude that threat induces people to act in a way to maintain the *status quo* (Jost et al., 2003; Nail et al., 2009), multiple studies suggest that priming mortality salience can make liberals more liberal as well as make conservatives more conservative (Greenberg

FIGURE 2
Illustration of psychological model for anti-feminism and male-victim ideology. Adapted from Jonas et al.'s (2014) illustration of the anxiety-to-approach model of threat and defense. Examples described in **(A)** are only anecdotal explanations based on the hypothesis of feminism as a threat to masculinity. **(B)** describes possible motivational, social-cognitive, or behavioral bases that may trigger or accelerate anti-feminism and male-victim ideology as defensive reactions, and they do not typically presume feminism as a masculinity threat. Adapted from Jonas et al. (2014) with permission from Elsevier.

et al., 1995; Weise et al., 2008). Considering that gender issues are germane to political orientations in Korea as well, such a mechanism of threat and defense may also explain the way in which feminism becomes more radical; this theory is basically for the general behavior of laypeople, which may not be very useful to account for certain groups or inclinations of behaviors only. Although it is true that the overall extremity of today's Korean society is also influential, analyzing these phenomena only by this framework may ignore a myriad of core properties of these extremely conspicuous attitudes. Specifically, although blatant misogyny had increased among Korean online communities even before the emergence of feminism as a major issue, this approach can only explain the reactions after feminism became salient. Indeed, there should be complex mechanisms incomprehensible with a simple diagram from the feminist threat to defensive reactions. Moreover, some or most of the antecedents should not directly relate to feminism/feminist threat or were developed before the emergence of feminism, although they may have facilitated the severity of the backlash among young Korean men after the emergence.

Consequently, despite the robust base of this model, only naively applying the threat-defense model to Korean anti-feminism and male-victim ideology lacks not only theoretical grounds but also empirical evidence. Therefore, here, we focus on the factors that uniquely explain their behavior while maintaining the basic theoretical framework of threat and defense. Such factors stand for diverse underpinnings concerned with every domain of defensive reactions to threat, suggesting the attributes that Jonas et al.

(2014) named "dispositional approach motivations." However, the attributes covered here are not limited to dispositional factors but encompass various factors in all areas of life, including social relations, epistemic motives, circumstantial influences, or collective identities (see Figure 2B). Nevertheless, this approach also postulates the predisposed uniqueness of Korean anti-feminists, which are involved in their regular social cognition, appraisal, and attitude formation (Kruglanski, 1990), and I hypothesize that such systematic inclinations will uniquely explain the behavioral patterns of Korean anti-feminist young men as well.

Insecure attachment

Attachment is one of the factors that Jonas et al. (2014) emphasized as an underlying moderator of defensive reactions to threat. According to the attachment theory, the parental bond experienced in childhood affects almost every relationship after people grow up: it changes personal development, creates fundamental schemas for social relationships, and exerts the most decisive influences on the entire stages of one's life (Bowlby, 2008). It applies to defensive reactions as well. Nash et al. (2014) argued that those who are securely attached have temperaments to prevent excessive anxiety activation in their neural networks even in threatening situations, which prevents immoderate or maladaptive defensive reactions. In contrast, those with insecure attachment cannot control their anxiety well and, therefore, are vulnerable to dysfunctional behaviors in intimate relationships,

including dating or romantic relationships. In fact, attachment insecurity is associated with the tendency of casual sex or negative affect in sexual relationships (Gentzler and Kerns, 2004). Insecure attachment also predicts violence or abuse in partner relationships (Dutton et al., 1994; Oka et al., 2014).

However, more important is that attachment affects group-level interactions as well, not only interpersonal relationships. Multiple studies suggest that attachment can explain social extremity or prejudice as well as individual malfunctioning (Carnelley and Boag, 2019). Mikulincer (1997) reported that adults' insecure attachment is associated with cognitive closure or stereotypes in judgment and decision-making processes. Experimental research also supports this: Saleem et al. (2015) demonstrated that priming secure attachment can reduce negative views toward outgroups. Weise et al. (2008) proposed that secure attachment prevents political polarization when threat is salient, whereas Boag and Carnelley (2016) suggested that insecure attachment leads to prejudice by decreasing empathy. Moreover, attachment style seems especially relevant to sexism: the influence of attachment on romantic relationships may also be valid to group-level interactions or attitudes regarding sexual themes. Fisher and Hammond's (2019) meta-analysis presented that attachment anxiety and avoidance are related to both benevolent and hostile sexism, and such relationships were stronger among men compared to women. Hart et al. (2012) also reported that attachment insecurity may affect benevolent and hostile sexism, mediated by romanticism. However, a caveat in this study is that the mediating effect of romanticism was usually concerned with benevolent sexism, whereas hostile sexism was more affected by factors related to prejudice such as social dominance orientation. In other words, the relationship between attachment insecurity and antagonistic sexism might be more associated with social values than romantic relationships; the group-level effects of insecure attachment might be in different domains from the individual- or relational-level effects.

Sexual ostracism

However, although the connections between attachment and sexism are not well-explained in romantic relationships, it does not, by itself, negate the association between romantic experiences and sexism. Arendt (1973) argued that loneliness and social isolation may be the origin of authoritarianism and totalitarianism. Indeed, the need for belongingness is one of the most fundamental human needs, and the condition of loneliness is considered a serious threat to survival, motivating humans to promptly address it (Cacioppo et al., 2014). Multiple studies suggest that loneliness is likely to result in aggression toward others or outgroups (Buelga et al., 2008; Odaci and Çelik, 2013) and may cause neutral behaviors to be interpreted as negative or hostile, which can increase not only individual anxiety but also social hostility (Chen et al., 2020; Trotta et al., 2021). There is some evidence that the anti-feminism of young Korean men might be associated with loneliness or sexual ostracism. Choo (2021) classified two types of Korean men with highly anti-feminist attitudes, one of which had generally fewer friends than other types, and the other used to socialize mostly with boys and had fewer female friends than other types. Although these differences were not decisive,

it was one of the strongest predictors of the differences between the classified types. However, in general, evidence suggesting the causal relationship between loneliness and prejudice is lacking. Floyd (2017) studied the relationships between loneliness and xenophobia/right-wing authoritarianism and found significant but trivial correlations. Nevertheless, considering Cacioppo et al.'s (2014) argument that loneliness is a physiological and evolutionary mechanism for human survival and reproduction, it is a possible conjecture that repetitive experiences of rejection in dating and concomitant senses of frustration/alienation may lead to hostile and aggressive behaviors toward the opposite sex. In reality, the extreme online ideology or culture of men alienated from dating ("involuntary celibates" or incels) is a social issue even outside of Korea, and academic research regarding them is also increasing in diverse fields (O'Malley et al., 2022; Sparks et al., 2022). Chun and Jeong (2019) also observed some distorted perceptions regarding romantic relationships among young men with extreme anti-feminist and male-victim ideology.

Nevertheless, this does not necessarily indicate that Korean anti-feminism and male-victim ideology have been steered by "naturally selected" young men. Outside of Korea, there is a study that incel online activity is higher in regions where the proportions of male populations are higher than females (Brooks et al., 2022). However, there is insufficient evidence that the lack of physical experience with women increases men's anti-women bias. For example, de Lemus et al. (2010) demonstrated that the level of adolescents' romantic relationship experiences was positively associated with sexist beliefs, indicating that their desire to seek romantic partners increased hostile attitudes toward the opposite sex. Fisher and Hammond's (2019) meta-analysis also showed that (i) the level of hostile sexism was not higher for men who were not in romantic relationships compared to men in committed relationships and (ii) the level of benevolent sexism was rather higher for men in romantic relationships. Although this is only a descriptive relationship without demographic control (e.g., age), they also argued that the association between avoidant attachment and hostile sexism only appeared among men in romantic relationships. Even if hostile attitudes toward women did indeed stem from sexual ostracism, they do not seem to stem from the absence of dating experiences *per se*. However, the accumulated experiences of failure and frustration in relationships with the opposite sex may have strengthened their sexist perceptions, and further studies are needed to identify this, especially among Koreans.

The Internet

Today, the Internet is a medium of various extreme and discriminatory ideologies, not limited to anti-feminism and male-victim ideology in Korea. Violent claims and hate speech in online spaces and social media, especially among adolescents and young adults, are observed not only in Korea but worldwide (Hawdon et al., 2015; Costello et al., 2020). Phenomenologically, it seems obvious that the Internet has become a channel for extremism (Gaudette et al., 2020), but there are various hypotheses as to its reasons. One of which is linked to the loneliness theory above: simply, those who feel ostracized or depressed are vulnerable

to problematic Internet use (Caplan, 2003). Indeed, one study reported that problematic Internet use is associated with low empathy (Melchers et al., 2015). However, in general, Internet usage *per se* does not seem to be inducing social dysfunctions (Shklovski et al., 2006). The prevalence of extremism on the Internet is likely to be the result of complex interactions between the uniqueness of online circumstances and the individual/collective characteristics vulnerable to extremism, especially when reacting to various social threats, rather than the mere environmental effects of the Internet itself (Vergani et al., 2020). Therefore, the relationship between the Internet and extremism should be comprehensively explored from many different perspectives, covering almost all areas of social psychology, including social learning and communications, maladaptive behaviors, and group interactions. The current study covered a comprehensive review of these factors. Consistent with the "prejudice of young generations" theory mentioned above, most of the factors presented here seem more vulnerable to young generations, and some are even more vulnerable to young men. This may explain why most young men in Korea have strong sexist prejudices and young women also have non-gender-related prejudices.

Overindulgence

Researchers have argued that excessive or pathological usage of the Internet or online video games may increase maladaptive behaviors. They argue that many young people today are overly using or are "addicted" to the Internet or online games, and violent online content may increase their aggressive behaviors. Still, there is no consensus in academia as to whether pathological Internet use or gaming adversely affects mental health. However, to conclude, the argument that pathological Internet use or gaming is innocuous is a minority opinion in academia. Ferguson and Colwell (2020) reported that 60.8% of scholars believe pathological gaming can lead to mental health problems, whereas only 30.4% were skeptical about that. Since Anderson et al. (2010) released a famous meta-analytic review suggesting that violent video games increase aggression, some researchers have criticized this research by arguing that the effect sizes were overstated (e.g., Ferguson, 2015; Hilgard et al., 2017), but this association has generally been reproduced until recently, including in longitudinal studies (Mathur and VanderWeele, 2019; Burkhardt and Lenhard, 2021). In contrast, the skeptics have mainly focused on peripheral criticisms such as methodological issues (Carnagey and Anderson, 2004), individual bias of the researchers of pathological gaming (Ferguson and Colwell, 2017), emphasis on social/environmental contexts of pathological gamers (Jeong et al., 2019), and the arguments that its severity is "exaggerated" (Ferguson et al., 2011; Ferguson, 2015). Griffiths et al. (2017) argued that many criticisms of pathological gaming do not properly distinguish the difference between gaming as healthy leisure and problematic gaming activities.

Indeed, skeptics also cannot deny that the phenomenon of pathological Internet use or gaming is real, even if the negative effects of the Internet or gaming itself are not particularly significant. Griffiths et al.'s (2012) review concluded that the prevalence of medically diagnosable video game addiction ranges

from 1 to 20–30% by country. In particular, in this review, the rates of prevalence were generally higher for men compared to women, indicating that young men are more vulnerable to the adverse effects of gaming, including aggression or hostile behaviors. In addition to phenomenological and empirical evidence, theoretical or neuroscientific evidence has also been sufficiently accumulated to interpret the negative impacts of the Internet/gaming or their overuse. This theory and evidence encompass traditional vicarious learning theory (Bandura, 1978; Allan, 2017), aggression models (Bushman and Anderson, 2002; Werner et al., 2010), and neurological models regarding the relationship between behavioral addiction and aggressive behaviors (Hahn and Kim, 2014). In contrast, the hypothesis or popular awareness that violent video games allow people to relieve or vent their stress or anger and reduce future aggressive behaviors in the real world ("catharsis theory") is largely untrue based on recent studies (Bushman, 2002; Schaefer and Mattei, 2005).

However, the studies mentioned so far may not confirm the negative effects of pathological Internet use or gaming. Briefly speaking, they can only evidence that violent video games may increase people's aggression, probably to a small extent, and the pathological use of the Internet/video games may influence some people's mental health, which is still controversial. Moreover, positing the negative effects of the Internet can neither justify the registration of gaming disorder to the 11th revision of the International Classification of Diseases (ICD-11) of the World Health Organization nor show that pathological gaming can lead to anti-feminism or male-victim ideology among young men in South Korea. Further evidence is needed to clarify the negative impact of Internet overuse or pathological gaming, either individually or socially/collectively.

Pornography consumption

Unlike the controversial issue of Internet overindulgence, there is a seemingly more destructive and sexually relevant problem on the Internet: porn consumption. Today, more than half of men and 20%−40% of women are estimated to be consuming pornography on the Internet (Zattoni et al., 2021). Pornography may have a bigger impact than other content on the Internet or video games, especially related to gender issues: it ruins relationships with romantic partners (Bridges et al., 2003), is associated with male impulsivity (Antons and Brand, 2018), and when overused, causes frontal lobe dysfunctions, which may lead to pathological behaviors such as violence against women (Hilton and Watts, 2011). young Korean men are no exception to the problem of Internet pornography consumption. According to recent statistics, the exposure to Internet pornography in Korea was highest among young men, who also had the highest tendency to believe that watching pornography is not a moral problem (Park, 2019). Seo (2020) argued that Korean adolescents are pervasively exposed to pornography on the Internet, whether voluntarily or not, putting them at risk of developing problematic behaviors related to sexual violence.

In general, however, there is limited evidence of the negative impacts of pornography, and evidence of the effects of pornography

on sexist prejudice is even more limited. Criticisms of the studies on the individual/social effects of pornography consist of their methodological issues, ambiguity in discriminating it from sex addiction, and the effects or outcomes considered non-pathological (Ley et al., 2014; Duffy et al., 2016). For these reasons, some researchers argue that pornography is in fact benign (Ley et al., 2014). Seto et al. (2001) argued that the effect of pornography on sexual aggression is significant only for already predisposed men, suggesting that pornography consumption may only be a factor that moderates sexual aggression or even a mere phenomenological outcome, rather than the cause of sexual aggression or violence. In other words, to link porn consumption with young Korean men's anti-feminism, it seems necessary to focus on the specific forms or cultures in which they consume pornography rather than the effect of pornography *per se*. Indeed, as one of the typical male-predominant cultures, pornography often contains content that is sexually aggressive toward women or exaggerated masculine identities (Fritz et al., 2020; de Heer et al., 2021). That is, at least some pornography is, by itself, an expression of sexist views or prejudice, degrading women as sexual objects. The sociocultural contexts regarding the sexual objectification of women in pornography may relate to degrading attitudes toward real women among pornography users (Attwood, 2004; Willis et al., 2022). Skorska et al. (2018) found that pornography can increase men's sexual objectification of women, sexist beliefs, and discriminatory attitudes toward women; these links were mostly found with sexually degrading pornography (i.e., pornography characterized by dehumanization/debasing of women) rather than in general pornography. Consistent results have been observed among Koreans as well. Willis et al. (2022) reported a strong association between pornography use and sexual objectification among Koreans. Also, interestingly, the interaction effect of gender and pornography use on sexual objectification was observed only among Koreans and not among other nationalities, suggesting that Korean men can be especially vulnerable to sexual objectification when watching pornography.

Provocative culture

The Internet also has its uniqueness in terms of interactions and social activities, as well as the individual-level influences discussed above. The uniqueness of Internet cultures can either be the fundamental structure of online spaces (e.g., the fragmentary nature of personal relationships) or the communicative preferences that have been made by previous and current Internet users. Firth et al. (2019) discussed that the Internet causes an increase in people's attention and memory burden due to the flood of information they are exposed to, pressuring people into automatic and immediate judgment and decision-making. Furthermore, they argued that the online networks' immediate feedback on successes and failures in social relationships affects the users' self-esteem, causing people to devote their online activities mostly to managing social impressions. To clarify, the Internet makes people "unthink" and forces judgment based on stereotypes and prejudice, and the existence of "likes" and social comparisons impairs diversity in social relationships but makes online relationships like a unidimensional and vertical hierarchy. In particular, Firth et al.

(2019) argued that the social-cognitive adverse effects of the Internet are greater in young people: experiences of immediate feedback on the self-esteem of adolescents not only lead to mental health problems such as a sense of isolation, depression, and anxiety but also aberrant behaviors such as cyberbullying. Another issue is that the Internet overrepresents some extreme opinions or ideologies. Yun et al. (2019) analyzed the editing history of Wikimedia and concluded that the information or opinions produced on the Internet are made only by a small proportion of people, arguing that the oligarchy of information makes the online environments misrepresent extreme ideologies rather than welcome diverse viewpoints. Due to these phenomena, the Internet is flooded with people willing to beat others, provocateurs, and those who want to stand their ground, pushing away tolerance, empathy, diversity, or deliberation. Furthermore, the structure of the Internet rewards such people rather than punishing them, creating online environments full of aggressive and extreme claims (Koehler, 2014; Bryant, 2020).

Anonymity and deindividuation

Anonymity is one of the essential parts of explaining the uniqueness of online communications. Because anonymity and its accompanying deindividuation decentralize individual responsibilities and free people from the social consequences of their behavior, individuals under anonymity tend to easily become less self-controlled, sometimes leading to radicalized, impulsive, or aberrant behaviors (Zimbardo, 1969). This can also explain why hate speeches are prevalent in online spaces. As anonymity and deindividuation grant exemptions from the responsibility for violent languages, online spaces are often used as the pathway for expressing discomfort/furtive desire and aggression (Lowry et al., 2016; Zimmerman and Ybarra, 2016). The effect of anonymity and deindividuation on bad comments on the Internet has recently been illustrated in Korea. Since Korea's largest web portal, Naver, has recently decided to open all commenters' comment history to the public, the average number of comments per day has decreased by 38%, and notably, malicious comments have dropped by 70% (Jeong, 2020). However, the caveat is that anonymity alone may not always lead to extremity. Rösner and Krämer (2016) suggested that the negative effects of anonymity only apply when the desire for expression under anonymity is justified in the collective atmospheres that allow for each other's aberrant behaviors. Similar to Internet overuse and pornography consumption, as described above, anonymity should also be seen as a moderator or risk factor rather than a direct cause of extremism. However, after group homogenization or polarization has progressed to a certain extent, anonymity can become a channel through which people no longer hesitate to express extreme or destructive claims, which will be explained below.

Verbal aggression

The prevailing aggressive culture on the Internet may be either the product of dispositional attributes of Internet users or the circumstantial effects derived from the violent content on the Internet, as discussed above. In any event, extreme or prejudiced arguments on the Internet are, by themselves, germane to verbal

aggression. Although not all types of aggression are related to prejudice, online hate speech or offensive language is the real issue, being an urgent and incessant social problem in a wide range of fields (Ștefăniă and Buf, 2021). However, although trait aggression or aggressive culture on the Internet is supposed to be a risk factor for online sexist speech or misogyny, evidencing these relationships has clear limitations with the current knowledge. First of all, quantifying the "aggressive online culture" is naturally bound to be subjective, mostly due to the vagueness in the determination of extreme or hate speech (Pohjonen and Udupa, 2017). In other words, it is hard to objectively identify whether the anti-feminist male communities in Korea are more aggressive than other communities. Nevertheless, it is possible to investigate whether men, especially young men, generally have more verbal aggression than women. Because aggression is linked to the activity of androgens, boys' aggression is generally more prominent than girls', especially during their childhood development (Ramirez, 2003). However, it is unclear whether this can be extended to verbal aggression on the Internet. Considering that men's aggression is mostly expressed in a physical form and women's aggression in a relational form (Björkqvist, 2018), it is difficult to predict how aggression will be manifested in online interactions. Wright (2020) reported that boys and girls with high masculine traits tend to express verbal aggression in online games, whereas boys and girls with high feminine traits express relational aggression in social media, suggesting that the differences in the dispositional types of aggression also apply to online spaces. Bettencourt and Miller's (1996) meta-analysis reported that gender differences in aggression decline under provocative situations; in online spaces with high provocations, women can also be as aggressive as men, making their circumstantial influences more prominent than dispositions.

However, the association between men's aggression and sexual behaviors is notable here. As men's aggression is biologically intertwined with reproductive behaviors (Cunningham et al., 2012), the increased aggression *per se* may indicate the increased risk of aggressive or hostile sexual behaviors. Such behaviors are manifested as the consumption of aggressive pornography as discussed above (Bridges et al., 2010; Fritz et al., 2020), and presumably, sexually offensive or hostile speech toward women on the Internet as well (Döring and Mohseni, 2019). However, the straight associations between the fundamental predispositions of males (e.g., hormone activities) and aggression/sexual behaviors might be weak or even trivial. Although Gallup et al. (2007) reported that men's handgrip strength relates to aggression and sexual behaviors, O'Connor et al.'s (2004) experimental study showed that testosterone injections among men do not directly increase aggressive or sexual behaviors, despite some increases in anger and hostility. However, it seems relatively more obvious that excessive masculinity as a personal attitude or a cultural norm can increase sexual aggression (Murnen et al., 2002). Locke and Mahalik (2005) demonstrated that male university students' belief in masculinity norms is associated with rape myth acceptance and sexual aggression. Such excessive or improper beliefs in masculinity are considered important components in the theories of aggressive sexual behaviors, including the attitudes of hostility toward women (Murnen et al., 2002; Malamuth and Hald, 2017). Nevertheless, the causation among aggressive predispositions, masculinity norms,

and actual aggressive behaviors against women is still unclear, requiring further investigations in this field.

Pseudo-rationalism

As discussed above, the uniqueness of Internet environments has made them full of people pursuing superiority over others. When such an attribute applies to the domain of judgment and decision-making, it may lead to the virtue of logically winning over others in online spaces. Moreover, as online spaces require rapid judgment rather than deliberation, such competition is likely to result in the "*I am right, you are wrong*" mindset, rather than true logical debates. These attitudes, now popular in most online communities, have the following beliefs in common: (i) reason or logic is superior to sensibility or empathy, (ii) their judgments are rational decisions based on logic, and (iii) the judgments of others that oppose their own are usually based on sentiments and are therefore irrational. The quote by Shapiro (2019), a famous right-wing commentator, is illustrative: his Twitter profile is famous with a pinned message of "*Facts don't care about your feelings.*" This is also common among young Korean anti-feminist men, which can be represented by Lee Jun-Seok's recent accusatory remark about subway protests by people with disabilities (as mentioned above) that they are "appealing to emotion, not reason" (Kang, 2022b). The alleged "rationalism" they propose is, in fact, diametrically opposed to true rationalism. Popper (1945) said that true rationalism understands the limitations of human knowledge and intelligence, admits that people can make mistakes in judgment and decision-making, recognizes how much people are indebted to others for knowledge, and therefore, does not hold impossible or unrealistic expectations from reason. In contrast, the "pseudo-rationalists" immodestly believe their intellectual superiority, pursue certain and immaculate truth, and eventually adopt rigid and authoritarian beliefs.

From a cognitive view, their attitudes can be explained by two concepts. The first is the Dunning-Kruger effect, i.e., the *inverse* correlation between one's competence and their confidence in their own competence (Dunning, 2011; Mahmood, 2016). This exhibits the paradoxical nature of metacognition that ignorant people are also more unaware of their own ignorance. Despite some criticisms regarding the reality of this phenomenon (e.g., Gignac and Zajenkowski, 2020), recent research shows that the Dunning-Kruger effect is also applicable to rigidity/dogmatism, prejudice, and extremism (Anson, 2018). West and Eaton (2019) argued that the Dunning-Kruger effect is also valid for the self-awareness of their own racism and sexism, demonstrating that those with stronger racist and sexist views also tend to disavow their prejudice more. Muller et al.'s (2021) neuroscientific study concluded that those who overestimate their own task performances tend to judge based on the process related to familiarity rather than the recollection-based process. This may be compelling evidence linking this effect to prejudice, considering the association between prejudice and the *status quo* bias (Jost, 2019). The second is the bias blind spot, the tendency to believe that cognitive bias pertains to others but not to themselves (Pronin et al., 2002). This phenomenon explains why people with bias also tend to derogate

others more. Considering that this phenomenon refers to the denial of one's own bias and the exaggeration of others' bias, this may also be construed as a cognitive reinterpretation of projection, which was a famous psychodynamic mechanism but is now also empirically evident (Baumeister et al., 1998). Wang and Jeon (2020) demonstrated that bias blind spot also exists in various social stigmas and suggested that recognizing their own social bias can reduce people's prejudice.

Theoretically, however, the cognitive tendencies above are merely considered the measurable descendants of the motives related to prejudice rather than the origin of prejudice. According to Ross and Ward (1996), people tend to believe that they see the world objectively, which contributes to various social conflicts and misunderstandings. People think what they see is an objective fact, which must be seen by others as well (Ross et al., 1977), and when these beliefs are broken (i.e., when encountering people who think differently from themselves), they tend to believe that such people are senseless or biased. Therefore, the phenomenon of pseudo-rationality is based on people's fundamental self-centered bias, which is an elemental social-cognitive mechanism that regulates attitude formations and individual/social behaviors. In other words, this is an active motivation to confirm their beliefs, pursue certainty, and eventually perpetuate their ignorance (see Jost et al., 2003). Nevertheless, despite some theoretical background related to the metacognitive basis of pseudo-rationalism, empirical research regarding the effects of the "illusion of rationality" is lacking. Jung (2021) recently developed a scale to measure pseudo-rationalism and presented some correlations of this scale with dogmatism, perspective-taking, and intellectual humility.

Group polarization/extremity

The development process of polarized identities as a consequence of group interactions can explain most extremist ideologies as well as anti-feminism, including those cultivated in online spaces (Vergani et al., 2020). This can be seen to be the final piece of the puzzle in manifesting extreme ideologies as a group identity, interacting with many individual or situational factors introduced above. Gaudette et al.'s (2020) qualitative study interviewed ten former online extremists and showed that the Internet is involved in the entire process of formation and development of extremism. Their narratives share some common stages: (i) being exposed to extremist ideologies through the Internet, (ii) starting interactions with extremists online, (iii) gradually beginning to sympathize with them, (iv) soothing loneliness and feeling a sense of belonging with them, (v) immersing themselves in online groups, and (vi) ultimately becoming self-sufficient for violent behaviors. Mostly, they were psychologically vulnerable to extremist ideologies, and the provocative claims online were enough to captivate their vulnerable hearts. Looking at these features, the theories of attachment insecurity or ostracism seem the most predominant for online extremist ideologies. However, it is notable that many of them were not new to extremist claims online, nor were they captivated by such claims in the first place. Their sympathy for extremist arguments was influenced not only by their own

psychological vulnerability but also by the unique features of online spaces, as listed above, which led to extremist arguments being repeatedly reproduced and even seeming attractive. Although extremist claims might start as small voices with few sympathizers, continued exposure to these claims can gradually make people accept them, even including those who were initially opposed to such claims, due to the mere exposure effect (Zajonc, 1968; Bornstein and Craver-Lemley, 2017) or the sleeper effect (Lariscy and Tinkham, 1999; Kumkale and Albarracín, 2004). Finally, the agreement exponentially accelerates to become a huge social cascade (Sunstein, 2002; Wang et al., 2018).

When a particular group starts to conform to a particularly lean argument, people in the group start to form a homogenous group identity. Individually, they ignore the empirical evidence contrary to their thoughts (Brandt et al., 2015) and selectively accept weak supporting evidence or personal anecdotes, including disinformation (Nickerson, 1998; Ray and George, 2019). Collectively, the group influences its members to maintain a single thought, forming group norms and adjusting their attitudes according to the norms (Marques et al., 1998; Sunstein, 2002). Such a phenomenon becomes especially prominent when the members confront or perceive the opponent groups with contrasting ideologies to themselves, which bolsters their group identity (Hogg et al., 1990). Indeed, polarization is more likely to occur in the presence of opposing groups, such as anti-feminist backlash. Group interactions tend to be especially radical and hostile in online spaces. Yardi and Boyd (2010) argued that in social media, people reinforce the group identity when they see the arguments supportive of their groups, but when they encounter opposing arguments, they rather strengthen their exclusive attitudes to such arguments. The nature of the online space makes it easier for people to selectively accept specific information and act only in the direction of reinforcing their existing attitudes (Bessi et al., 2016). In addition to the users' opportunity to choose the information themselves, Internet service providers also play a role in reinforcing the users' existing positions by offering personalized content (Pariser, 2011; Bryant, 2020). Over time, they self-amplify their assertions within the exclusive room of homogeneous opinions or ideologies ("echo chambers": O'Hara and Stevens, 2015), letting those with minority opinions exit the group (Sunstein, 2002). Finally, they evolve into an extremist group with a convergent polarized ideology (Atari et al., 2022).

It seems relatively obvious that Korean anti-feminism and male-victim ideology have passed through these processes of group polarization, developing their claims into more exclusive and homogeneous ones. Choo (2021) identified a strong association between anti-feminism and the usage of exclusive male communities among young Korean men. However, important to note is that such a process can apply to every intergroup dynamic and conflict, including online communities of young women. For example, Song and Kang (2018) concluded that exclusive attitudes were also observed in a radical online community of young women in Korea. Although some scholars argue that extreme ideologies or themes are more predominant in online anti-feminism (e.g., Rothermel, 2020), a study reported that polarized attitudes were observed among online feminist groups as well (Peña-Fernández et al., 2023), indicating that everybody

is vulnerable to group polarization. It seems that the group interaction process only determines the severity of extremism, not its direction. Nevertheless, it can still explicate why young Korean men have been seen to have astonishingly extreme and homogeneous identities regarding gender issues. For young generations today, the Internet serves as a kind of huge peer group (Lehdonvirta and Räsänen, 2011). Young Korean men have been exposed to antagonistic claims about feminism on the Internet since they were very young (Jeong, 2013; Lee, 2013) and naturally learned extreme anti-feminist claims from their online peers, easily sympathizing with them (Kim and Lee, 2017). Therefore, in addition to their strong congruence and group identity, they tend to rely more on their online peers for judgment and decision-making, which is also an important component of group polarization (Boyd, 2023).

Conclusion

Anti-feminism and male-victim ideology among South young Korean men have emerged relatively recently, despite their strong ramifications. Despite the lack of previous academic or psychological studies regarding this issue, psychological studies regarding modern racism and sexism outside Korea were discussed, which show very similar ideological features to the current anti-feminism in Korea. Through various types of data, it was evidenced that like other modern prejudices, Korean anti-feminism can also be considered general prejudice, rather than a unique phenomenon that applies only to specific concerns. Going further, multiple candidates for the antecedents of Korean anti-feminism that may trigger or accelerate hostility toward women or feminists were discussed, roughly based on the threat-defense theory, with evidence that supports or negates the plausibility of such candidates. This study is considered the deepest exploration of the psychological origins of Korean anti-feminism and male-victim ideology. This study adopted a multi-perspective approach regarding the complex social issue, utilizing various theories in psychological fields. Finally, I tried to reach a holistic conclusion, which is as cogent as possible given our current knowledge. I believe this interpretation and its all-inclusive approach can also provide insights into other prejudices or extremism discovered in various cultures and societies. This study shows that the theories regarding modern prejudice, mostly studied in the United States or Western societies, can also apply to Korean society, and such ideologies have some common psychological underpinnings irrespective of cultural backgrounds. Therefore, in the opposite direction, it would also be possible to apply the characteristics of online anti-feminism in Korea to sexist prejudice, online extremism, or general prejudice in other countries.

However, due to the scarcity of academic research and empirical evidence, this study could not reveal most of the mechanisms that form the specific ideological features, such as victim mentality. Although victim ideology has been observed in Western cultures as well, further studies are needed to identify its psychological antecedents. Furthermore, in this study, explanations of the Korean states mostly depended on unpublished reports: Although the poll results or descriptive statistics are not considered unreliable, some theories seem to need future academic validations. In addition,

this study has developed its logic mainly through comparisons using generation and age, following the generational discourse adopted by Chun and Jeong (2019). Many parts of this study overgeneralized the uniqueness of "young men" themselves rather than anti-feminists only, mainly due to the paucity of evidence. Future studies must delve deeper into the individual characteristics of anti-feminism and male-victim ideology, as prejudice is not the exclusive property of a particular group or generation.

Moreover, the theories presented here are merely at the hypothetical stage, requiring verification through future studies. As the factors proposed in this study cover massive and extensive areas in social psychology, it seems that further studies should verify such potential factors individually rather than through all-inclusive research. The possible methodology includes correlational studies with self-report measures, experimental and neuroscientific studies, and analyses of social media to identify the features of interactions made in online spaces with quantitative modeling. Further studies should also consider the realm of Korean anti-feminism that the model proposed in this study does not explain. As this study has focused mostly on individual cognition and motivations, the sociocultural contexts that may influence modern sexism and extremism may have been ignored. Such contexts include social norms such as patriarchal values; although the effect of benevolent sexism is not observed among young Korean men in current studies, the potential influences of sexist social norms on the process of formulating their ideologies cannot be overlooked. Further studies could reveal the relationships between modern sexual prejudice in Korea or other countries and the cultural norms underlying it, such as patriarchal values or subtle gender stereotypes.

Above all, even if this model is later evidenced, it does not, by itself, indicate that Korean anti-feminism and male-victim ideology are completely a false consciousness. Their anti-feminist ideologies may have many different causes, some of which seem justifiable or admittable. However, at the very least, it seems obvious that certain psychological motives have facilitated their anti-feminism and male-victim ideology or inflated the severity of their extremity or its expressions. Moreover, despite some uniqueness, the primordial frameworks of these attitudes are identical to those of other forms of prejudice. As has been sparsely explained, this is a hallmark of modern extremism on a global scale, and contrary to what many people still believe, it has no cultural boundaries. The current society compels a deeper understanding of contemporary prejudice around the world. We should open our eyes to what is happening here and now, or more accurately, everywhere and now, and get closer to the implications of contemporary extremism and prejudice.

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Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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What's in store for females after breaking the glass ceiling? Evidence from the Chinese audit market

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Given that female auditors' representation in the audit market has averagely caught up to that of males, yet remains insufficient at the partner level, it is imperative to investigate gender discrimination in public accounting firms. Using data from the Chinese audit market, this paper analyzes the glass ceiling phenomenon faced by females as they aspire to promotion to partner positions. It also explores the professional barriers that may impede their career progression post-promotion. The findings illuminate that the opportunities for female promotion to partner positions are notably lower than for males. Furthermore, after their elevation to partner roles, females are more likely to be allocated to clients grappling with financial distress and high-risk situations. In contrast, opportunities to engage with auditing important clients are diminished, particularly within male-dominated audit firms. Additionally, the study reveals that female promotion to partner positions heightens their prospects for assuming the lead auditor role in audit projects. However, this phenomenon predominantly materializes within audit firms characterized by a higher proportion of female auditors. Instead, females face more significant challenges in garnering recognition within male-dominated audit firms. Lastly, the research examines investor reactions to female promotion to partner, revealing a generally negative response. In summary, this study contributes to a comprehensive exploration of gender discrimination within the public accounting firms, shedding light on women's career development challenges after breaking the glass ceiling.

KEYWORDS

glass ceiling, gender discrimination, female auditor, partner, audit firm

1 Introduction

To enhance the status of females in the labor market and promote gender equality at a societal level, significant efforts have been made globally over the past few decades (Bertrand et al., 2019; UN Women, 2023). However, female representation in leadership roles remains inadequate (Rattan et al., 2019). This phenomenon is particularly pronounced in public accounting firms. The career trajectory of auditors in audit firms has historically been characterized as "up or out," with promotion to partner being the highest professional pursuit in the auditing industry. Nevertheless, males hold the dominant position in the audit market, and females are underrepresented in partner positions, which has been a long-standing issue. According to the "2017 Registered Accountant Industry Development and Management Report" released by the Accounting Department of the Ministry of Finance of China, in 2017, females

comprised 50.33% of Certified Public Accountants (CPAs), nearly achieving gender equality. However, when scrutinizing the proportion of partners, a stark contrast emerges, with females accounting for only 41.96%, a substantial deficit of 16.08 percentage points compared to male partners. Within the 40 audit firms possessing securities qualifications, the female proportion is even lower, standing at a mere 31.08%, lagging behind the industry average by 10.88 percentage points. Similar observations of this gender disparity have been made in other countries (Gammie et al., 2010; Almer et al., 2021), indicating the existence of "vertical gender segregation" within the auditing industry (Hull and Umansky, 1997; Almer et al., 2022). Therefore, despite the appearance of gender equality throughout the auditing industry, this paper posits that there is reason to suspect the presence of a glass ceiling for females in their professional development to partner in the Chinese audit market.

Notably, once females break through the glass ceiling and are promoted to partner, will they face career development dilemmas again? This question involves doubts about female competence as well as potential gender discrimination. The underrepresentation of females at the partner level has long been an unresolved issue. However, when females are promoted to partner, their competence will no longer be a questionable concern. It is reasonable to believe that females promoted to partner positions are comparable to, and perhaps even superior to, males in competence. Using data from the Belgian public accounting profession, Hardies et al. (2021) find that female auditors have to be more productive than males to be promoted to partner. However, females are not valued as much as they should be after being promoted to partner, as evidenced by the fact that female partners are less likely to be assigned to highly reputable clients (Almer et al., 2021). Therefore, examining whether there is a significant difference in the types of clients that females serve after being promoted to partner in the Chinese audit market is worthwhile.

Using hand-collected data on partner promotion in Chinese audit firms, this paper delves into the challenges faced by females promoted to partner in audit firms and their career development after promotion to partner, thus providing new perspectives for academic research on the glass ceiling. Specifically, this study aims to answer four key research questions to shed light on gender inequality in the auditing careers of females. First, this paper explores whether there is a glass ceiling effect for females in the auditing market. This issue is directly related to potential career advancement barriers to promotion due to gender bias. Second, we analyze whether females are hindered in audit practices once they break through the glass ceiling successfully. Specifically, we investigate whether there is a significant difference in client allocation among female partners and whether this difference is more pronounced in male-dominated audit firms. This question contributes to understanding whether gender factors influence the responsibilities and opportunities for females in leadership. Subsequently, the paper focuses on the extent to which audit firms value female partners, i.e., whether or not they will allow female partners to lead more in audit engagement. Finally, it tests how investors react to promoting females to partner in the capital market. By investigating these critical issues, this study aims to provide theoretical and empirical support to promote gender equality and female careers in auditing.

This paper contributes to the literature on female career development and the glass ceiling phenomenon in multiple ways. Firstly, by analyzing the likelihood of female auditors in the Chinese

audit market promotion to partners, this study broadens the research on the glass ceiling phenomenon. While prior studies have discussed the glass ceiling phenomenon for women in public accounting firms, many of these studies primarily rely on interviews and surveys (Cohen et al., 2020; Almer et al., 2021). Fewer studies have conducted empirical analyses of the barriers female auditors face in promotion, primarily focusing on countries such as Germany (Downar et al., 2020) and Belgium (Hardies et al., 2021). However, the audit market in China possesses distinctive characteristics, including higher fragmentation and the absence of Big4 dominance. Therefore, conclusions drawn from data in other countries may not necessarily apply to the Chinese audit market. This paper, by manually collecting data in China, empirically tests the obstacles faced by females in promotion to partner, thereby expanding the research on female career development within the audit market and supplementing the literature on the glass ceiling phenomenon.

Secondly, this paper advances research on the potential glass cliff phenomenon females may face upon entering leadership roles by analyzing differences in client allocations following female promotion to partner. The study reveals that after females are promoted to partner roles, they are more likely to be assigned to high-risk clients and less likely to be assigned to essential audit clients, with this difference being particularly pronounced in male-dominated audit firms. By examining how audit firms differentially handle female partners in auditing practices, this paper elucidates potential career development challenges faced by females entering leadership roles and provides empirical evidence from public accounting firms regarding the glass cliff phenomenon.

Lastly, the paper finds that females promoted to partner are often not given sufficient attention within audit firms and are frequently not appointed as lead auditors for audit projects. Additionally, investors' reactions to female promotion to partner are generally negative. These research findings demonstrate that, even though females have broken the glass ceiling and reached leadership positions, they still fail to gain full recognition within organizations and even in capital markets. Therefore, this study contributes strong evidence to the gender discrimination literature, emphasizing that gender equality remains a significant issue.

This paper is arranged as follows. In Section 2, the paper reviews prior literature and proposes the hypothesis. Section 3 describes the data sample and research design. Section 4 presents the results. Additional tests are performed in Section 5. The conclusions are summarized in Section 6.

2 Literature review and hypotheses development

2.1 Underrepresentation of females in leadership

In 1986, Hymowitz and Schellhardt (1986) introduced the "glass ceiling" concept to describe invisible barriers that hinder females from advancing to high-level positions within organizations. Since then, a substantial body of literature has emerged, discussing the factors that affect females' promotion and how they overcome the glass ceiling. Nevertheless, females continue to be underrepresented in top positions in the labor market. Literature on influencing female

promotion focuses on the following aspects: (1) Gender bias. Research indicates that gender bias is a significant phenomenon during recruitment and promotion, where employers prefer male candidates over equally qualified female candidates. This gender bias is rooted in societal and cultural norms and stereotypes (Rudman, 1998; Rudman and Glick, 2001), impacting how employers evaluate and make decisions concerning employees of different genders. A prevalent societal belief exists that females should bear the primary responsibility for caregiving in families. This belief might lead employers to question females' ability to balance work and family responsibilities, particularly in high-level positions. Even if females are promoted to leadership roles, employers may doubt their competence and worry that family demands might hinder their performance. This misconception could result in a preference for male candidates, as they are perceived as more dedicated to their work (Heilman, 1983). Furthermore, males are often considered to possess leadership qualities, a stereotype associated with traditional masculinity traits such as confidence, decisiveness, and competitiveness. Consequently, in leadership selection, males usually have an advantage, while females may be excluded due to a lack of these perceived qualities (Eagly and Karau, 2002; Heilman, 2012). Gender bias presents a significant obstacle to females' career development, resulting in unfair treatment regarding promotions and compensation (Eagly and Carli, 2007). (2) Gender discrimination. Gender discrimination is a deeply rooted issue in the labor market that continuously affects females' upward mobility (Hultin and Szulkin, 1999). Although laws prohibiting gender discrimination have been enacted worldwide, the problem persists. Gender discrimination often disadvantages females in competitive professional settings, even when they possess considerable skills and backgrounds (Heilman, 1983; Spurr, 1990). Females with skills, experience, and performance equal to their male counterparts may still be underestimated or overlooked (Powell and Butterfield, 1994; Hultin and Szulkin, 1999). This phenomenon is commonly referred to as the "glass ceiling," implying that females seem to face subtle barriers to career development (Morrison et al., 1987; Powell and Butterfield, 2015). Gender discrimination becomes especially apparent in male-dominated work environments (Dalton et al., 2014). Nonetheless, research has shown that increasing the representation of women in management roles appears to reduce the gender wage gap (Cohen and Huffman, 2007) and alleviate the obstacles to females' promotion (Gorman, 2005; Kurtulus and Tomaskovic-Devey, 2012). (3) Self-selection. Psychological studies suggest that females tend to avoid competition, while males are more willing to embrace it (Niederle and Vesterlund, 2011). Females often actively avoid high-level management positions that require competitive incentives (Gneezy et al., 2003; Niederle and Vesterlund, 2007, 2011). This avoidance behavior may stem from various factors, including aversion to risk and concerns about work-related stress (Barker and Monks, 1998). For instance, females may prioritize balancing their professional and family lives. Influenced by societal and cultural norms, females often shoulder more family responsibilities, leading to concerns about the stress and time demands associated with leadership positions (Heilman, 1983). This perspective may make female less willing to embrace competitive positions, as they fear the potential impact on their roles within their families. Additionally, Gneezy et al. (2003) suggest that in non-competitive environments, women and men perform equally, but as the level of competition increases, women's performance gradually falls behind men's. This further emphasizes

that females may be more likely to withdraw or behave conservatively in competitive environments. This trend may explain why females are underrepresented in top positions, partly due to their own choices. Niederle and Vesterlund (2007) conduct experimental research to identify the reasons for females' underrepresentation in high-level leadership positions and sought explanations beyond gender discrimination. Their research results further confirm that females tend to act conservatively in competitive environments, highlighting the impact of gender differences on career choices and promotions in the leadership positions.

2.2 Female promotion to partner and the glass ceiling effect

Becoming a partner in the audit firm is considered a sign of success in auditing (Davidson and Dalby, 1993). Similar to shareholders in a corporation, partners own shares of the audit firm and share in the residual profits. However, in contrast, partners not only hold ownership stakes in the audit firm but also actively engage in the execution of auditing practices. They play a crucial role in the audit firm's operation and client management, actively engaging in audit projects. Nevertheless, males have been dominant in professional service firms like audit firms. Following the principle of homophily, male partners often tend to favor individuals with similar backgrounds when selecting new partners (Dalton et al., 2014). Consequently, this gender disparity is particularly pronounced at the partner level. Numerous studies indicate that female promotion to partner faces challenges (Ragins et al., 1998; Almer et al., 2012; Cohen et al., 2020). While the proportion of female auditors has been gradually increasing throughout the auditing market and has reached parity with male counterparts, female representation remains notably deficient at the partner level. This phenomenon suggests that females face hidden barriers to promotion to the partner position, limiting their opportunities for upward mobility in their auditing careers. Specifically, Downar et al. (2020) examine the glass ceiling effect for females within audit firms using data from Germany. Although the Chinese auditing market differs from Germany in certain aspects, such as the absence of dominant positions held by the Big 4 international audit firms in China and a more competitive landscape among audit firms, the issue remains relevant in the Chinese auditing market. Based on this, the paper proposes the first hypothesis:

> *H1*: Female auditors face a glass ceiling in promotion to partner.

2.3 Career dilemmas for female partners

In the labor market, females face a glass ceiling, limiting their opportunities for promotion to top-level positions. However, once females break through this glass ceiling and are promoted to the partner level in the auditing market, they may still encounter challenges and difficulties. These challenges reflect the persistent issue of gender inequality in top leadership despite the significant professional accomplishments of females. Research has shown that even when females are promoted to high-level leadership positions, they are often evaluated less favorably than their male counterparts,

especially in male-dominated work environments or when assessed by male evaluators (Eagly et al., 1992). The career prospects for female leaders may also be less favorable than those for male leaders, and they are more likely to find themselves on what is commonly referred to as the "glass cliff" (Ryan and Haslam, 2005). This could be due to various reasons. On the one hand, it may be because females are perceived to lack the competence required in leadership positions and are seen as lacking the necessary experience and skills for leadership roles (Metz and Tharenou, 2001), which can negatively impact a company's performance (Adhikari, 2012). Therefore, females who are promoted to partner may receive lower evaluations. On the other hand, some scholars argue that the career difficulties females face in leadership roles result from gender bias. Dalton et al. (2014) find that in firms with a higher percentage of female partners, female auditors perceived less gender discrimination. Hardies et al. (2021) provide empirical evidence of gender discrimination in audit firms using data from Belgium. Their research discover that the performance standards for female partners are often higher than those for male partners, yet females are still less likely to be assigned to higher-prestige clients after promotion. Therefore, while females promoted to partner may positively impact companies (Jeong and Harrison, 2017), they may still not receive the recognition they deserve due to gender bias or discrimination. In summary, this paper posits that females who are promoted to partner positions in audit firms may still face career challenges. Despite having overcome the glass ceiling, issues related to gender bias and discrimination may still affect their career progression. In audit firms, maintaining client relationships is a principal task for partners. Retaining existing clients and attracting new ones are essential sources of revenue for partners. Therefore, this paper proposes the second hypothesis:

> *H2*: Female auditors are more likely to be assigned to high-risk or less important clients after being promoted to partner.

3 Research design

3.1 Data and sample

Our sample consists of auditors who participated in auditing listed companies during the period 2014–2021. The data on auditor promotions are manually collected from the China Institute of Certified Public Accountants and other relevant websites. Auditor personal characteristics data are available from the Chinese Research Data Services Platform (CNRDS) database. The rest of the data is from the China Stock Market and Accounting Research (CSMAR) database. We use data at the auditor-year level to test whether there is a glass ceiling for females in auditing careers. As shown in Panel A of Table 1, our sample starts with 18,919 auditor-year observations from 2014 to 2021. After removing data from the year of the auditor's promotion and the missing values generated by calculating the required variables, the paper ends with 14,377 observations. Panel B illustrates the sample selection process for testing the client assignments of female auditors after they are promoted to partner. In this session, we use the initial sample of 45,348 auditor-company-year observations for 2014–2021. Similar to Panel A, we delete the data for the year of the auditor's promotion and missing values. Finally, we obtain 31,744 observations to examine the career dilemma

TABLE 1 Sample description.

Panel A: Sample selection for female auditors promoted to partner	
Auditor - year observations (2014–2021)	18,919
Less observations in the year of the auditor's promotion	(1,133)
Less missing values resulting from calculating the required variables	(3,409)
Auditor-year observations used for regression analysis	14,377
Panel B: Sample selection for client assignments after female auditors were promoted to partners	
Auditor–company-year observations (2014–2021)	45,348
Less observations in the year of the auditor's promotion	(2,344)
Less missing values resulting from calculating the required variables	(11,260)
Auditor-company-year observations used for regression analysis	31,744

females face after breaking through the glass ceiling in the auditing market.

3.2 Empirical model and control variables

To test whether females face the glass ceiling in the auditing market, this paper estimates the following multivariate regression model:

$$Promotion = \alpha_0 + \alpha_1 Female + Controls + Year + AuditFirm + \varepsilon \quad (1)$$

where the dependent variable, *Promotion*, indicates 1 if the auditor is promoted to partner and 0 otherwise. *Female* takes 1 for female auditors and 0 for male auditors. If there is a glass ceiling in the audit market, this paper predicts that females are significantly less likely to be promoted to partner than males. Therefore, a negative coefficient on *Female* is predicted in this paper (i.e., $\alpha_1 > 0$).

It also controls for relevant variables that may affect the auditor's promotion to partner in the following terms: Individual characteristics of the auditor, including whether the auditor graduated with a major in accounting (*Major*), whether the auditor has a master's degree or higher (*Degree*), the auditor's working years since obtaining the CPA qualification (*Work_Length*), whether the auditor experienced job-hopping (*Job_Hopping*), as well as whether the auditor possesses industry expertise (*PSFee*); Audit firm-level control variables, including whether it is a Big 4 accounting firm (*Big4*) and the audit firm's market share (*AF_MarShare*); Client-level control variables, including total assets (*AO_Size*), return on net assets (*AO_ROE*), loss or not (*AO_Loss*), growth (*AO_Growth*), sum of accounts receivable and inventory divided by total assets (*AO_Rece_Inve*), book-to-market ratio (*AO_BTM*), whether it is a state-owned enterprise (*AO_SOE*), the average percentage of independent directors (*AO_Ratio*), whether the chairman and general manager are two positions in one (*AO_Dual*), and the average age of listed firms (*AO_ListAge*) of all the clients audited by the auditor during the year. In addition, the paper controls for year fixed effects and audit firm fixed effects.

To examine the client allocation after female is promoted to partner, this paper estimates the following regression model:

$$ClientAssign = \alpha_0 + \alpha_1 Female + \alpha_2 Promotion +$$
$$\alpha_3 Female\_Pro + Controls + \qquad (2)$$
$$Year + Industry + \varepsilon$$

where this paper examines the client allocation after female promotion to partner in terms of risk and importance, respectively. *Female_Pro* represents the interaction term between Female and Promotion.

We measure the client's risk status by using the variables of whether the client is in financial distress (*Fin_Distress*) and whether it is a high-risk client (*High_Risk*). Following Altman (1968), we define *Fin_Distress* as taking 1 if the client company's Zscore is less than 1.8, 0 otherwise. *High_Risk* takes 1 if the listed company has been involved in litigation in the previous year, or has been issued a modified audit opinion, or has incurred a loss, otherwise 0. For client importance, it is measured by client total assets and audit fees, that is, client total assets as a percentage of the audit firm's total assets for all clients during the year (*CI_Size*) and client audit fees as a percentage of the audit firm's total audit fees for all clients during the year (*CI_Fee*). The larger the value of *CI_Size* and *CI_Fee*, the more important the client is to the audit firm.

Equation (2) controls for the following company-level control variables: client's total assets (*Size*), return on equity (*ROE*), loss status (*Loss*), growth, sum of accounts receivable and inventory divided by total assets (*Rece_Inve*), book-to-market ratio (*BTM*), whether the company is a state-owned enterprise (*SOE*), the percentage of independent directors (*Ratio*), whether the chairman and general manager are two positions in one (*Dual*), the age of the listed company (*ListAge*), and whether the company changes audit firms (*Chg_Firm*). Furthermore, we also control for the auditor's characteristics, *Major*, *Degree*, *Work_Length*, *Job_Hopping*, *PSFee* and audit firm characteristics, *Big4*. The industry-fixed effects and year-fixed effects are also controlled. All variables are winsorized at 1 and 99%. Detailed definitions of the variables used in this paper are provided in Appendix A.

4 Empirical result

4.1 Descriptive statistics

Panel A of Table 2 provides descriptive statistics for female promotion partners. As shown in Panel A, the mean value of Promotions is 0.189, indicating that 18.9% of the auditors in the sample are promoted to partners. *Female* has a mean value of 0.388, showing that 38.8% of females are in the sample. The average value of *Major* is 0.456, indicating that 45.6% of the auditors graduated from accounting-related majors. *Degree* has a mean value of 0.092, indicating that only 9.2% of auditors have a master's degree or higher. The average working experience of auditors is 9.228 years (*Work_Length*), 12.7% of auditors have experienced job-hopping (*Job_Hopping*), and the proportion of auditors with industry specialization accounts for 12.7% (*PSFee*). Panel B presents descriptive statistics for a sample testing the client allocation after female auditors are promoted to partner.

Table 3 provides the correlation coefficients for the variables between *Promotion* and auditors' characteristics. There is a significant

negative correlation between *Female* and *Promotion* at the 1% level, indicating that female auditors are less likely to be promoted to partner. This provides initial evidence that female faces glass ceilings in auditing career promotion.

4.2 Tests for glass ceiling in female auditors promotion to partner

Table 4 presents the regression results of equation (1), which examines whether females suffer glass ceilings in partner promotions in the audit market. Columns (1) and (2) are regression results using the OLS model without controlling for fixed effects and controlling for year and audit firm fixed effects. The coefficients of *Female* are −0.085 and −0.083, respectively, and significant at 1% level. It means that females are significantly less likely to be promoted to partner than males. In economic terms, female auditors have a lower probability of being promoted to partner than males by about 44.6% (−0.083/0.189, where 0.189 is the mean value of *Promotion*) to 45% (−0.085/0.189). It can also be found that the coefficient of *Degree* is significantly positive in both columns, indicating that auditors with higher degrees are more likely to be promoted to partner. *Work_Length* is significantly positively correlated with *Promotion*, suggesting that the longer the working length of the auditor, the more likely to be promoted to partner. The coefficients of *Job_Hopping* and *PSFee* are all significantly positive, demonstrating that auditor's job-hopping experience and industry expertise positively affect their promotion to partner. To verify the robustness of the conclusions, this paper repeats the above regressions using logit model. Columns (3) and (4) show the regression results for the uncontrolled fixed effects as well as controlling for year and audit firm fixed effects, respectively.[1] The results reveal that the coefficient for *Female* remains significantly negative using logit regression. Therefore, the findings suggest that females are significantly less likely to be promoted to partner in the audit market than males, and that females face a glass ceiling.

4.3 Tests for career dilemmas after female promotion to partner

Table 5 examines the client allocation of female auditors after being promoted to partners. In particular, column (1) tests the results for *Fin_Distress* as the dependent variable. *Female_Pro* is significantly positive, implying that females are more likely to audit financial distressed clients after being promoted to partner than before. Column (2) shows the probability of assigning high-risk clients after females are promoted to partners. As can be seen, the coefficient of *Female_Pro* is positive and significant at the 1% level, supporting the conjecture that females are more likely to be assigned high-risk clients after being promoted to partner. Column (3) and column (4) test whether females are assigned important clients after being promoted to partner. Column (3) shows the findings using *CI_Size* as the dependent

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1 Column (4) has a sample that is inconsistent with the other three columns because in the logit regression, when year fixed effects and audit firm fixed effects are included, a portion of the sample is lost due to covariance problems.

TABLE 2 Descriptive statistics.

Panel A: Descriptive statistics for the glass ceiling for female promotion to partner							
Variable	Obs	Mean	Min	P25	Median	P75	Max	SD
Promotion	14,377	0.189	0.000	0.000	0.000	0.000	1.000	0.391
Female	14,377	0.388	0.000	0.000	0.000	1.000	1.000	0.487
Major	14,377	0.456	0.000	0.000	0.000	1.000	1.000	0.498
Degree	14,377	0.092	0.000	0.000	0.000	0.000	1.000	0.289
Work_Length	14,377	9.228	0.000	4.000	8.000	13.000	29.000	5.986
Job_Hopping	14,377	0.127	0.000	0.000	0.000	0.000	1.000	0.333
PSFee	14,377	0.022	0.000	0.000	0.000	0.000	1.000	0.147
Big4	14,377	0.053	0.000	0.000	0.000	0.000	1.000	0.224
AF_MarShare	14,377	0.066	0.002	0.018	0.051	0.112	0.164	0.050
AO_Size	14,377	22.267	17.277	21.467	22.090	22.878	28.543	1.219
AO_ROE	14,377	−0.005	−88.087	0.026	0.067	0.108	33.304	1.676
AO_Loss	14,377	0.138	0.000	0.000	0.000	0.000	1.000	0.307
AO_Growth	14,377	0.320	−2.733	−0.020	0.110	0.270	263.271	3.456
AO_Rece_Inve	14,377	0.260	0.000	0.158	0.247	0.342	0.935	0.144
AO_BTM	14,377	0.615	0.009	0.444	0.604	0.778	1.559	0.238
AO_SOE	14,377	0.091	0.000	0.000	0.000	0.000	1.000	0.260
AO_Ratio	14,377	0.379	0.200	0.333	0.375	0.417	0.750	0.049
AO_Dual	14,377	0.302	0.000	0.000	0.000	0.500	1.000	0.403
AO_ListAge	14,377	2.192	0.000	1.609	2.303	2.884	3.466	0.765
Panel B: Descriptive statistics of female partner client allocation							
Variable	Obs	Mean	Min	P25	Median	P75	Max	SD
Promotion	31,744	0.165	0.000	0.000	0.000	0.000	1.000	0.371
Female	31,744	0.324	0.000	0.000	0.000	1.000	1.000	0.468
Size	31,744	22.327	20.028	21.406	22.146	23.054	26.331	1.284
ROE	31,744	0.046	−1.021	0.026	0.066	0.111	0.329	0.165
Loss	31,744	0.121	0.000	0.000	0.000	0.000	1.000	0.326
Growth	31,744	0.172	−0.592	−0.025	0.104	0.271	2.694	0.424
Rece_Inve	31,744	0.264	0.009	0.143	0.247	0.361	0.724	0.160
BTM	31,744	0.610	0.106	0.413	0.601	0.799	1.189	0.257
SOE	31,744	0.090	0.000	0.000	0.000	0.000	1.000	0.286
Ratio	31,744	0.378	0.333	0.333	0.364	0.429	0.571	0.053
Dual	31,744	0.294	0.000	0.000	0.000	1.000	1.000	0.455
ListAge	31,744	11.097	0.000	4.000	9.000	18.000	31.000	7.814
Major	31,744	0.509	0.000	0.000	1.000	1.000	1.000	0.500
Degree	31,744	0.117	0.000	0.000	0.000	0.000	1.000	0.321
Work_Length	31,744	13.026	0.000	7.000	13.000	19.000	33.000	6.885
Job_Hopping	31,744	0.125	0.000	0.000	0.000	0.000	1.000	0.331
PSFee	31,744	0.063	0.000	0.000	0.000	0.000	1.000	0.243
Big4	31,744	0.056	0.000	0.000	0.000	0.000	1.000	0.230
Chg_Firm	31,744	0.086	0.000	0.000	0.000	0.000	1.000	0.281

variable, and column (4) shows the regression results using *CI_Fee* to measure client importance. In both column examinations, the coefficients of *Female_Pro* are statistically insignificant, suggesting that females do not audit clients that are important to the audit firm after promotion. These results indicate that female auditors are more likely to audit high-risk clients and less likely to audit significant

TABLE 3 Correlation analysis.

	Promotion	Female	Major	Degree	Work_Length	Job_Hopping	PSFee
Promotion	1.000						
Female	−0.078***	1.000					
Major	−0.005	0.015***	1.000				
Degree	0.010*	0.035***	−0.054***	1.000			
Work_Length	0.147***	−0.112***	0.162***	0.085***	1.000		
Job_Hopping	0.150***	−0.053***	0.034***	0.016***	0.088***	1.000	
PSFee	0.037***	−0.034***	0.028***	0.039***	0.119***	0.005	1.000

clients after being promoted to partner. Even if females break through the glass ceiling and become part of the partnership, it is still difficult for them to be taken seriously by audit firms. The findings provide empirical evidence that females face career dilemmas after being promoted to partner, and H2 is supported.

4.4 Tests for gender discrimination faced by the female after promotion to partner

Whether females promoted to partner will be assigned to high-risk or relatively less important clients may be due to multiple reasons, including factors such as relatively lower competence or possibly gender discrimination. As Eagly et al. (1992), Dalton et al. (2014), and Hardies et al. (2021) have found in their studies, females are more likely to be undervalued and more likely to be at risk of gender discrimination, particularly in male-dominated work environments. To further confirm that the difference in client allocation after female promotion to partner is related to gender discrimination in audit firms, this study plans to test whether the difference in client allocation demonstrated in Table 5 is more pronounced in firms with relatively low female representation. Suppose females are relatively underrepresented in some audit firms. In that case, those audit firms may be more inclined to uphold traditional work patterns and biases, leading to more significant differences in client assignments.

To test the above conjecture, this paper divides the sample into two groups based on the yearly median of the proportion of female auditors in audit firms. High_F takes 1 if the percentage of female auditors in audit firms is higher than the annual median, and 0 otherwise. Table 6 presents the differences in assigning financial distress clients by female partners across subgroups. As can be seen, the coefficient of Female_Pro is significantly positive only in the group with a lower percentage of female auditors. This means that in male-dominated audit firms, they are more likely to be assigned to financially distressed clients after being promoted to partner. Table 7 shows a subgroup test for auditing high-risk clients after female promoted to partner. Similar to the results in Table 6, the coefficient of Female_Pro is positive and significant at the 5% level in male-dominated audit firms, supporting the hypothesis of gender discrimination. Furthermore, Table 8 presents subgroup tests of assigning important clients to females after they are promoted to partner. In the subgroup test, Female_Pro is significantly associated with CI_Size in the group with a higher proportion of female auditors,

and the between-group coefficients are significantly different at the 5% level. There were consistent results when using CI_Fee to measure the importance of the client to the audit firm. These results indicate that females promoted to partner are only valued in audit firms with a high proportion of females and are allowed to audit important clients. It also provides evidence for gender discrimination.

In conclusion, the above results indicate that female auditors still face career dilemmas after promotion to partner, reflected in the higher likelihood of auditing clients in financial distress, high-risk clients, and lower chances of auditing clients that are important to the audit firm. This situation is more pronounced in male-dominated audit firms. Even if females break through the glass ceiling and become part of the partnership, it is still difficult for them to be taken seriously by audit firms.

5 Additional tests

5.1 Are females valued after promotion to partner?

In the audit reports of Chinese listed companies, there are at least two signature auditors, acting as review partners (Leader) and acting engagement auditors. In particular, the review partner coordinates the audit project and takes ultimate responsibility. Since the audit firms converted to the special general partnership form in 2014, the first signing auditor should theoretically be a partner position in the audit firm. Accordingly, there is a significant increase in the likelihood that females will serve as reviewing partners when they are promoted to partner, regardless of gender discrimination. Additionally, as Hardies et al. (2021), if there is gender discrimination in audit firms, it will require females to perform better than males to achieve promotion. That is, female promotion to partner in audit firms with a high proportion of males will exhibit superior ability, and they are more likely to serve as reviewing partners in audit projects if gender discrimination exists.

The results are shown in Table 9. In the full sample test of column (1), the coefficient of Female_Pro is significantly positive at the 1% level. In the subgroup tests in columns (2) and (3), the coefficient of Female_Pro is significantly positive in the group with a relatively low share of female auditors, validating the conjecture. In conclusion, the results indicate that females promoted to partner in male-dominated audit firms usually exhibit higher competence (Hardies et al., 2021) and provide evidence of gender discrimination in audit firms.

TABLE 4 Tests for glass ceiling in audit market.

	OLS		Logit	
	(1)	(2)	(3)	(4)
Female	−0.085***	−0.083***	−0.832***	−0.890***
	(−15.21)	(−15.41)	(−14.40)	(−14.43)
Major	−0.011*	0.004	−0.071	0.050
	(−1.94)	(0.62)	(−1.34)	(0.87)
Degree	0.073***	0.064***	0.513***	0.501***
	(7.13)	(6.45)	(5.96)	(5.35)
Work_Length	0.031***	0.031***	0.238***	0.250***
	(57.78)	(57.97)	(50.60)	(45.37)
Job_Hopping	0.044***	0.026**	0.275***	0.120
	(4.33)	(2.55)	(3.83)	(1.51)
PSFee	0.128***	0.121***	0.808***	0.991***
	(5.28)	(5.37)	(5.30)	(6.10)
Big4	0.111***	−0.170***	0.966***	0.973***
	(7.36)	(−6.33)	(9.25)	(3.37)
AF_MarShare	−0.631***	−0.503	−5.798***	−2.948
	(−10.94)	(−1.51)	(−9.96)	(−0.85)
AO_Size	0.003	0.003	0.054*	0.064*
	(1.00)	(0.86)	(1.79)	(1.94)
AO_ROE	−0.038**	−0.028*	−0.271**	−0.183
	(−2.34)	(−1.82)	(−2.14)	(−1.40)
AO_Loss	0.024**	−0.003	0.222**	−0.011
	(2.14)	(−0.24)	(2.19)	(−0.10)
AO_Growth	0.007	0.001	0.073	0.014
	(1.24)	(0.13)	(1.32)	(0.24)
AO_Rece_Inve	−0.000	0.019	0.068	0.183
	(−0.01)	(1.05)	(0.38)	(0.92)
AO_BTM	0.034**	0.000	0.304**	0.062
	(2.38)	(0.01)	(2.23)	(0.40)
AO_SOE	−0.023**	0.006	−0.193*	−0.011
	(−2.15)	(0.55)	(−1.87)	(−0.10)
AO_Ratio	−0.038	−0.027	−0.528	−0.195
	(−0.66)	(−0.48)	(−0.97)	(−0.33)
AO_Dual	0.030***	0.015**	0.281***	0.162**
	(4.35)	(2.21)	(4.24)	(2.27)
AO_ListAge	−0.020***	−0.020***	−0.204***	−0.223***
	(−4.89)	(−4.91)	(−5.08)	(−5.23)
_cons	−0.082	−0.173**	−4.548***	−4.117***
	(−1.20)	(−2.41)	(−7.32)	(−5.58)
Year	Yes	Yes	Yes	Yes
AuditFirm	Yes	Yes	Yes	Yes
adj. R²/pseudo R²	0.264	0.324	0.285	0.349
N	14,377	14,377	14,377	13,288

***, **, and * denote significance at the 1, 5, and 10% level, respectively.

5.2 Investor reaction to female promotion to partner

Besides, the paper further examines the investors' earnings response to female promotion to partner. The earnings response coefficient captures investors' perceptions of the factors affecting a company's earnings situation. If gender discrimination is prevalent in the capital markets, then this paper argues that investors will react negatively to female promotion to partner and the situation is more pronounced in audit firms with a higher proportion of females. This paper constructs the following model to test investors' earnings response to female auditor promotion to partner:

$$BHAR = \alpha_0 + \alpha_1 UE + \alpha_2 Promotion + \alpha_3 Promotion\_UE + Controls + Year + Industry + \varepsilon \quad (3)$$

BHAR is the cumulative excess return. Considering that the cut-off date for the publication of listed companies' financial reports in China is April 30 of the following year, this paper adopts the returns for the 12 months from the beginning of May in year t + 1 to the end of April in year t + 2 to calculate *BHAR*. *UE* is the earnings surprise, expressed as the difference between net profits in period t + 1 and net profits in period t divided by the market value of equity. *Promotion_ UE* represents the interaction term between *UE* and *Promotion*. We are interested in the coefficient of *Promotion_UE*, if there is gender discrimination against female auditors in the capital market, then this paper predicts that the coefficient of *Promotion_UE* is negative ($\alpha_1 < 0$).

As predicted, the coefficient on *Promotion_UE* is significantly negative. In the subgroup test, the results show that there is a more significant negative response from investors in audit firms with a higher percentage of females. In contrast, in male-dominated audit firms, investors do not respond significantly to the promotion of female auditors. Consistent with the conjecture, gender bias against female auditors is prevalent at the capital market level (Table 10).

6 Conclusion

This study delves deeply into the glass ceiling phenomenon that female auditors face in the auditing market and their career challenges after promotion to partner. The underrepresentation of females in leadership roles has been a hot topic of academic interest, particularly in male-dominated public accounting firms, where this issue becomes particularly pronounced. Despite progress in achieving gender equality in various fields, the number of females entering the public accounting firms has become comparable to that of men. However, the problem of underrepresentation of females, especially in leadership roles such as partner positions, remains a serious concern. In a system where "up or out" is the norm, females' barriers to advancing to high-level leadership positions could lead to a substantial talent drain in public accounting firms. Therefore, conducting in-depth research into the issues females encounter in their career development within the auditing market is necessary.

Using hand-collected data on auditor promotions to partner in the Chinese audit market, this paper empirically examines the glass ceiling effect of female promotion to partner as well as the career development dilemmas after promotion. First and

TABLE 5 Tests for career dilemmas after female promotion to partner.

	(1)	(2)	(3)	(4)
	Fin_Distress	HighRisk	Cl_Size	Cl_Fee
Female	−0.010**	−0.013**	−0.001	−0.001
	(−2.28)	(−2.32)	(−0.48)	(−0.45)
Promotion	0.008	0.003	−0.002	−0.002
	(1.36)	(0.36)	(−0.96)	(−0.94)
Female_Pro	0.022**	0.033**	0.004	0.004
	(1.97)	(2.10)	(0.93)	(0.93)
Size	0.072***	−0.021***	0.000	−0.001
	(35.28)	(−7.40)	(0.09)	(−0.71)
ROE	−0.543***	−0.295***	−0.024***	−0.025***
	(−28.85)	(−13.54)	(−3.37)	(−3.48)
Loss	0.172***	0.146***	−0.003	−0.002
	(17.31)	(12.75)	(−0.81)	(−0.74)
Growth	0.023***	0.039***	0.001	0.001
	(4.54)	(5.76)	(0.30)	(0.31)
Rece_Inve	−0.071***	0.000	0.009*	0.009*
	(−5.00)	(0.01)	(1.75)	(1.72)
BTM	0.568***	−0.016	−0.001	−0.002
	(56.25)	(−1.18)	(−0.36)	(−0.51)
SOE	0.067***	−0.027***	−0.006**	−0.006**
	(8.72)	(−2.89)	(−2.21)	(−2.21)
Ratio	−0.005	0.014	−0.019	−0.019
	(−0.16)	(0.29)	(−1.50)	(−1.50)
Dual	0.007	0.006	−0.007***	−0.007***
	(1.64)	(1.06)	(−4.36)	(−4.35)
ListAge	0.001***	0.010***	0.001***	0.001***
	(3.63)	(24.31)	(5.75)	(5.84)
Major	−0.003	−0.002	0.003**	0.003**
	(−0.86)	(−0.38)	(1.97)	(2.01)
Degree	−0.014**	−0.015**	−0.007***	−0.006***
	(−2.50)	(−2.01)	(−3.03)	(−2.97)
Work_Length	−0.000	−0.000	0.000***	0.000***
	(−1.01)	(−0.76)	(3.17)	(3.15)
Job_Hopping	0.000	−0.012	−0.008***	−0.008***
	(0.08)	(−1.63)	(−3.68)	(−3.70)
PSFee	−0.019**	−0.018*	−0.005	−0.005
	(−2.45)	(−1.73)	(−1.52)	(−1.42)
Big4	−0.065***	−0.021*	0.018***	0.020***
	(−6.93)	(−1.85)	(4.98)	(5.53)
Chg_Firm	0.024***	0.058***	0.015***	0.015***
	(3.35)	(6.13)	(5.06)	(5.05)
_cons	−1.660***	0.657***	0.068***	0.080***
	(−34.31)	(10.12)	(4.12)	(4.89)
Year	Yes	Yes	Yes	Yes
Ind	Yes	Yes	Yes	Yes
adj. R^2	0.440	0.089	0.013	0.013
N	31,744	31,744	31,744	31,744

***, **, and * denote significance at the 1, 5, and 10% level, respectively.

TABLE 6 Group test for female partners auditing financial distress clients.

	Dependent variable = Fin_Distress	
	(1)	(2)
	High_F = 1	High_F = 0
Female	−0.006	−0.015***
	(−0.93)	(−2.77)
Promotion	0.006	0.010
	(0.57)	(1.35)
Female_Pro	0.015	0.030*
	(0.92)	(1.95)
Controls	Yes	Yes
Year	Yes	Yes
Ind	Yes	Yes
adj. R^2	0.458	0.428
N	12,850	18,894
	Prob > chi2 = 0.498	

***, **, and * denote significance at the 1, 5, and 10% level, respectively.

TABLE 7 Group test for female partners auditing high-risk clients.

	Dependent variable = High_Risk	
	(1)	(2)
	High_F = 1	High_F = 0
Female	−0.008	−0.018**
	(−0.87)	(−2.31)
Promotion	0.011	−0.004
	(0.79)	(−0.36)
Female_Pro	0.009	0.054**
	(0.38)	(2.52)
Controls	Yes	Yes
Year	Yes	Yes
Ind	Yes	Yes
adj. R^2	0.079	0.097
N	12,850	18,894
	Prob > chi2 = 0.155	

***, **, and * denote significance at the 1, 5, and 10% level, respectively.

foremost, the research reveals that, in comparison to their male counterparts, female auditors face significantly lower odds of promotion to partner, thus shedding light on the glass ceiling phenomenon in career development. Secondly, this paper further examines the differences in client allocation following the promotion to partner. The results indicate that females, upon becoming partners, are more likely to be assigned to financial distressed clients and high-risk clients, with fewer opportunities to audit important clients. This difference is particularly pronounced in male-dominated audit firms, underscoring the role of gender discrimination in the observed disparities. Furthermore, this research observes that although female partners have significantly increased opportunities to serve as lead partners in audit projects, these opportunities are primarily concentrated in firms with higher proportions of female auditors.

TABLE 8 Group test for female partners auditing important clients.

	CI_Size			CI_Fee		
	(1)	(2)	(3)	(4)	(5)	(6)
	Full sample	High_F = 1	High_F = 0	Full sample	High_F = 1	High_F = 0
Female	−0.001	0.004	−0.006***	−0.001	0.004	−0.006***
	(−0.48)	(1.55)	(−2.97)	(−0.45)	(1.58)	(−2.97)
Promotion	−0.002	−0.005	−0.000	−0.002	−0.005	−0.000
	(−0.96)	(−1.43)	(−0.03)	(−0.94)	(−1.39)	(−0.03)
Female_Pro	0.004	0.012*	−0.003	0.004	0.012*	−0.003
	(0.93)	(1.66)	(−0.58)	(0.93)	(1.65)	(−0.57)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Ind	Yes	Yes	Yes	Yes	Yes	Yes
adj. R²	0.013	0.015	0.015	0.013	0.015	0.015
N	31,744	12,850	18,894	31,744	12,850	18,894
		Prob > chi2 = 0.088			Prob > chi2 = 0.090	

***, **, and * denote significance at the 1, 5, and 10% level, respectively.

TABLE 9 Test for whether females are valued by audit firms after promotion to partner.

	Dependent variable = Leader		
	(1)	(2)	(3)
	Full sample	High_F = 1	High_F = 0
Female	−0.089***	−0.085***	−0.089***
	(−19.69)	(−12.06)	(−14.74)
Promotion	0.384***	0.378***	0.389***
	(62.36)	(37.07)	(50.69)
Female_Pro	0.054***	0.023	0.083***
	(4.38)	(1.19)	(5.28)
Controls	Yes	Yes	Yes
Year	Yes	Yes	Yes
Ind	Yes	Yes	Yes
adj. R²	0.531	0.517	0.544
N	31,744	12,850	18,894
		Prob > chi2 = 0.015	

***, **, and * denote significance at the 1, 5, and 10% level, respectively.

In contrast, females continue to face challenges in gaining full recognition in male-dominated audit firms. Finally, this study tests investors' reactions to females' promotion to the partner level, revealing that the capital markets are not optimistic about the career progression of female auditors. These research findings underscore that gender equality remains an important and thought-provoking issue within the public accounting firms.

This study provides significant insights into understanding gender inequality within the public accounting firms and inspires further research. Researchers could delve deeper into the promotion mechanisms within audit firms, particularly focusing on gender equality disparities. This approach would uncover the underlying causes of gender inequality issues, enhancing the effectiveness of potential solutions. Furthermore, future research should comprehensively examine the factors influencing females' promotion to partner positions, including individual traits, family factors, job performance, and other promotion-related elements. An in-depth exploration of these factors will yield a clearer understanding of the challenges female auditors encounter on their path to partnership and provide precise recommendations for future policies and practices. While this study primarily focuses on the Chinese audit market, its conclusions are applicable globally, as gender inequality issues are widespread in various countries and audit markets. Nevertheless, we encourage future researchers to explore institutional differences in partner promotions within public accounting firms in different countries or regions further. This will aid in pinpointing the specific reasons for gender equality disparities in various locales and provide more compelling empirical support for international gender equality initiatives.

There are some limitations in this paper due to data availability. Firstly, due to data constraints, this paper only observes the promotion process of auditors to equity partner positions. In the Chinese auditing market, some audit firms have salaried partner positions, and while these individuals are also referred to as partners, they do not hold equity in the firm. Their roles fall between auditors and equity partners, similar to director positions in other countries. Consequently, this study does not explicitly examine the promotion of these salaried partners, and it cannot ascertain whether female auditors are more likely to be promoted to salaried partner positions. This is an important aspect to consider when assessing the existence of the glass ceiling phenomenon for female auditors. Secondly, the data in this study is sourced from 40 securities-qualified audit firms, which do not represent the entire landscape of audit firms, particularly smaller ones. This implies that the research findings are somewhat limited due to sample selection. Different-sized and structured audit firms may exhibit variations. Therefore, the results of this study may have limitations when generalized to the entire auditing market. Lastly, we utilize data from the Chinese auditing market, and the structure of auditing markets differs across countries. Consequently, the research findings may not necessarily apply to auditing markets in other countries.

TABLE 10 Investor reaction to female promotion to partner.

	(1)	(2)	(3)
	Female = 1	*Female = 1&High_F = 1*	*Female = 1&High_F = 0*
UE	0.709***	0.719***	0.693***
	(12.80)	(9.05)	(9.02)
Promotion	0.008	0.010	0.007
	(0.66)	(0.57)	(0.40)
Promotion_UE	−0.281***	−0.482***	−0.065
	(−2.74)	(−3.57)	(−0.40)
Controls	Yes	Yes	Yes
Year	Yes	Yes	Yes
Ind	Yes	Yes	Yes
adj. R²	0.105	0.099	0.113
N	10,010	4,714	5,296
		Prob > chi2 = 0.047	

***, **, and * denote significance at the 1, 5, and 10% level, respectively.

Different cultures, regulations, and market conditions can lead to different manifestations of gender inequality issues. Therefore, researchers should exercise caution when applying the results of this study to auditing markets in other nations.

Despite these limitations, this research comprehensively explores female promotion to partner in the auditing market. The findings hold practical significance for public accounting firms and regulatory bodies. Public accounting firms should proactively establish transparent and equitable promotion standards, ensuring that gender does not become a barrier in the promotion process. Industry regulatory bodies should also actively promote gender equality and advocate for diversity and inclusion measures in the audit market. These actions could help increase the representation of females in leadership roles and, consequently, eliminate gender discrimination at the partner level in public accounting firms.

Data availability statement

Publicly available datasets were analyzed in this study. This data can be found at: https://data.csmar.com/.

Author contributions

HC: Conceptualization, Data curation, Methodology, Writing – original draft. JW: Formal analysis, Investigation, Validation, Writing – review & editing.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpsyg.2023.1321391/full#supplementary-material

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A qualitative study on the attitudes of women politicians toward their roles in politics: a case of Northern Cyprus

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Introduction: Politics is a mechanism of cooperation for the common interest of society. In this mechanism, each individual is expected to participate equally in the leadership and decision-making mechanisms. Women's participation in politics is essential for the spread of good governance and democracy. Globally, political participation is disaggregated by gender, with men's participation greater than women's. A lower representation of women in politics is also observed in Northern Cyprus. The attitudes or views of society and politicians may determine the political participation of women in leadership positions. This study examines the obstacles and determining factors that make it difficult for women to reach leadership positions even though their political role is increasing.

Methods: Semi-structured interviews were conducted with 21 female participants for this research. Eleven of them are female ministers in parliament and represent the three main political parties in the country. The remaining 10 female participants are also members of the central executive body of the three parties and the National Assembly.

Results and discussion: Women politicians believe that problems related to gender equality in politics prevent women from entering active politics and rising to leadership positions. Although there was no gender discrimination in Northern Cyprus means that women have gained equal rights with men in many areas, it was concluded that the traditional political culture keeps women out of politics.

KEYWORDS

barriers to political participation, feminism, leadership, political participation, female MPs

1 Introduction

It is well-known that gender discrimination is one of the most important debates in almost every culture. Depending on ideology, region, and period, women have limited rights, less experience in public life, and limited access to positions of power (Masad, 2020). The truth is still that although women are recognized as equal to men in many areas, they have not reached the same authoritative status as men in politics (Schrupp, 2017). However, the free and equal participation of all elements that make up society in the administrative process and their representation through the protection of their interests are among the most important concerns of a democratic society. It is one of the main elements of democracy that women have the same place as men in every aspect of political life, especially in the

decision-making mechanisms (Kenworthy and Malami, 1999). When political participation is broken down by gender, it is found that women's participation is lower than men's everywhere in the world. Several factors prevent women from participating in politics. In Northern Cyprus, some attitudes are consistent with this situation. Political leaders and members of society generally have biased views about how well women can participate in politics and govern the country. This originated from the attained roles for women in their society due to patriarchal structures in society and male-dominated politics (Hadjipavlou and Mertan, 2010). This study was conducted using a semi-structured interview structure with women politicians in the Republican Assembly of Northern Cyprus, the party councils, and central administrative councils of the three largest political parties in Northern Cyprus: Cumhuriyetçi Türk Partisi (CTP), Ulusal Birlik Partisi (UBP) and Halkın Partisi (HP). This research addresses the difficulties women politicians face in entering political life and the impact of gender inequality on their political life.

2 Literature review

2.1 Feminism

In this article, it is highlighted that it is usually difficult for women to rise to leadership positions even though they are active in political life by understanding the unequal gender dynamics through feminist theory. Feminism focuses on promoting women's position in society in terms of politics, economics, or legal rights (Tong, 2009). The important feminist theorists Bell Hooks and Estelle Freedman fought against the traditional norms and values as well as the sexist policies of male supremacy. They defined feminism as a movement to end gender inequality and devised solutions to women's problems. They argued that men and women are inherently equal and that both genders should work together to end gender discrimination (Hooks, 2000; Freedman, 2002). Feminism aims to protect women from oppression, exploitation, and discrimination regardless of race, language, religion, and nationality. In terms of gender, the distinction between public and private has emerged according to physiological characteristics. The core of this distinction is that women become pregnant, give birth to children, and care for and raise them. Men, on the other hand, use more physical strength to perform tasks that require power and endurance. Thus, the men became hunters, shepherds, or warriors; the women stayed at home, took care of the children, and did the housework. Over time, this division of roles has extended to all aspects of life. This is because while men are generally brave, strong, and independent, women are seen as passive, quiet, and caring (Vatandaş, 2007).

2.2 Differentiation in the role of women in public-private spheres

Feminism is generally considered to be an approach that opposes the prevailing patriarchal order in society and fights for women's rights to eliminate the problems women face in the private or public spheres (Kramer et al., 2019). This is because women's

actions or experiences in the public sphere-work spheres/politics-are not seen as valuable to policymakers because of their status in the private sphere–domestic responsibilities. The dilemma between public and private spheres reinforces gender inequality and results in the man who owns the public sphere dominating the women who are in the private sphere. Female representation, which came to the fore in the first wave of feminism, is an important touchstone. Under the influence of this wind, women in many countries have gained legal advantages such as the right to vote, the right to be elected, the right to education, and the right to work. These gains are important, but insufficient based on traditional relationships. Even though egalitarian laws have been enacted today, women's political participation has not yet reached the same level as men's (Wischermann, 2004).

Understanding the concept of leadership is also important for this study because it primarily examines the reasons why women in Northern Cyprus do not achieve the desired level of leadership. Although women and men have many of the same rights in society, they do not have the same power as men in the political system of society (Duner, 1999). Although women have participated in the Republican Assembly of Northern Cyprus, they have made little progress in gaining real political power and leadership positions. For this reason, in light of feminist theory, women throughout the world are kept in the private sphere and cannot benefit from the opportunities that the public sphere offers (Holmes, 2022). When political participation is broken down by gender, it becomes clear that women's participation is lower than men's everywhere in the world. In democracies, individuals with equal rights are expected to participate equally in administrative and decision-making mechanisms (Hunt, 2007). In the context of equality, representation, and participation, women are found to be a more disadvantaged group than men around the world (De Nicola, 2017). However, in various societies, political leadership positions are assumed to be suited for men. By recognizing gender as an issue, the aim is to reduce the prejudice about women's "unsuitability" for leadership roles. Women have struggled to attain leadership positions in positions of influence. According to feminist theory, gender equality should be achieved by society to influence all institutions. Leaders not only influence other people but at the same time help shape the entire society and institutions. They also promote gender equality when they perform their duties (Chin et al., 2007). Therefore, strong leadership can contribute to the success of government and weak leadership can lead to failures in government. Leadership is a process of agreeing on what to do and how to do it, and encouraging individual and collective efforts to achieve common goals (Yukl, 2006).

2.3 Women's representation in politics

According to the concept of leadership, leaders can inspire citizens in their societies and shape the political structure. Leaders should be confident, willing to make difficult decisions, and compassionate toward those in need. Women's equal representation and engagement in politics and public life are critical components of a democracy. A more resilient, stronger, and inclusive world can result from empowering women as

agents of change and decision-makers in the processes that shape their lives. Therefore, women's effective political participation is critical to contributing to improved human rights and sustainable development. For peace, democracy, and equality, women's perspectives and experiences must be considered on an equal footing with men's at all stages of the decision-making process (Mindzie, 2015). More women in political leadership positions benefit both women and society as a whole. Progress in policy areas is essential for economic growth and development when there are more women in political leadership positions. The case for women's empowerment is unassailable even without these findings. To address the problem of women's participation in political life, the "quota system" has been developed since the late 1980s (Galligan, 2006). Several governments around the world have afforded to increase women's political participation in policy-making mechanisms through legislative measures. Gender quota is a way to increase women's political participation by having a certain number of women in the decision-making mechanisms of political parties, local councils, and parliaments (Hughes et al., 2019). Not only do quotas promote demand for women's political participation, but they can also lead to changes in traditional norms, cultures, and behaviors in legislative assemblies and political parties (O'Brien and Rickne, 2016). These changes in political culture can reduce prejudice against women leaders, as people generally have a distrust of women's abilities in politics (Franceschet et al., 2012).

2.4 Historical overview of women's political rights in Northern Cyprus

The social structure of the Turkish Cypriot community is constantly and rapidly changing. Turkish Cypriot women are influenced by both Eastern and Western cultures (Mallinson, 2009). Women in Cyprus received the right to vote and stand for election many years after women in Turkey on December 5, 1934. The Turkish Family Law and the Turkish Family Court Law were considered the first steps toward equality for the Turkish Cypriot community. On May 28, 1951, the Turkish Family Law (Chapter 339) and the Turkish Family Court Law (Chapter 338) were passed in the Turkish Cypriot community and marked the beginning of the movement toward equality (Solsten, 1993). Following this first step, women received the right to equal education in 1952 and the right to vote and hold elective office in 1960, after the establishment of the Republic of Cyprus (Lisaniler, 2006). With the proclamation of the Republic of Cyprus (RoC) in 1960, women were given the right to vote and hold elective office, received education, and established organizations to protect women's rights. These developments accelerated the fact that women were more visible in the public sphere than in the private sphere (Mertan, 2000). The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) was declared on February 7, 1996 by the Republican Assembly of Northern Cyprus as a fundamental human rights convention and regulation for the protection of women's rights at the United Nations level. Through this convention, it would commit to provide equal economic, cultural, and political rights to men and women (Hadjipavlou and Mertan, 2019). International resolutions, conventions, and documents provide

an important sanctioning framework for public institutions and nation-states to take steps toward gender equality. The Government of Northern Cyprus has made these commitments under United Nations and European Union documents. Another international convention on gender equality, the Council of Europe Convention on Preventing and Combating Violence against Women and Domestic Violence, was opened for signature in Istanbul on May 11, 2011 to combat violence against women and domestic violence. With the ratification of this Convention, called the Istanbul Convention for short, by the Republican Assembly of Northern Cyprus on December 5, 2011, the Assembly declared that it would take responsibility for preventing violence, protecting victims, and bringing perpetrators of violence to justice and that all members of society, especially men and boys, must change their attitudes (Mertan, 2000). Turkish Cypriot women in the northern part of Cyprus work outside the home, as is the case in other parts of the world. Although starting a business is good for women's self-confidence, financial independence and the opportunity to contribute to the production process can also bring some challenges. One of the biggest problems for working women is taking on domestic responsibilities at the same time. This burden is exacerbated, especially for working mothers. As a result, it becomes extremely difficult or sometimes impossible for women to participate in the social and political environment (Onuş, 2018). Based on the feminist perspective, human activities are divided into private and public spheres. For example, women are responsible for productive and domestic work such as housework and child-rearing, while men dominate public life, which includes a wide range of activities from paid work to politics. While the activities associated with women are seen as women's natural duties rather than work, those performed by men are seen as relatively more valuable. This has led to the exploitation of women's work in the private sector and their exclusion from the public sector, or even if they are represented there, they play a subordinate role (Tombak and Topdal, 2014). The exclusion of women from the public sphere, especially politics, underscores male domination in Northern Cyprus. Although women have gained equal rights with men in various fields, they have not been able to achieve leadership positions in the political structure of society (Yirmibeşoğlu, 2008).

2.5 Current situation of women's participation in political life

Attempts have been made to actively shape the role of women in Northern Cyprus, but the number of female deputies in parliament is still lower than that of men. The number of female MPs is 11, while the number of male MPs is 39 (KKTC Cumhuriyet Meclisi, 2022). Northern Cyprus has had neither a female president nor a female prime minister. Following the assemblies of the Republic of Cyprus in 1960, the Turkish Federated State of Cyprus from 1975 to 1983, and the proclamation of the Turkish Republic of Northern Cyprus (TRNC) on November 15, 1983, there have been a total of 22 female deputies during the 50 years of these three periods. Since the establishment of the Turkish Republic of Northern Cyprus, two female deputies have served in the Ministry of the Assembly of the Republic. There was no female minister in the Council of

Ministers formed in 2014. From 2018 to 2022, the Council of the Republican Assembly of Northern Cyprus could have only one female member. Another important debate in Northern Cyprus concerns the office of mayor in twenty-eight municipalities, which has been reduced to eighteen by 2022, but there is still no female mayor in Northern Cyprus. The number of male politicians in each election from 2014 to 2022 is higher than the number of female politicians for the membership of the municipality associated with the local administration. The number of male and female members of the municipality is one hundred and eighty-eight and ninety-two, respectively. The last important position is the mukhtar, which is the head of a village or district, and as with other political positions, the number of female mukhtars is less than the number of male mukhtars, with a large difference in numbers. From 2014 to 2022, the number of female and male heads is sixteen and two hundred and twenty-six, respectively. With the amendment of the Law on Political Parties in 2015, the 30% quota for nominated candidates came into force. Although the parties draw up the lists according to the legal regulations, this quota is not reflected in the election results (Tüccaroğlu, 2012). From 1990 to 2013, there was not much difference in the number of female deputies. In 1990 and 1993, the number of female deputies was only two. In 1998 and 2003, the number increased to four female MPs. In 2005, however, there were only three. In 2009 and 2013, the number rose again to four female deputies. In 2018, it peaked with nine female politicians entering parliament. For many years, there was criticism that the number of female deputies in parliament was low. Even though the number of female deputies in the 50-seat Parliament of the Republican Assembly of Northern Cyprus in 2022 is eleven, it is still an unexpected figure (Orakcioğlu, 2022).

3 Materials and methods

3.1 Research design and participants

The focus of this study was on qualitative research to gain in-depth knowledge and collect primary data on the political role of women in Northern Cyprus. To obtain open-ended responses from the participants and to capture their attitudes, feelings, and behaviors, semi-structured interviews were conducted with female members of the parliamentary executive bodies and assemblies of the three political parties, CTP, UBP, and HP, as well as with ministers of the Republican Assembly of Northern Cyprus. A total of twenty-one female politicians participated in the interviews. Eleven of them are female ministers in the Republican Assembly of Northern Cyprus as members of their parties CTP, UBP, and HP. Ten participants are female members of the central executive body and the National Assembly in CTP, UBP, and HP. Two participants are members of the party council of CTP and the other two participants are members of the central executive committee of the same party. While one participant is a member of the central executive committee of UBP, two participants are members of the party council of the same parties. While one participant is a member of the central executive committee of HP, two participants are members of the party council of the same party. Before starting the semi-structured interviews, it is important to note that the Ethics Committee of the European University of

Lefke approved that the interview questions are impartial and formulated. Based on this approval, research data collection began on December 9, 2021, and ended on April 13, 2022. Due to the intensity of their work pace, participants were interviewed in person at a time and place convenient to them, and meetings were even held with some MPs in Parliament. The length of the interviews varied depending on the participants' responses. With the consent of the interviewees, a voice recorder was used and notes were taken to create a transcript. The data from the conducted interviews were categorized according to the questions collected under the headings related to the topic and analyzed by the researchers.

The demographics of the participants were included in the study based on their educational background and work history. One participant is a high school graduate, six participants have a doctoral degree, seven participants have a master's degree, and the other seven participants have undergraduate degrees. They come from different professional backgrounds. The professions of most of them, e.g., teachers or lecturers, doctors, and lawyers, belong to professional groups due to the reduction of the gender gap in education in Northern Cyprus. One participant is a civil servant in the field of agriculture and currently works in the Ministry of Agriculture in a managerial position. The agricultural field is mostly known as a male domain, but this suggests that working in these fields does not cause women to neglect or postpone their household duties, hinder their children's education, or disrupt daily family life. In February 2002, a law transformed the Department of Women and Family Affairs into the Department of Women's Studies. This law guarantees that women receive and improve their rights in terms of equality from the government (Lisaniler, 2006). Business owners are also generally perceived as men, but five participants run their businesses, both in their fields and started by their families. The other demographic information relates to the age of the participants. One participant is between 25 and 34 years old. Eight participants are between 35 and 44 years old and the other eight participants are between 45 and 54 years old. There are only four participants in the 55–64 age group. This shows that the participants are young women who can stand on their own feet after reaching a certain age after obtaining their profession. In terms of marital status, the majority of participants, sixteen, are married and have household responsibilities.

3.2 Data analysis

This study is based on a thematic analysis (Lochmiller, 2021) involving four steps: First, the entire transcription is reviewed to get an overall impression of what the female politicians said. The second step consists of rereading the statements to identify the units of meaning, taking into account the phenomena of interest. In this stage, common themes and codes were also identified and categorized by recurring key terms. In the third step, all meaning units are reviewed to gain deeper insight into the phenomena of interest, and in the final step, the transformed meaning units are synthesized into a consistent statement about the experiences

of female politicians (Eysenbach and Köhler, 2002). The themes are distinct from each other and have the property of explaining the data by forming an inherently meaningful whole. The themes were chosen to be organized originally and not to contain the personal opinions of the authors while specifying the themes to increase the subjectivity of the study. Since it was decided to keep the identity of the participants anonymous and confidential for ethical reasons, the participants were coded in the transmission of the results as P1, P2,..., and P21 in the transmission of the results.

The purpose of this study is to examine why the country's traditional political culture keeps women out of the political arena and away from leadership positions, even though there is no visible gender discrimination in Northern Cyprus. This study is mainly about women's political participation, and it aims to show why female representatives still cannot reach leadership positions in politics, although it is not difficult for women to participate in social life in Northern Cyprus. This article is useful and interesting, especially given the challenges women face and their underrepresented status in the political sphere. This study contributes to the literature and policy by providing new empirical evidence of gender inequality in politics in the context of Turkish Cypriot women politicians. It also critically and comprehensively examines the difficulties, struggles, and experiences of women politicians living on the island as they attempt to enter politics. One of the limitations of the study is that male politicians could also be included in the survey to provide more comprehensive information and compare the responses of female representatives. However, the study intends to be based on the opinions of female politicians. Considering the data collection method and reliability of coding, there is another limitation of the study. Reliability is related to the repeatability of research results and to the question of if the study can be conducted once again after the first one, and whether it would yield the same results. The consistency with coding segments placed in the same category is referred to as reliability. In addition, the reliability of the coding criterion means that the findings and interpretations of the research are the product of a consistent process by which the findings obtained would be as clear and reproducible as possible (Compton et al., 2012). This study contains controversial questions due to the semi-structured data collection method. This has led to the collection of subjective data that is prone to bias. Even if the same work is repeated with the same people, the responses will vary because there are questions that can be raised for discussion. At the same time, there are two types of reliability of coding: inter-coder reliability refers to consistency between different coders, while intercoder reliability refers to consistency in how the single researcher codes data at multiple points (O'Connor and Joffe, 2020). In this study, intra-coder reliability is used that represents code entered by a single coder and this reduces the reliability of the study. Since the analysis may need some subjective judgment to be shared between researchers. As a recommendation and for further studies, the inter-coder reliability can be endeavored for other relevant cases to contribute to the literature.

4 Results and discussions

4.1 The reasons for difficulties faced by women politicians

The interview questions are divided into two groups, which are asked to the participants using the semi-structured interview technique. The reasons for the difficulties faced by female politicians in participating in politics and the possible solutions proposed are the focus of consideration of the content of the questions. However, since focusing on the entire set of questions is beyond the scope of this article, it will mainly focus on the causes of the problems faced by female MPs when participating in politics. Among the questions in the first group, one of the most important questions, in particular, is "What are the opportunities and challenges for women's political participation in Northern Cyprus?" As shown in Table 1, there are five codes under the theme of "opportunities": "self-improvement," "self-confidence," "modern structure of our society," "access to education and economic independence," and "gender quota." One participant elaborates on the self-improvement of individuals through participation in politics. She (P1) asserts: *"Self-development is an opportunity by taking on a social duty"*. Based on her statement, women's desire to improve themselves is an opportunity. Women and men are at the same level of self-development in Northern Cyprus. Women can make their own educational and professional decisions just like men. In other words, they have the opportunity and access to education to better themselves. Self-development is an opportunity to take on a social task and improve oneself in certain subjects, in a profession, or career. This means that women and men in North Cyprus are at the same level of self-development. The same participant also addresses women's self-confidence as an opportunity. She points out women's domestic duties, but this can be seen as an opportunity, as it represents women's ability to manage work, domestic duties, and politics together. Women's participation in politics and fulfilling domestic duties at the same time can cause anxiety, but this can also be an opportunity because it shows that women can manage all these tasks and increase their self-confidence. The codes "modern structure of Turkish Cypriot society" and "access to education and economic independence" show that women and men in Northern Cyprus have equal opportunities when it comes to participating in education and employment. Three participants identify respectively: *"No one can say to the person who will join the politics you cannot join"* (P6), *"Women can have professional life by support of their family members for their domestic responsibilities"* (P9), and *"The social and cultural structure of Turkish Cypriot society as an opportunity and this structure does not cause any problems to women"* (P12). According to these participants, young girls or women can participate in educational life and achieve their economic freedom without any problems, just like men. Family members are supportive due to the democratic family structure in Northern Cyprus. Women's access to educational and business life is also quite good, which enables women to participate more in public life. The democratic structure of the Turkish Cypriot

TABLE 1 Existing opportunities and challenges for women's political participation.

Thema	Code	f
Opportunities	Improving self	1
	Self confidence	1
	Modern structure of our society	3
	Access to education and economic independence	3
	Gender quota	11
Challenges	Lack of encouragement by their political parties	4
	No opportunity for women political participation in TRNC	4
	Traditional state perspective and male dominance	8
	Domestic responsibilities	14

community does not make it difficult for young girls and women to participate in public life. No one tells someone who wants to be involved professionally or politically that they cannot. Young girls and women have the freedom to decide on their profession or get involved politically. Finally, most respondents (eleven participants) agree with the idea that gender quotas are the most important and only opportunity for women in North Cyprus. Gender quotas have been instrumental in increasing the number of women in politics and in the decision-making mechanisms of political parties, local councils, and parliaments. The higher number of women can lead to greater representation of women and give them more acceptance in society. Increasing the number of women in politics can also help promote other women in society. Participants also emphasize that gender quotas are not intended to meet quotas, but to raise society's awareness that women should participate in politics with their thoughts, principles, and attitudes.

In the second part of the question, participants mainly indicate that the challenges to women's participation in politics are greater than their opportunities. There are four codes related to "challenges" as indicated in Table 1. These are "lack of encouragement from political parties," "no opportunity for women's political participation in North Cyprus," "traditional state perspective and male dominance" and "family and work commitments." The first two codes, "lack of encouragement" and "no opportunity for women's political participation in Northern Cyprus," originate from the political difficulties faced by women representatives, both within their parties and in government in general. According to the participants, the active position of women in political parties should be strengthened first and foremost, and girls should be educated in political parties from a young age to gain knowledge about politics. Women should not only be used to fill gender quotas in the two political parties or other political bodies of Northern Cyprus. The third code is that the government in Northern Cyprus has a traditional state perspective, namely a patriarchal structure that makes it difficult for women to

participate in politics. Turkish Cypriot society lives in a democratic country, but in the practice of the democratic government of Northern Cyprus, the representation of women in politics is not easy which shows there is a male dominance structure in the participatory decision-making mechanisms in politics. This is also due to the aforementioned separation of public and private spheres in society. The roles that women occupy in society, such as domestic responsibilities, make it difficult for them to be more involved in politics. Therefore, the male-dominated political structure leads to the exclusion of women in this environment. Participants also cite that the public's expectations of a woman entering politics are higher than a man, for example, because more qualifications are required. There is prejudice against women being able to be active in politics as men, and women are expected to be more educated and qualified than their male counterparts. The participants are primarily convinced that this problem is due to the traditional political culture in Northern Cyprus, as shown in the fourth code. Although women have the same rights as men in many areas, they do not have the same authoritarian status as men in the political structure of society. The sociocultural structure of their society prevents women from actively participating in political life. Political discussions are also held in male-dominated areas such as village cafés or sports clubs, and women have always assumed the role of wife or mother in their homes.

In the context of male dominance in the political structure, the study of Erbilen et al. (2021) focuses mainly on the dilemma between the private and public spheres, which has been at the center of two centuries of feminist literature and political struggle. The dichotomy of public and private is often used to construct, control, limit, exclude, and oppress gender and sexual differences to preserve traditional patriarchal power structures. This dichotomy also forces both genders to assume certain roles within the patriarchally defined boundaries of the public sphere. Although women emerge as important actors in social life, they are rarely considered political leaders. The main problem with this distinction is that while women have the same rights as men in many areas, they do not have the same authoritarian status as men in the political or economic structures of society. Although they were allowed to participate in the Republican Assembly in Northern Cyprus, they have made little progress in gaining real political power in many countries because participants support the notion that there is a male-dominated structure to politics in participatory decision-making mechanisms. When women's household and childcare responsibilities are added, women's representation in politics becomes more difficult (Bedioglu and Batman, 2014; Maguire, 2018). Some participants specify in their statement: *"We are living in a democratic country. but when it comes to practice in terms of representation of women in politics, women face difficulties in decision-making mechanisms due to traditional male dominance structure in society and in politics"* (P9), *"Women's home, family, and child responsibilities are main difficulties that need more effort. the state has nothing to do with this situation"* (P12), and *"If women have family responsibilities, it is much more difficult to be active in politics because it takes time and there is no private life. This is not a problem for men but it is for women because women undertake these responsibilities due to male-dominant structure"* (P16). Politics is therefore seen as a male preserve, and even when women do

vote, they inevitably make their electoral decisions along the lines of their fathers, husbands, and brothers. The consideration that the places where politics is made are suitable for men entails the idea that politics is men's business. Because of the dilemma between the private and public spheres, women are constrained by domestic duties. They are expected to marry, fulfill their domestic duties, and raise their children. With these duties, women are removed from the public sphere (Fraser, 1990).

As mentioned in the study by Erbilen et al. and Seltzer et al. (1997) also point out the difficulties for women who want to participate in politics. They address the male-dominated state perspective and women's domestic responsibilities. Based on the male-dominated state perspective, women should work harder to create a negative perception in the media or to convince those who do not want to vote for them. In Northern Cyprus, however, sports clubs, pubs, and coffee houses are the preferred venues for direct contact with voters. These places cause difficulties for both voters and women candidates, as propaganda activities in these places are carried out either in the evenings or on weekends. The physical inadequacies of the preferred places and the male perspective of the users of the space are effective. Based on the feminist perspective, the division of the public and private spheres in society can also cause this difficulty (Altindal, 2009). The participants indicate that the traditional division of labor between men and women has an impact on women's political life. In the private sphere, domestic duties are women's tasks, and managing the house is men's task. The social division of labor keeps women trapped in the private sphere and pushes them into a passive position. It leads to the man becoming the subject in the public sphere. Even when women are politically engaged in the public sphere, they still bear the responsibility for their homes. Looking at the political history of the country, it is clear that women are very rarely represented in the political scene as mukhtars, mayors, party leaders, and members of parliament, and are not perceived as doing only men's work.

One of the most important questions is about the role of women in key executive and local government positions in Northern Cyprus. The first part of the question discusses the reasons why women do not occupy key leadership positions in political parties, although there are women in parliament. As shown in Table 2, the topic of the first part of the question is "reasons for the absence of women in key leadership positions" and the code is "male dominance in key leadership positions." Participants emphasize that the number of female MPs increased from nine to eleven in the last election in 2022 in Northern Cyprus. This is a welcome situation, even if the desired number is not reached. However, even though women are represented in parliament, it is still difficult for women to obtain important leadership positions in political parties. All participants agree that this is due to the patriarchal structure (male dominance) of society and politics in Northern Cyprus. The second part of the question is about why there is no female mayor in local government in North Cyprus. All participants agree that the lack of female representatives in the local government is a major problem because women have more detailed-thinking personalities than men. As mentioned in Holman's (2017) study, women can be more successful in key leadership positions and local governments. Participants explain this by the recognition of politics as a man's job, the masculine structure of the places where political work is

TABLE 2 Key executive and local government positions of women in TRNC.

Thema	Code	f
Reasons for lack of women in key executive positions	Key executive positions male dominance	21
Reasons for no female mayor in local governments	Local government male dominance	21

done, the traditional division of labor between women and men in the Turkish Cypriot community, and the greater commitment of women to politics. Although women and men seem to have equal rights in society, the number of female local representatives in Northern Cyprus is very low compared to men, and to date, there has been no female mayor.

4.2 Impact of traditional values and social/cultural norms on political participation of women

The impact of traditional values played an important role in discussing the difficulties women face in participating in politics. For this reason, participants were asked the question, "Do traditional customs, social and cultural norms affect the role of women in politics?" As can be seen in Table 3, culture and traditional values have a great influence on the role of women politicians. According to the participants' responses, the theme is: "Impact of cultural norms on women's political participation." Only one participant believes that cultural norms are decreasing. According to this participant, traditional norms are decreasing compared to the past, and taboos about the role of women in society are gradually being broken. Young girls and women today can do what they want more easily than in the past. However, the remaining majority of participants agree with the great influence of traditional values and cultural customs on politics. As also mentioned in Thanikodi and Sugirtha's (2007) study, women's political participation is limited due to traditional values. Domestic responsibilities are placed on women's shoulders, making it difficult for them to participate in politics. Therefore, most participants emphasize that the patriarchal structure of society in Northern Cyprus hinders women's political role. Some of them argue: "*There are conservative values in political parties due to male-dominated structure... According to the male-dominated political structure, domestic responsibilities are accepted as a main obstacle for women to be elected as a mayor*" (P3), "*Turkish Cypriot Community has a male hegemony in politics and this does not allow women to have managerial positions... I believe women are more successful in local governments due to their detailed thinking structure but male dominance political structure hinders this*" (P6), and "*Women do not have key executive positions in political parties and local governments due to the male-dominance structure of politics*" (P10). To emphasize the masculine structure of politics, they point to the acceptance of politics as men's work and the places where political

TABLE 3 Impacts of traditional customs, social and cultural norms on the role of women in politics.

Thema	Code	f
Impacts of cultural norms on political participation of women	Decreasing the impacts of cultural norms	1
	Cultural norms affect the role of women	20

TABLE 4 Feeling social pressure as a female politician.

Thema	Code	f
Feeling social pressure as a female politician	Yes	9
	No	12

TABLE 5 Having politician family members.

Thema	Code	f
Having politician family members	No information about having politician family member	1
	Have politician family member	10
	Have not politician family member	10
Role of politician family members on women political participation	Family visibility depends on the individual	4
	Prejudices about capacities come from family members	4
	Easier visibility for women having politicians in their families	15

work is done, such as coffee houses, sports clubs, or taverns. The consideration that these places are suitable for men brings the idea that politics is men's work. Because parties are male-dominated, women are often excluded from men's decision-making processes.

One of the most crucial questions to capture society's image of women as politicians is whether or not they feel social pressure. As shown in Table 4, nine participants respond "yes, social pressure" on the topic of social pressure as a female politician. They state that they feel pressure because of the patriarchal structure of society. The roles assigned to women, such as domestic duties, mean that they do not have time for politics. Similar to the study by Paxton et al. (2007), participants show that politics is a male profession and women cannot adequately represent the public like men. The participants relate this issue to the patriarchal structure of society to explain the pressure they feel. The remaining twelve female participants confirm that they do not feel social pressure. In their opinion, the reason they do not feel pressure may be that they live in a democratic family and country or that they are free to work in the same way as men.

The next question refers to whether the participants have politicians in their family members to discuss the traditional structure of politics in Northern Cyprus. As shown in Table 5, one participant did not indicate whether she has a politician in her family. Ten participants indicated that they have a politician in their family, and the remaining ten people do not. The second part of the question asks whether the presence of a politician in the family increases the visibility of women. There are three codes under the theme "the role of family members of politicians on women's political participation". These codes are: "visibility in the family depends on the individual," "biases about skills come from family members," and "easier visibility for women who have politicians in their family." Four participating representatives emphasize that women's visibility depends on the individual. According to these four participants, women may have politicians in their families, but that does not mean they will be visible and successful no matter what. Being visible, they argue, is related to the person. The person should be visible in politics because it is related to their education, knowledge, attitude, and public appearance. The next code is "Prejudices about abilities come from family members." While two participants mention the code "family visibility depends

on the person," they also emphasize that this situation can lead to prejudice against women who are politicians among their family members. Participants state that if there are women politicians in their family, they may have evolved because of their family members, but at the same time, this may lead to prejudice that they can be more easily recognized because of their family members. Participants disagree with this situation. If people have attained a position, it is because of their efforts and abilities, not because of their family members. Even the participants who argue that getting to a place because of family ties does not bring lasting success point out that this prejudice is unfounded. Finally, according to most participants, recognition and visibility are easier when one of their family members is a politician. These participants indicate that this is beneficial for both recognition and being a role model in politics at home. Thus, a new member who comes from a family with a political background has more political experience. In a small community, it is easier for people who have politicians in their family to make their mark because people know each other best.

4.3 Improvement of the position of women in politics

So far, the study has discussed the perceived reason for women's participation in politics in Northern Cyprus based on their views and thoughts of them in interviews. To conclude, the participants were also asked about possible solutions to the problems of women in politics. One of the most important questions is: "How can the role/position of women in politics be improved? What have you personally done to achieve this?" As can be seen in Table 6, the theme for the first part of the question is "ways to improve the role of women in politics," based on participants' responses. There are five codes for this theme: "the party's attitude improves the role of women in politics," "support from society," "laws on women's rights should be improved," "self-confidence," and "women should be motivated in politics." One participant emphasizes the importance of the party's attitude toward the role/position of women in politics. If the necessary arrangements are made within the party, the role of women in politics will be strengthened so that women's chances of being elected can increase. She also points to the importance of gender quotas, which can increase the number of women in

TABLE 6 Ways to overcome the challenges to women's political participation.

Thema	Code	f
Ways to improve role or position of women in politics	Attitude of party improves women's role in politics	1
	Support from society	1
	Laws on women's rights should be increase	3
	Self confidence	7
	Women should be motivated in politics	11
Things have been done personally	Did nothing personally	2
	Personally encouraged women to improve women's role in politics	7
	Personally attended to gender training and activities to encourage other people	13

political parties, which in turn can encourage other women to become involved in political parties as well. The other participant emphasizes public support to improve the role of women in politics, but this is not enough, and women in general need to be properly motivated to be active in politics. If society encourages women and wants to see more women in politics, women may become more enthusiastic about politics. As mentioned in the study by Hooks (1986), the participant in question points out the importance of society's solidarity against male domination. With solidarity, any problem that affects women in society can be addressed more sensitively. This will also help to strengthen women's power and they can overcome problems more easily. The other three participants believe that the role of women in politics can be strengthened by passing laws on women's rights. The state should create new legal regulations to facilitate women's social, economic, and political life. With these laws, women's position in society and politics can be strengthened, and women can increase their positions in politics in the long run. Participants assert: *"Executive authorities, ministers, etc. should be trained to prepare efficient laws for women's rights"* (P4) and *"To increase political participation of women, more laws related to women or social issues should be passed"* (P14). According to the participants, women's rights can be protected through various laws, and women can prove themselves in politics and increase their credibility by appearing less vulnerable in the eyes of society. In addition, women can be very independent and take care of their family members, but they may face problems at certain times due to their household duties. If the necessary laws are enacted, the problems against women can also be ended and women can consolidate their place in politics. For example, the state should provide a kindergarten for women with children and nursing homes to care for the elderly. The necessary legal regulations should be made to solve the problems of women with such tasks (Dubler, 2003).

As shown in Table 6, seven participants mentioned the importance of having "self-confidence" to prove themselves in politics. However, from a feminist perspective, a male-dominated

society has weakened women's self-confidence. Self-confidence, which is seen as a promise of liberation, is essential for feminist political empowerment because it conveys the courage to stand up to oppressive structures and change them. The feminist concept of self-awareness consists of the idea of respect for the individual "I" (Dillon, 1992). Therefore, participants believe that if a woman continues to improve herself in all circumstances, no matter what her profession, that success will continue when she enters politics, and that this may lead her to perform more easily in politics. For example, women are in many different professions, such as surgeon, property manager, or engineer, meaning women can succeed in all areas of society in terms of education and careers. Politics is also one of the areas in which women can be successful. Political parties can pave the way for women by providing them with a suitable environment for decision-making mechanisms to boost their self-confidence. This can also prevent women from lagging behind men. Finally, on the topic of "ways to improve the role or position of women in politics," the code formulated by eleven participants is "women should be motivated in politics." Some of the participants specify: *"As women in the party, we are constantly fighting for the establishment of various mechanisms within the party"* (P3), *"Political parties should organize different events for women to increase awareness on the role of women in political"* (P8), *"Women's organizations in parties should be raised. Men and women should be programmed the same"* (P12), and *"Hardworking and social awareness in political parties can improve the role of women in politics… Struggles in political parties for the development of women's freedom can increase their position in politics"* (P16). According to most participants, women need to be motivated to be more active in politics. Women should be encouraged to join a political party at a young age to learn about political structures and gain experience in politics. They also stress the importance of raising public awareness through training on gender issues. Educating people about gender awareness at a young age can develop a mindset based on gender sensitivity that can change perspectives. Because the only way to give shape to cultural values is through public education and awareness. Participants mainly agree our society needs gender studies for both genders men and women together. Gender studies can bring up many issues related to women's difficult situations or problems to increase awareness. They also argue education should be started from a young age because the mentality of the male-dominated political system is only changed by education. If children can have awareness and sensitivity about disadvantaged groups of people, especially women, from a young age, the risk of society's gender inequalities can be reduced (Atchison, 2016).

The second part of the question asks participants about the things they personally do to improve the role or position of women in politics. As can be seen in Table 6, the theme is "things done personally" based on the participants' responses. There are three codes for this theme, namely: "have personally done nothing," "have personally encouraged women to improve the role of women in politics," and "have personally participated in gender training and activities to encourage others." Seven participants emphasized encouraging women to participate in politics above all else. They have tried to verbally encourage women to participate in politics. This is because when women in politics share their experiences with other women, they can be

encouraged and accelerate their participation in politics. Finally, the majority of participants personally encourage other people, especially women, to participate in gender education and activities. According to these participants, it is easier to set an example for future generations who have more experience with women's rights or the importance of women in politics. They make great efforts to raise awareness in their respective political parties by organizing various activities about gender studies and the development of women's role in politics. They also focus on the importance of public awareness, which can be raised through projects, seminars, or especially training on gender awareness. The mentality of society regarding gender roles needs to change to increase the visibility of women in the public sphere. Above all, participants emphasize the importance of educating children about gender equality at a young age. In the school system, boys are still encouraged to play soccer and girls with dolls. In their opinion, it is very difficult to solve this problem with this type of education system. According to the participants, it is easier to set an example for future generations who have more experience with women's rights or the importance of women in politics. They try very hard to raise awareness about their respective political parties by organizing them differently.

5 Conclusion

The main purpose of this article is to highlight the low representation of women in the political arena in Northern Cyprus and to examine the main limitations of Turkish Cypriot female representatives. Based on semi-structured interviews, the views of female MPs on the impact of gender inequality on their political life were explored by overcoming all factors that exclude them from politics. The patriarchal system was highlighted to explain the power interactions between men and women based on the feminist perspective. Women were kept out of public life by maintaining the public and private spheres. In general, it was found that there are various limitations due to the specific conditions in Northern Cyprus. The result of this research is that traditional values related to gender are the biggest obstacles to women's political participation. Women who want to actively participate in politics are faced with certain expectations that are never required of male candidates. First of all, a woman is required to prove herself to all voters in terms of education, social status, and economic income level. Based on the public and private dilemma, the pressure to manage domestic duties and politics together leads to problems for women. In politics, there are no fixed working hours, such as participating in propaganda activities, traveling, and lengthy meetings. Therefore, women have little time for their personal lives, and they rely on the support of other women in their immediate environment. If they feel they do not receive adequate support, they stay away from active politics and wait until their children are grown to relinquish some of their responsibilities. The times and places where politics is done are also not suitable for women and pose problems for them. In this context, women try to exist as assistants who address male politicians instead of making policies themselves. Women need to free themselves from these positions and meet in an environment where they can share their ideas about the country's problems, engage in qualified active politics,

and conduct self-confident and awareness-raising activities. These meetings will motivate women to participate in politics. Women's participation in politics is absolutely necessary to change traditional gender roles and make women more visible in the public sphere. In this way, it will be easy to speak of a true democracy in which all parts of society are equally represented.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving humans were approved by European University of Lefke Ethics Committee with the number ÜEK/65/01/09/2122/01. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

NA: Writing – original draft. EO: Writing – original draft.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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"There are lots of new faces this year… I'm not entirely sure when I became one of the old ones": a psycho-ethnography of the self at #PoWESconf five years in

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Conferences have been discussed as spaces for academic work to extend beyond the confines of one's institution, fostering environments of collaborative working, learning, and social bond-making. The British Psychological Society's Psychology of Women and Equalities Section hosts an annual conference, attended by feminist scholars from around the world. Drawing on auto-ethnography and psycho-biography, this paper presents a 'psycho-ethnography of the self' with reflections centred on: 'Scholarship', 'Feminist Praxis'; '(Safe) Academic Spaces'; and 'Positioning the Self'. This article contributes to a small, but growing body of literature critically reflecting on conferences as spaces for personal and professional development and academic growth.

KEYWORDS
conferences, feminist praxis, positioning the self, PoWES, psycho-ethnography, scholarship

1 Introduction

Conferences offer a brief and unique 'escape' from the commutes, stuffy offices, and hours of gazing at dual computer screens most academics endure on a daily basis. They become spaces where colleagues and collaborators from different institutions – and even different countries and disciplines – come together to meet in person (sometimes for the first time, despite having worked and, dare I say, even published together beforehand), plan future research, solicit feedback prior to submitting papers for publication, meet potential new collaborators, and in doing so often form strong professional and personal bonds with one another. There is something quite formulaic about conferences. They are, of course, a 'performance' in every sense of the word: Academics usually go armed with their most recent work and give it an airing to their peers and their competitors with feedback being expected – be it positive, negative, or on occasion hurtful (see Bell and King, 2010; Ford and Harding, 2010). Thus, conferences can be described in a Butlerian way whereby the performance is socially constructed and adaptive (Butler, 1988) or in-line with Goffman's (1959) theory of performances having a 'front stage' where the performers are 'on' (i.e., the conference talks and times for networking) and a 'back stage' where the performers are 'off' (i.e., the spaces in which delegates are alone and reflect on their performance). Nonetheless, there is an importance placed on conferences by academics, due not only to their scholarly nature to facilitate and

foster new research, but also because of their ability to bring together academics with similar outlooks and research areas and facilitate cross-institutional and increasingly, cross-disciplinary collaborations, networking, mentorship, and if you are lucky enough, even friendship (see Ford and Harding, 2008; Mair and Frew, 2018).

Many academics will recognise the importance of conferences for academic engagement which goes wider than colleagues with whom they share offices and the students they see each year on the courses to which they contribute. Though in the present era of academic austerity, there is evidence to suggest researchers are becoming more discerning over their choice in conference attendance (see Edelheim et al., 2018). Some conferences are more mechanical than others – whereby they follow a routine, and often long-recycled style of welcome, parallel streams, poster galleries, networking sessions over (cheap) wine and mealtimes, and a closing keynote (see Ford and Harding, 2008). As McCulloch (2018); p. 53 wryly quips: "*No matter how many catastrophes the organisers think have occurred during the course of a conference, as long as the conference venue does not explode or self-combust, the delegates will assume that everything happened as it was planned.*" Conferences often have an organised chaos feel about them, but somehow The British Psychological Society [BPS] Psychology of Women and Equalities Section [PoWES] annual conference manages to contain all the so-called required elements, but is different in a very positive way. The conference – now with the more recent additions of parallel workshops and engaging symposia – is a three-day event which simply does not have that same mechanical feel to it, as it is more relaxed, with an emphasis on inspiring conversation and debate, rather than harsh critiques of work presented, and so delegates place an importance on critical perspectives and a global, intersectional, feminist agenda. The PoWES annual conference is nurturing, wholesome, and supportive. It is just as welcoming to new members, as it is to those who have been in attendance since its inception. These feelings have been shared widely by the members and delegate (see Capdevila et al., 2019; Donnelly et al., 2022), but the secret behind as to why this is, remains unknown or perhaps simply un-nameable (see also Bowes-Catton, 2023). A sound guess would be that it is the type of members who engage in a feminist community such as PoWES, which make the conference feel so different to most others. What the PoWES conference offers is greater than a sharing of academic knowledge, but rather a vital space for critical reflection, mentoring, and both personal and professional growth. Networking is also important, but it follows a model which is not based on simply how useful someone can be to the development of your own research, but rather is based on common interest, camaraderie, and on building strong systems of support. It is relaxed, over informal meals, walks in the grounds, and open mics, and not over black-tie dinners, with grand speeches from 'the pale, male, and stale' of academia. These supportive networks are there to ensure all those who are involved are provided with the scaffolding they need to continue in their academic careers; the advice they require to overcome difficulties and challenges in their current circumstances; and to re-energise ideas to ensure that within academia, Psychology, and in all aspects of our lives, the feminist agenda for equity in rights and freedoms are pushed to make real, tangible, national and global change.

Conferences themselves require a degree of psychological labour to be undertaken whereby delegates are in essence, complicit in the construction of a grand performance (i.e., attending, presenting, and networking), where they each have a role to enact – a role which may

change depending on their notoriety amongst the(ir) academic community, the stage of their academic career they are in, and also their role at the conference (i.e., as conference Chair, as a keynote, as a session chair or symposium convener, as a speaker, or as an attendee). There is an etiquette to conferences which, although abided by, can be psychologically taxing (see Ford and Harding, 2008; Edelheim et al., 2018; Mair and Frew, 2018). Scholarship on the experiences people have at conferences remains fairly limited and analyses of delegates' expectations, attendance, and the subsequent outcomes of conference attendance is a relatively unexplored part of the global academic endeavour. Though where it does exist it focuses on their actual utility and potential within academia (Nicolson, 2017; Benozzo et al., 2019); knowledge production and academic impact (Shalom, 1993; Rowley-Jolivet, 2004; Gross and Fleming, 2011; Ioannidis, 2012; de Leon and McQuillin, 2018); academia-based anxieties (Ford and Harding, 2008; Bhandari, 2017); and body language exhibited by delegates (Bell and King, 2010). Literature which uses a gendered lens to analyse academic conferences is generally lacking, and therefore there is limited scholarship available from the last few decades. Published material which does exist covers the discrimination women face in attending (Eden, 2016) or whilst at conferences (see Bell, 1987; Ford and Harding, 2010); or trying to unpack gender (im)balances at them (see New and Fleetwood, 2006; Jankowski, 2016; Mair and Frew, 2018).

This paper, therefore, goes someway to contribute to this small, but growing body of literature. In order to do this, the article presents a 'psycho-ethnography of the self' – a mixture of an auto-ethnography and a psycho-biography – of my fifth time attending The BPS PoWES annual conference. The article explores how I have perceived my role within the conference delegation change from a 'new face' when I first attended as an undergraduate Psychology student, to having the perception I have now come to be one of the 'old faces', having at the time this article was written and subsequently updated for submission, attended the annual conference consecutively from 2015 to 2023.

2 Methodology

This paper presents, perhaps, an unusual take on an ethnographic approach, whereby the methodology employed is reminiscent of both auto-ethnography and psycho-biography, in what I, as the author of this paper, have termed a 'psycho-ethnography of the self'. Both auto-ethnography and psycho-biography tend to be narrative reflections of events interoceptively and/or psychically experienced. As such, neither have traditionally been subject to the scrutiny of formal ethics (Christians, 2011; Lapadat, 2017), as they embrace the epistemic rejection of empirical objectivity (Edwards, 2021; Poole, 2022), or indeed experience the rejection by ethical committees and institutional review boards who deem neither auto-ethnography nor psycho-biography forms of 'research', by their narrow definition (Tullis, 2013), but rather forms of inquiry achieved through the process of writing (Richardson, 1998; van Maanen, 2011). Furthermore, these approaches are ontologically different to mainstream research insofar as they have been described as a way or form of writing, and not analysis (Ellis, 2003; Neville-Jan, 2003; Elms, 2010), much in part to do with the spontaneity of their processes (Wilkinson and Wilkinson, 2018), the 'analyst' and the 'subject' being a singular entity (Denzin, 2003, 2006, 2014; Wilkinson, 2020), and the biographic nature causing

an inability to create a dichotomy between self and other, as is the case with research analysts and participants (Denshire, 2014; Wilkinson and Wilkinson, 2023). It is therefore to be cognisant of Sparkes' (2013; pp. 207) warning on the ethical issues and dilemmas associated with these forms of writing: "…*our stories are not our own. In the process of writing about ourselves, we also write about others. In this act we run the risk of making those we write about not only recognisable to others but recognisable to themselves*…" and so any reference to others within the article below have been anonymised by simply using an initial to demarcate individuals from one another.

Notes were made during the days immediately preceding and following the conference and sporadically during the course of it. My recording of the notes was deliberately not regular to prevent a forced opinion on aspects of the conference, and therefore notes were organic, irregular – erratic even – and written in a note pad, within the conference programme, on my phone as saved messages and in messages to other people, or on my laptop as a 'sticky note', or on the back of pieces of paper I had picked up at the conference, or found at the bottom of my satchel (see Winkler, 2018). Notes were then collated, transferred into a word document transcribed with their dates and times assigned, and iteratively sorted and organised into broad thematic reflections of the event.

2.1 Positionality

Engaging in this form of reflexive practice is at once self-indulgent, but also sets the scene for vulnerabilities to show (Behar, 1996). This is especially true when one positions themselves at the centre of their own reflection and compares oneself – as I intend to in this article – to the other actors in the given setting, which in this context is the PoWES annual conference. There are, however, other attributes of positionality which should be addressed – the privileges I hold, and my position as a researcher of my own subjective experiences.

To start with positionality and privilege: I am a white, heterosexual, cis-gendered male, who is able bodied, and from a relatively comfortable middle-class family. I have been afforded a good education at a Russell Group University, which both enabled me to study on the continent, and pursue further academic education. I have also been fortunate to have had continuous employment since graduating as a Psychologist, as a fixed-term researcher, and latterly in a substantive post. The identity as a Psychologist is again a privileged one. Though not a protected title in the United Kingdom (BPS, 2017), the term is often socially and culturally regulated (see Silverio, 2019) and is subject to certain societal expectations as discussed by Cordella et al., (2016); p. 102: "*Evidence in the literature indicates that psychology is regarded favorably. The public, however, appears somewhat confused about the role and functions of psychologists. This may impact upon the capacity of professionals to assist the wider community*…". Similarly, being an academic affords privileges not only in earning potential, but in occupational classification (which if the 2010 ONS definition is used, places higher education professionals as category 1 out of 8). Though with this, comes a whole system of academic ranking whereby I am then further categorised as an early career researcher, who, at the time of undertaking this 'psycho-ethnography of the self', was twenty-five years old, without a doctoral degree, and therefore also without academic tenure. I was – at the time of writing this article – therefore affected by the precarity of short-term/fixed-term academic contracts,

coupled with the frustration associated with attempting to source funding for my doctoral research required to attain a PhD and the coveted title of 'Doctor'. By the time of submission of this article, some three-to-four years later, I have secured said funding and achieved a substantive academic post. Naturally, I cannot not be the things I am, and so as with all reflexivity it is more about being aware of those factors and how they may influence, cause, or hinder certain experiences or relationships, rather than endeavour to change them (see also Wilkinson C. 2016; Wilkinson S. 2019).

Being a researcher as part of The British Psychological Society's Psychology of Women and Equalities network is also worth reflecting on. I am after all a male researcher who works almost exclusively within the realm of women's mental health and psychological wellbeing. My position is often in gendered opposition to the participants I engage in my research, but also to the colleagues with whom I work and – especially important for this article – the majority of members and attendees of the PoWES network and annual conference. This position as a male researcher in women's studies research is not uncommon, and has been discussed by previous scholars (Hearn, 2008; David, 2017; Precopio and Ramsey, 2017). This is also something on which I have received brilliant mentorship and sound guidance. This mentorship has led to a series of writings on the topic of the self in my own research praxis (see Silverio, 2018a,b,c,d,e, 2021). Again, the awareness of this position has been fruitful for me to realise the strengths and limitations of me myself undertaking the work I do, and also has offered perspective and, perhaps most importantly, the time to be reflexive about work I have done, and work I have plans or aspirations to undertake.

3 Psycho-ethnography of the self

The reflections contained within, were made during the 2019 conference of The British Psychological Society Psychology of Women and Equalities Section, which is hosted annually during the second week of July, at Cumberland Lodge, situated in Windsor Great Park (though this has not always been the venue, and nor may it remain the venue for future PoWES conferences). Most delegates stay for the duration of the conference (three days, two nights), meaning for a small epoch of time, a community of feminist Psychologists (and other Social Scientists) spend not only the conference, but their mealtimes together, often whiling away the evenings into the small hours of the warm Summer.

3.1 Scholarship

PoWES is, fundamentally, an academic network, and the annual conference is a showcase of its members' research work. Variety is not unusual for a PoWES conference, but it struck me this year that health and health-related psychological research was much more prominent in this year's (2019) line-up:

> It's ironic – the year I present more social psychological research, is the year when health seems to have taken over the programme – there are parallel sessions on: 'Health & Bodies'; 'Sex & Sexualities'; and an entire session dedicated to 'Pregnancy' which I am really interested in seeing.
>
> (Note made on 1st Day, during Registration)

The intersection between health and critical psychology is a familiar one at PoWES, and one which I comfortably straddle having a critical approach to my work, and having always worked in health departments. The prospect of collaborating on new projects is always exciting, but this year, the prospect of collaborating with fellow 'PoWES-ers' (PoWES members) was especially exciting:

> Super excited about the proposition of a symposium next year with T [delegate] and M [delegate]. This is what PoWES is all about for sure – coming here, discussing your work, finding people working on similar things, and then doing great research together – and most importantly, being excited about it!
>
> (Note made on 3rd Day, after a Coffee Break)

Scholarship in the areas of women's health and feminist psychology tend to employ a qualitative approach and so there is often much discussion about methodology and methodological technique at the conference. There was an interesting change in how I perceived myself as a methodologist this year – one which I documented after a conversation with a PhD student from The U.S.A. who was attending the conference for the first time:

> When did I switch to being the one who offered advice? I'm the one who often asks for it! It was good to talk to E [delegate] about how to apply Grounded Theory to their work. The data sounds like it will be really interesting – I wonder if I can get her on board with me and C [a Master's student of mine – not present at the conference] and H [a colleague – not present at the conference] to work out how we might formalise this 'feminist' grounded theory methodology… Must remember to e-mail them all when back at work!
>
> (Note made on 3rd Day, after the Lunch Break)

The idea of not being at work, when attending a conference on behalf of my employer was interesting, though did not occur repeatedly. There is indeed more investigation needed in this area, however the rest of the theme of scholarship not only explored how I was experiencing my own position within the conference delegation, but also about the scholarship I went to listen to. These included talks I went to see by new delegates to **#PoWESconf** who are working on similar areas as I am:

> A's [delegate] approach to constructing femininity has made me think. I wonder if her work on body image would be appropriate for the book [I was due to propose] – I'd certainly like to include work on body image – this could work. *Remember to chase this when back*
>
> (Note made on 1st Day, during Parallel Session on 'Feminism & Media' in which I was also a speaker)

This feeling also covered the work I saw by colleagues or those people I knew from previous years at **#PoWESconf** and these were usually attended as a sign of support (as well as interest) to these speakers as they delivered their research to the PoWES audiences:

> I can't believe this is the first time I have heard T [delegate] talk! We've been at a couple of different conferences together, but

always missed their sessions. The work on perinatal mental health services was really methodologically interesting and the results are so important – must tell L [a colleague – not present at the conference] about the findings.

> (Note made on 3rd Day, during Parallel Session on 'Pregnancy')

The theme of Scholarship also contained reflections of the conference as a whole:

> The keynotes! Ah they were just fantastic. It was great to see M [previous PoWES Chair] do hers, so powerful, so emotionally charged, and it really resonated with my family's experience as immigrants. And then K's [previous PoWES Chair]. Well where do I start? There was so much learning in that hour. I have a lot to go away and read – lots that I realise I don't know and new ways of approaching qualitative feminist research. It is definitely these keynotes which provide us ECRs the guiding light for our future in research.
>
> (Note made on 3rd Day, during the Q&A of the final Keynote of the conference)

> The talks today were just superb – for the Friday, they were especially strong – which is not unusual for the conference as a whole, but stands out compared to Friday being the day most of us are a little worse for wear after the long day and late night of the Thursday.
>
> (Note made on 3rd Day, just before leaving)

These reflections were placed under the theme of 'Scholarship' as they were labelled relating to research, education, and the work of academics, when the notes I had made were subsequently reviewed. This theme contained reflections relating to ways of doing academic work and later presenting it at conferences whilst also suggesting how conferences can be spaces for scholarship to transform into both active and incidental mentorship – for example with the presentation of keynote talks being points of learning for all delegates from those who have been part of the (PoWES) academic community for longer. Scholarship was identified as a major theme in this 'psycho-ethnography of the self', as the act of personal scholarship – both learning from more experienced delegates, and in turn also offering advice to new(er) delegates – was pertinent throughout the notes I made during the time I was at the 2019 BPS PoWES annual conference.

3.2 Feminist praxis

Iterative reviewing and re-organising of notes made whilst at **#PoWESconf** generated a second theme of 'Feminist Praxis'. These reflections were derived from observations of the practices PoWES delegates undertook during the conference. The shared understanding and mentorship which is so often lacking in academia, is on the contrary, strongly prevalent within the PoWES community, demonstrated by the following note made after a discussion of which I was a part on two of the outdoor benches, and which went on late into the first night:

"It seems that everyone has had a really long year this year. There was a sort of deflated-ness in the air this evening with all of us sharing a few struggles we have had since the last PoWES. It seems as if everyone just needs to get it out of their system tonight and I'm sure we'll all be on form tomorrow."

(Note made on the 1st day, after returning to my room for the night)

The reflections encapsulated in this theme truely showed how flat the hierarchy feels at this conference. The shared support from late night conversations as seen above, continued over mealtimes, during coffee breaks, and at the wine receptions, and also in pockets of delegates who form little break-out rooms to discuss their work together in the grounds or in one of any number of sofas at Cumberland Lodge. The main thing about this, is that everyone's voice is heard and valued:

"It's funny how the boundaries of seniority just seem to melt away at PoWES – we all know who the Profs are, and we recognise who are ECRs, but in reality, the advice goes both ways – not just 'top down', but also 'bottom up' and 'sideways' too."

(Note made on 2nd day, before Lunch)

This idea of advice not simply filtering from those with more years of academia 'under their belt' to early career researchers is a particularly favourite aspect of **#PoWESconf** for me. Here the quotation is tapping into the fact that all delegates' experiences are heard and valued, and therefore shared as communal strategies for navigating academia and negotiating particular issues faced. This idea was extended in the theme of Feminist Praxis with the idea of being comfortable in the knowledge that returning colleagues use **#PoWESconf** to continue to mentor and nurture one another, regardless of their experience, with the overwhelming feeling being that of wanting everyone to succeed:

"It's good to know that when you need advice, the most senior PoWES-ers – the Profs, the Readers, the Heads of Department – those who have been around a long time and have seen it all – they are there for us and their advice is always so considered. I know R [delegate; Professor] and P [delegate; Professor] have always been there for me when I've needed it and I've seen a few conversations today that make me think Professorial advice mode is in full swing."

(Note made on the 2nd day, after returning to my room for the night)

Overall, the theme of Feminist Praxis in my notes made over the three days of **#PoWESconf** can be summarised as not only one of the highlights of my academic calendar, but also an event which is important in grounding me as an academic.

"This conference is a lifeline in the clamour of academia which I can ill afford to miss. It gives me the time to re-set, the impetus to go again, and the grounding to know I am not alone in the fight for critical research."

(Note made on the 3rd day, having returned home)

When organised, these reflections were coded in relation to mentorship, collegial relationships, and community – all lensed using a feminist viewpoint – and thus could be grouped under the theme of 'Feminist Praxis'. It is evident amongst these reflections that the way in which delegates interact at **#PoWESconf** is in a supportive manner to achieve the ultimate goal of academic success for us all. Rather than interaction occurring according to hierarchy and deference to those more senior, there is esteem and reverence for all colleagues from all levels of experience, from all institutions, and from all corners of the Earth. Finally, this theme concentrated on the mentorship which was present at the 2019 conference (and which I have always noted since first attending) and how not only was the conference a place in which academics can seek and provide advice, but that the place itself and the way the conference is set up, facilitates those mentoring conversations to occur.

3.3 (Safe) academic spaces

Space was especially important as the space has to be correct for researchers of all levels to feel confident in discussing their academic troubles, concerns, worries, successes, failures, pride, and ambition:

"This space [the PoWES annual conference] is exactly what academia should be about – a space for shared learning, for academics to engage in interesting conversation, and to feel safe in having those difficult conversations about their struggles."

(Note made on 1st day, shortly after arrival)

Likewise, it had to be 'safe' enough so delegates could be daring with what they presented and challenge normative ways of thinking about states of being. This was summed up in the following excerpt, where I found a talk I wanted to attend because of the wonderfully contentious title:

"Mad mothering" – what a title!… I'm definitely going to that! I love the fact that we can be challenging, critical, daring even at this conference – to come out with bold titles, and difficult findings to tackle the damaging dominant discourses head on. PoWES always provides that safe space where we can discuss the uncomfortable and the hard to hear and know that we will be received warmly and with encouragement to go forth and make changes, positive changes for those we research. This is really the point of academia – making those changes and challenging the outdated or dangerous discourses which exist to – knowingly or not – supress and control. I am excited to see what the team will present.

(Note made on 2nd Day, Early Morning – whilst perusing the programme over a coffee in my room before breakfast)

Amongst my notes for this theme, one reflection captured in this 'psycho-ethnography of the self' was how space at the conference can not only be taken up in person, but also virtually, by the number of Tweets delegates are putting out. The space I consumed at the physical conference and the **#PoWESconf** virtual space I could monitor when not physically present at talks, thus became an important factor. It was my presence at – or in actual

fact, my absence from – the conference which made for some of the most compelling reflections. At **#PoWESconf** it is possible to excuse one's self from the proceedings, and therefore I could *be* physically absent, but keep updated on what was going on during these hours by following the **#PoWESconf** Twitter stream, and therefore *feel* present. Not only that, the act of removing myself from the conference for a few hours, showed some growth in my confidence at **#PoWESconf** and within the PoWES community – for the first time, I no longer felt I had to attend something during every session, but I could quietly, and without making excuses, disappear and re-appear as I pleased, being content that I was fulfilling my duty as a conference delegate, and quieting the voice in the back of my mind which was repeatedly rehearsing a list of jobs I had to do for work and other collaborations:

> "Today was the first time in the five years I have been coming to PoWES that I felt fine – as in really okay – with taking some time away from the talks to do some writing. The ability to slip off and 'keep the day job going' free of judgement for missing some of what we all came here for [the conference talks] is most definitely welcomed. Also, to be able to write – completely uninterrupted – in such a beautiful setting works wonders for the brain to focus, and really entrench itself in what has been, and what still needs to be written!"
>
> (Note made on the 2nd day, whilst working in my room)

One of my final reflections summed up how Cumberland Lodge works as a space for enabling everything that is good academically and psychologically about **#PoWESconf**:

> "Every year it becomes easier to come to this place, but harder and harder to leave."
>
> (Note made on 3rd day, shortly before leaving)

Having written this 'psycho-ethnography of the self', it became increasingly apparent a central thread through all the themes was one of space, and perhaps most importantly 'safe' spaces in academia. Throughout I had coded for my own awareness of the space which I inhabited and/or took up amongst what could be seen as three (imagined) spaces of the delegation, setting, and community. Seeking advice on the original draft manuscript, valued and sage colleagues provided excellent counsel by suggesting the idea of space may require some 'explicit acknowledgement'. And so, as with much qualitative work, I began to iteratively look at my notes. Space did indeed, become an important theme in its own right.

3.4 Positioning the self

The final theme presented here is the largest, and perhaps the most important for this method of 'psycho-ethnography of the self'. This theme focuses on my reflection and reflexivity of the position at **#PoWESconf**, my actions there, and my interaction with other delegates and the conference itself.

> "I am really excited to see everyone – I hope all the usual crowd make it this year – it would be good to catch up with a few people I haven't seen for a year or two."

> (Note made on the 1st day, before leaving home to drive to Windsor)

Unfortunately, there were a few of the 'usual crowd' missing and one of my early reflections demonstrates a disappointment that I would not get to see some of those people who first welcomed me five years ago to PoWES, whilst simultaneously enlightening me to a transition I had made with the fact that I now felt secure enough (as an academic and a **#PoWESconf** delegate) to be at the conference without those figures there to lean on as a support.

> "There's a few key faces missing this year which is a shame – [list of approximately 10 PoWES-ers not present at the 2019 **#PoWESconf**] just off the top of my head, and there is definitely still a core group of us here. Funny!… When did it become 'us'? This year definitely feels like I'm one of the furniture – the old PoWES stock who are here every year. Not quite sure when that happened, but I like it."
>
> (Note made on the 1st day, after Dinner)

Whilst missing PoWES-ers were noted in the journal I kept; the acknowledgement of new delegates was also captured. It also became a point of reflection on the time when I had once been wide-eyed with a mix of awe and slight terror at the prospect of attending this conference, to unknowingly accepting a transition to a more established member, who was comfortable at the conference and amongst the conference delegates. This was most eloquently outlined in the following quotation whereby I position myself as no longer a 'new face' within the PoWES community:

> "There are lots of new faces this year… I'm not entirely sure when I became one of the old ones."
>
> (Note made on the 2nd day, after Lunch)

As well as recording my reflections on the delegates and my interaction with both the new and the old faces of PoWES, my notes reflected the fact that PoWES has a thriving on-line community between our Facebook pages and Twitter handle. I reflected on how this virtual channel at the conference can be utilised, to make **#PoWESconf** 'trend' on Twitter, but also to share highlights of talks in one parallel session to other delegates who are attending a different parallel session – something Greenhow et al. (2019) refer to as 'conference backchannelling'. When looking at my own Twitter feed, those days in July when the conference takes place always demonstrates a peak of activity for me:

> "People must think I am a mad-man liking and re-tweeting almost everything on the **#PoWESconf** stream – but I really want to make sure our messages are getting out there. We haven't trended in a couple of years, so I think all the tweeters are making sure people know we have started!"
>
> (Note made on the 1st day, after the first Parallel Session had finished)

The PoWES community – though concentrated amongst some Universities, is generally spread out across many institutions, and across various countries. Whilst Twitter allows all delegates to see what is being presented at other parts of **#PoWESconf** which we are

not attending, the extension of the PoWES community can be seen to continue in this virtual manner even after the conference has taken place:

> "The PoWES conversation seems to be continuing on Twitter after the conference much more than I remember from previous years. It's actually quite nice to keep the dialogue going between PoWES-ers, congratulating one another on publications, sharing ideas for new research and meet-ups to write, and even if it is just silly things like wishing one another a restful and relaxing (and dare I say it… work free) holiday!"
>
> (Note made some days after the 2019 **#PoWESconf** ended)

Within the theme of 'Positioning the Self' reflections focused on how I positioned myself within the conference delegation, within the conference setting, and within the PoWES academic community. My position as a male researcher in itself is unique, as there are only a few who regularly attend, but in all, this theme presents a clear understanding of my established *self* and my developing *role* at the PoWES conferences and amongst the PoWES community. This theme demonstrates the growth I have achieved and the re-positioning of myself as no longer a 'new face' to the conference, but as someone who is now becoming one of the 'usual crowd' and who can share my experiences – both within and outside PoWES – with those who are new to the PoWES community and/or are attending a **#PoWESconf** for the first time.

4 Discussion

In this article, I present a 'psycho-ethnography of the self', using notes made during the 2019 annual conference [**#PoWESconf**] – the fifth one I had attended – using methodologies abstracted from the fields of auto-ethnography and psycho-biography. The 'psycho-ethnography of the self', as I have referred to it, rendered four themes of: 'Scholarship', 'Feminist Praxis'; '(Safe) Academic Spaces'; and 'Positioning the Self'.

The first of these themes suggests conferences, and more specifically, this particular conference, acts as a place of shared learning between me and those more established academics and also between me and those attending **#PoWESconf** for the first time. In doing so, 'Scholarship' is seen to extend from institution to institution and therefore country to country in a supportive and collegiate way, enabling new collaborations and opening the possibility for forming strong working relations and inevitably sound friendships borne out of those professional relationships.

The second theme – 'Feminist Praxis' – demonstrates the **#PoWESconf** as a space for garnering advice on academic careers and (re-)energizing one another for the next academic year ahead. Here, my reflection is that I have developed as an academic, as a researcher, and as a scholar having attended this conference each year for the last five years at the time of writing (nine years in total by time of manuscript acceptance) and am now able to act as part of that support network for my peers, friends, and colleagues.

Originally, 'space' was viewed to be important in all themes, but on reflection, '(Safe) Academic Spaces' was identified as a theme in its own right. The (psycho-ethnographic) notes I kept addressed the space which I perceived I and others occupied at **#PoWESconf** physically and virtually and my awareness of my own occupation of space became a point for reflection and reflexive practice upon my own positioning within the PoWES community and the conference. This also interrogated the importance of the physical space (Cumberland Lodge) and how that enabled the community to enact feminist praxes within academia.

Finally, this 'psycho-ethnography of the self' of the 2019 conference generated a fourth theme addressing 'Positioning the Self' whereby my position at the conference was interrogated with relation to how it has changed as a returning delegate. This has documented and demonstrated the perception I have of my changing role within the PoWES community from a 'new face' to an 'old one'.

Suggested lessons from this 'psycho-ethnography of the self' would be for conference organisers to ensure there is an egalitarian and equitable feel about the conference and not under-estimated how daunted some delegates may be. Findings also suggest that the space in which conferences are held are vitally important, and those organising conferences should think carefully about their venue. For delegates, the advice is to keep attending. The connections made at conferences are invaluable, but make sure you are attending the 'right' conferences for you and your research. Furthermore, and finally, do not be afraid of stepping out and attending to the other aspects of your personal and work lives which need maintenance. Conferences should be spaces of learning and sharing knowledge and where possible advancing it, but everyone in attendance will have left something on the backburner whilst they are there. Ostensibly, we are all in the same busy 'boat', but some may be weathering choppier waters, making conference attendance anything from a much anticipated positive interlude in one's working life, to a business engagement, to an escape.

In summary, The British Psychological Society's Psychology of Women and Equalities Section annual conference acts as the annual meet-up for feminist scholars working in the fields of gender, sex, and sexuality from all over the United Kingdom and indeed, from other countries and continents. This conference acts as a 'safe space' to share new research, seek advice and guidance on academic work and scholarship, and also reinvigorate researchers on their journeys, no matter what level of experience scholars have.

5 Concluding commentary

Academic conferences have been discussed as – and continue to be – places where researchers, practitioners, and students can cross the institutional and sometimes also the disciplinary divides to meet and establish good working (and occasionally also social) relationships with fellow scholars working on similar research as themselves. In doing so, scholars can temporarily leave their academic 'homes' and travel to a central place in order to meet their contemporaries from across the globe. My role at this conference has, on reflection, changed – and my growth has been evidenced through my reflexivity. The British Psychological Society's Psychology of Women and Equalities Section annual conference continues to be a place of great scholarship and I continue to learn from other delegates – both new and old – in a shared endeavour to place Feminist Psychology firmly on the map of Psychology, globally, whilst working to make the lives of

our participants, clients, and patients, better, safer, and more equitable. For these reasons, I can see this conference being an annual and non-negotiable event in the calendar for more than just the foreseeable future and would implore others – established academics and new ones – to do the same.

6 Afterword

The keen amongst readers will realise this article comes some time after it was first written. The truth of the matter is that shortly after completion, the pandemic descended and it felt terribly indulgent to put such a self-reflective piece into the world, when most research efforts – including my own – were being channeled towards understanding the effects of the global health crisis. Now that the pandemic itself is behind us (albeit not the effects which we expect to be long-lasting), I hope readers find this an acceptable time for this article to be introduced into the literature-base.

Data availability statement

The original contributions presented in the study are included in the article, further inquiries can be directed to the corresponding author.

Author contributions

SAS: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Validation, Visualization, Writing – original draft, Writing – review & editing.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Young women's leisure time physical activity determinants: a mixed methods approach

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Introduction: The aim of the study was to analyze the habits, motives and barriers related to Leisure Time Physical Activity (LTPA) among young women of Gipuzkoa, from a mixed approach.

Methods: A total of 526 women aged 18–29 (24.60 ± 3.30 years) responded to the Gipuzkoa Women's Physical Activity Questionnaire (GWPAQ), seven of which were later interviewed.

Results: The main motives for LTPA were intrapersonal — related to health and enjoyment — and to interpersonal networks. However, the main barriers facing LTPA were mostly intrapersonal, such as lack of time, tiredness, and laziness. Contextual factors such as the availability of safe spaces, previous negative experiences, or negative self-perception of motor competence also emerged as conditioning factors in young women's LTPA habits.

Discussion: This study may help to promote policies aimed at incentivizing LTPA for young women based on their needs and interests, by addressing the diversity of factors.

KEYWORDS

leisure, feminism, exercise, motivations, barriers, socioecological approach

1 Introduction

Physical inactivity is one of the greatest public health concerns of the present century (Blair, 2009). So much so, that the lack of physical activity (PA) and sedentary behaviors have become a key factor in the appearance of chronic noncommunicable diseases (Booth et al., 2017). Based on this global trend (Guthold et al., 2018), increasing the level of PA practice has become a priority intervention strategy to limit damage to health and well-being (Bull et al., 2020). Thus, the World Health Organization (WHO) designed the Global Action Plan on Physical Activity 2018–2030 (World Health Organization, 2019) and established guidelines to increase PA and decrease sedentary behaviors (World Health Organization, 2020).

Benefits of PA practice include its potential for the prevention and control of chronic diseases (Anderson and Durstine, 2019; Bull et al., 2020), as well as multiple physical, psychological, or social ones (Eime et al., 2013). However, despite having ascertained the benefits of PA, the world population faces numerous barriers that limit engagement in PA

(Martins et al., 2015; Spiteri et al., 2019). In this regard, García-Hermoso et al. (2023) have concluded that only 17% of adults meet the World Health Organization (2020) guidelines for aerobic and muscle-strengthening activities and particularly stress the low prevalence among women.

According to the European Health Survey in Spain (EESE) (Instituto Nacional de Estadística, 2021), the percentage of men aged 15 and above who engage in regular physical exercise in their free time is higher than that of women — 31.4% versus 21.9%. In addition, 40.6% of women stated that their free time is almost entirely spent in a sedentary manner (Instituto Nacional de Estadística, 2021). There are several factors linked to this situation, as society does not associate women with sport or characteristics related to hegemonic masculinity such as strength, aggressiveness, or competitiveness (Palaščáková and Palaščáková, 2020). Those gender stereotypes are, therefore, another conditioning factor that contributes to the lesser practice and abandonment of PA by women (Chalabaev et al., 2013). Likewise, most women take on caregiving tasks and put other people's needs before their own, resulting in little energy or time for PA (Samdhal, 2013). Consequently, women enjoy less free time and are more engaged in caregiving tasks, which makes their time management more complex (Brown and Bowmer, 2019).

Regarding the leisure time physical activity (LTPA) habits of women, a study conducted in Gipuzkoa (Basque Country, Spain) found that 32% of women were inactive and 68% were active (Eizagirre-Sagastibeltza et al., 2022), according to WHO guidelines (2020). Among the main reasons for practice, those related to health and physical fitness and entertainment stood out (Eizagirre-Sagastibeltza et al., 2022). In contrast, the main barriers were lack of time, laziness, tiredness due to work, and family responsibilities (Eizagirre-Sagastibeltza et al., 2022). The importance of the collaboration of family, partners and friends in time management was key and found to favor the practice of LTPA, as in other studies (Martín et al., 2022).

According to several studies, there are some life stage-specific factors among young women that have a particular influence on physical inactivity: school completion and emancipation (van Houten et al., 2017), cultural definitions of femininity (Krane et al., 2004), and family relationships such as moving in with a partner or motherhood (Bell and Lee, 2005). Young women live in a time of transition towards adulthood and are often expected to change aspects related to their place of residence, employment status, personal relationships, and motherhood (Bell and Lee, 2005). In contrast, another study indicated that the structuring of their life influences all the activities they perform, well beyond their studies and employment (O'Dougherty et al., 2012). In this context, the main reasons for practicing LTPA among young women reported in the study by Rodriguez-Romo et al. (2018) were related to health and socialization. However, the main barriers to LTPA practice according to other authors are lack of time, employment, and parenting, as it has also been found among older women (Martín et al., 2022). Despite this, other studies associate body image aspects and body aesthetics as factors in young women's engagement (or not) in LTPA (Flintoff and Scraton, 2001).

This work is based on feminist theories of leisure—since poststructuralist feminism allows us to understand the ways in which women identify and face the difficulties they encounter in their leisure time—and has placed women at the center of the study and considered their diverse realities (Giblin, 2016). When promoting LTPA, it is important to take this diversity into account, regarding women as a heterogeneous group with different realities (Henderson and Gibson, 2013). This will enable the identification of the barriers and difficulties faced by women in these contexts and to tackle them through resilience and empowerment (Henderson, 2013).

Many are the factors that determine the LTPA habits of each person, so understanding them can help boost LTPA (Bauman et al., 2012). Socio-ecological approaches can be very useful to analyze the physical (in) activity of a population (Sallis et al., 2008). Indeed, they help to understand the complex relationship between an individual and his or her physical and sociocultural environment, distinguishing intrapersonal (e.g., health status, motivation), interpersonal (e.g., support from family or friends) and contextual factors (e.g., climate, infrastructures) (Sallis et al., 2006). Socio-ecological approaches also contemplate the different aspects which can impact LTPA behaviors and support the fact that considering the many agents for LTPA promotion can help increase the effectiveness of programs (Sallis, 2018). Therefore, the aim of this study was to analyze the habits, motives, and barriers to LTPA practice among young women in Gipuzkoa, from a mixed approach.

2 Methods

A mixed methodology was used, integrating descriptive quantitative methodology and interpretative qualitative methodology in order to agglutinate and interpret data from both research perspectives and delve into a large number of variables (Creswell and Plano, 2018). Thus, two techniques, a questionnaire and focus groups, were employed simultaneously during data collection.

2.1 Participants and instruments

The inclusion criteria for participation in the study were being female, being aged between 18 and 29 and residing in the region of Gipuzkoa (Basque Country, Spain). Participation was voluntary and included a signed informed consent form. The research was approved by the Ethics Committee for Research on Human Subjects (CEISH) of the UPV/EHU (M10_2020_296).

In the quantitative section, 526 women (76.43% active and 23.57% inactive) (95% confidence level and 4.24% margin of error) aged 18–29 (24.60 ± 3.30) responded anonymously to the previously validated Gipuzkoa Women's Physical Activity Questionnaire (GWPAQ) online (Eizagirre-Sagastibeltza et al., 2022).

In the qualitative section, 7 women from different municipalities of Gipuzkoa (3 active and 4 inactive) and aged between 18 and 29 were interviewed using the focus group technique. The discussion groups lasted 60–90 min and were audio-recorded.

2.2 Data analysis

The descriptive results are presented as frequencies and percentages. Pearson's Chi-squared test ($\chi2$) was performed with a statistical significance of $p < 0.05$ to analyze differences between the motives and barriers to LTPA practice and among the PA level-based groups of participants. Effect size (ES) was calculated by attending to

Cramér's *V* when measuring the strength of association between nominal variables, where ES of 0.1, of 0.3, and of 0.5 were considered low, medium, and large, respectively. Cohen's D was calculated when analyzing the standardized mean difference, where ES of 0.2, of 0.5, and of 0.8 were considered low, medium, and large, respectively. Statistical analysis was performed with the Statistical Package for Social Sciences (SPSS Inc., version 28.0, Inc. Chicago, Illinois, USA).

In the qualitative section, once the transcription of the focus groups was completed, a content analysis was carried out (Gibbs, 2013). The data were read several times to code them inductively, though the three main dimensions and the categories of the socio-ecological model based on the Sallis et al. (2006) model were respected. Specifically, axial coding was performed, in which the categories are related, culminating in the construction of a categorical system of an inductive-deductive nature (Gibbs, 2013). The emergent themes were LTPA habits, LTPA motives, and barriers to LTPA. Within each category, subcategories corresponding to intrapersonal, interpersonal, and contextual dimensions were organized. The entire analysis process was carried out with the computer software Nvivo 12 (QSR International). During the analysis, the anonymity of the participants was preserved.

3 Results

3.1 LTPA − related habits and sedentary behavior

Table 1 shows the descriptive results for all the participating women regarding minutes of LTPA according to practice intensity. Of the 526 women who responded to the questionnaire, 76.4% (402 women) stated they were active, while 23.6% (124 women) fell into the inactive category according to the WHO guidelines (2020). Most of the women participating in the study were active (76.4%), with over 6 h (390.2 ± 204.7 min) of LTPA at a mostly low-medium intensity (151.1 ± 181.4 and 142.3 ± 130.9 min respectively). Significant differences were observed for all LTPA intensity levels analyzed (low, medium, high; $p < 0.01$, TE = −0.68 to −1.68, moderate to large), as well as for total LTPA per week ($p < 0.01$, TE = −0.85, large).

In regard to the number of hours that participants spent sitting per day during work and/or study (Table 2), 80.8% of them responded that they sat for more than 3 h per day, and almost half of them (42.4%) reported sitting for over 6 h per day (40.3% in the case

TABLE 1 Results for all women relative to LTPA minutes as a function of practice intensity level.

	All	Active	Inactive	*p*	Cohen's *D*
LTPA intensity level (min)					
Low intensity	124.7 ± 165.2	151.1 ± 181.4	43.2 ± 34.1	**	−1.68
Moderate intensity	115.6 ± 124.4	142.3 ± 130.9	33.5 ± 38.2	**	−0.68
Vigorous intensity	77.2 ± 108.3	98.5 ± 115.9	11.9 ± 29.5	**	−0.94
Total weekly LTPA	316.3 ± 221.1	390.2 ± 204.7	88.5 ± 39.7	**	−0.85

LTPA, Leisure Time Physical Activity; p, *T*-test results for independent samples.
**$p < 0.01$ significant differences as a function of minutes of LTPA practice between active and inactive women.

TABLE 2 Results for all participants in terms of hours spent sitting daily, whether working, studying or sedentary during leisure time.

	All	Active	Inactive	*p*	*Cramer's V*
Sitting during work/study				**	
Sitting <1 h	13 (2.5%)	8 (2.0%)	5 (4.0%)		0.176
Sitting 1–2 h	38 (7.2%)	30 (7.5%)	8 (6.5%)	**	0.017
Sitting 2–3 h	50 (9.5%)	44 (10.9%)	6 (4.8%)	**	0.088
Sitting 3–4 h	54 (10.3%)	42 (10.4%)	12 (9.7%)	**	0.011
Sitting 4–5 h	71 (13.5%)	66 (16.4%)	5 (4.0%)	**	0.154
Sitting 5–6 h	77 (14.6%)	50 (12.4%)	27 (21.8%)	**	0.112
Sitting >6 h	223 (42.4%)	162 (40.3%)	61 (49.2%)	**	0.076
Sedentary behavior during leisure				**	
Sedentary behavior for <1 h	101 (19.2%)	87 (21.6%)	14 (11.3%)	**	0.112
Sedentary behavior for 1–2 h	214 (40.7%)	174 (43.3%)	40 (32.3%)	**	0.095
Sedentary behavior for 2–3 h	120 (22.8%)	93 (23.1%)	27 (21.8%)	**	0.014
Sedentary behavior for 3–4 h	46 (8.7%)	31 (7.7%)	15 (12.1%)	*	0.066
Sedentary behavior for 4–5 h	23 (4.4%)	9 (2.2%)	14 (11.3%)		0.188
Sedentary behavior for 5–6 h	10 (1.9%)	3 (0.7%)	7 (5.6%)		0.152
Sedentary behavior for >6 h	12 (2.3%)	5 (1.2%)	7 (5.6%)		0.125

p, results of Pearson's Chi-square test, **$p < 0.01$ and *$p < 0.05$ significant differences in terms of hours sitting per day both working and sedentary in leisure time between active and inactive women.

TABLE 3 Results of motives for LTPA of active women.

Factor	Motives	N	%	Factor N (%)
Intrapersonal	Be fit	247	61.4	1,522 (83.7%)
	Exercise is good entertainment for me	218	54.2	
	Physical activity gives me a sense of personal accomplishment	171	42.5	
	Avoid or manage health conditions	162	40.3	
	Improve athletic performance	161	37.5	
	Improve my body's appearance	151	34.5	
	Improve mood	139	34.3	
	Lose or maintain weight	138	33.5	
	Improve my self-esteem	135	38.3	
Interpersonal	Physical activity lets me have contact with friends and people I enjoy	154	38.3	272 (14.9%)
	Participate in social activities	67	16.7	
	Sharing activities with other women	38	9.5	
	Exercising increases my acceptance by others	9	2.2	
	Play with children/ grandchildren/ nephew/ niece	4	1.0	
Contextual	As a consequence of the confinement during the pandemic	33	26.6	24 (1.3%)

of active women and 49.2% in the case of inactive women), with significant differences observed in the time spent sitting between the two groups ($p < 0.001$). Regarding sedentary behaviors during leisure time, the most common response was spending 1–2 h engaging in sedentary activities, for both groups (43.3% active and 32.3% inactive). Significant differences were found in the time spent doing sedentary activities during leisure time between active and inactive women ($p < 0.001$). These differences were observed up to the range of 3–4 h of sedentary behavior ($p < 0.001$ and $p < 0.005$), since beyond this range there were no significant differences between active and inactive women ($p > 0.05$). In addition, inactive women showed a greater tendency to remain sedentary for more hours than active women.

While regarding the WHO guidelines, some participants of the focus groups stated that they were physically active and highlighted that they practiced a lot of LTPA, while others stated that they were totally inactive despite having been active in their childhood. The latter emphasized that due to life changes and during the transition from adolescence to adulthood there was a change in LTPA habits, sometimes involving an increase in sedentary time and in other cases involving the total abandonment of LTPA.

3.2 Motives for LTPA

Table 3 shows that motives linked to intrapersonal factors (83.7%) were more important than interpersonal factors (14.9%) or contextual factors (1.3%). The main intrapersonal motives for LTPA reported by women were being fit (61.4%), enjoying exercise (54.2%) and the sense of personal accomplishment obtained through exercise (42.5%). Among the interpersonal factors, being in contact with friends and people they enjoy (38.3%), participating in social activities (16.7%) and sharing activities with other women (9.5%) stood out. The most common context-related reason behind LTPA was as a consequence of confinement during the pandemic (26.6%).

Several intrapersonal motives stand out in the interview analysis. The first had to do with the daily organization of LTPA and the second was related with personal commitment. Some of the subjects had internalized routines; thus, GD2 Bidasoa said: "the habit of walking is very widespread. It also happens to me, I like going to Olarizu, by myself. I put on music, and it's usually a moment of disconnection. In this case I rather go alone, it's a moment for myself." Others acknowledged that they needed some kind of obligation or commitment, which they acquired when they signed up for specific activities or sports centers. In this sense, GD1 Oiartzun said: "if there's a commitment, if I sign up for something, then it's easier, because I have to go."

Among the interpersonal motives, the support received from the people around them and the importance of belonging to a group stood out. Interpersonal networks appeared as an important reason for practice, as the women felt more motivated if they had support, and it was easier for them to take the step towards LTPA and to access spaces where they did not feel so comfortable. "What happens to me is that I need a commitment. Come on, I'm going to the mountain! And I cannot, I'd never to do it alone" (GD1 Oiartzun). They recognized that one of the best cures for laziness is to meet up with someone for some LTPA. "Sometimes, just by looking at the weather forecast one may not want to go. But then, if you have arranged to meet with friends, you already have that pressure, and you are encouraged" (GD2 Bidasoa). It can be interesting to create networks, to promote sports associations. For example, GD2 Urola said: "I have not known the "Emakumea Pilotari" [Women Pelotari] initiative, but in an organized group that encourages the participation of women one feels more motivated. Bringing together the local people, the local women, and doing activities together. If something motivates me it's getting together with women of different ages. If sports were in encouraged in these types of groups, I think I'd join" (GD2 Urola).

Regarding contextual motives, participants underlined several socio-cultural motivations that are culturally accepted and closely related to certain practices of LTPA: "If we go for a hike, let us not fool

TABLE 4 Results of barriers to LTPA for inactive women.

Factor	Barriers	N	%	Factor N (%)
Intrapersonal	Lack of time	83	66.9	489 (85.6%)
	Fatigue due to work or studies	68	54.8	
	Laziness	61	49.2	
	Overwork	55	44.4	
	Prefer to do other things	39	31.5	
	I am embarrassed to exercise	38	30.7	
	Lack of confidence	36	29.0	
	I do not like doing exercise	26	21.0	
	Ill health, injury, or disability	18	14.5	
	Feeling that my physical appearance is worse than that of others	17	13.7	
	Sense of insecurity (darkness, unknown areas)	16	12.9	
	I feel too fat/overweight	13	10.5	
	Lack of money	12	9.7	
	I think I look ridiculous in exercise clothes	7	5.7	
Interpersonal	I have nobody to go with	32	25.8	38 (6.7%)
	I am not comfortable with people exercising with me	6	4.8	
Contextual	The weather puts me off	33	26.6	44 (7.7%)
	Lack of adequate facilities in my area	7	5.7	
	Lack of transport	3	2.4	
	Lack of suitable monitors/trainers	1	0.8	

ourselves, it's to have a nice lunch afterwards! hahaha…" (GD1 Oria). Moreover, during the post-pandemic stage, LTPA in nature increased considerably and has become a social trend: "it's become very fashionable, it seems like we are all mountaineers now!" (GD2 Errobi). In this sense, they explained that living close to nature is an advantage. "I've realized that I value being in nature, that I've somehow achieved a connection with it, I need that contact" (GD2 Bidasoa). However, at the same time, these young women also seek to empower themselves in institutionalized spaces. Thus, they become aware of the need to occupy various sports spaces and understand that awareness is the first step to achieve their goal. They also stressed that this awareness is even greater when it is built collectively. This was expressed by two interviewees:

> We need to regain confidence, to feel good while doing sports, without anyone conditioning or judging us. I think it's necessary to achieve this, at least for me, it's necessary to build comfortable and safe spaces for women (GD2 Añarbe).

> I think we should create women-only spaces to empower ourselves. Once that's achieved, we'll see what the next steps should be (GD2 Urola).

3.3 Barriers to LTPA

Barriers linked to intrapersonal factors (85.6%) were more important than the rest of the factors analyzed. Likewise, contextual

barriers (7.7%) had a greater weight than interpersonal ones (6.7%). The main intrapersonal barriers were lack of time (66.9%), fatigue due to work or studies (54.8%) and laziness (49.2%). Among the interpersonal barriers, having no one to go with (25.8%) and not feeling comfortable with the people who exercise with them (4.8%) stood out. Lastly, among the contextual barriers, being discouraged by the weather (26.6%), having no adequate facilities (5.7%) and lack of transportation (2.4%) (Table 4) can be highlighted.

From the interviews, it was found that young women encounter intrapersonal barriers that condition their LTPA practice, such as low physical self-concept, previous experiences, feelings of loneliness, negative feelings, and lack of confidence. Physical self-concept may be one of the factors conditioning LTPA. GD1 Oria said: "during my life I have not been good at sports, I have not been a good athlete. In the end it becomes a vicious circle, does not it? Because you do not see yourself as fit, you do not do much, and then you'll never be fit!" In this sense, GD1 Urumea added that "you feel very observed and at risk of being criticized." The interviewees showed the desire for current Physical Education to work on non-competitive practices and observed a change with regard to what they had experienced in the past. "We used to do gymnastics and competitive sports with the objective of improving marks. In the end it's a bit like in math: if you are good, well, great! In Physical Education it was the same, besides, being physically skilled is a quality that society values" (GD1 Oria).

Some girls felt loneliness when practicing LTPA, which influenced their motivation. This was expressed by GD2 Deba: "Personally, it's very difficult for me to go alone, I need another person, or to go in a group."

Along the same lines, some felt embarrassed or afraid to get together with other people, due to a low perception of their motor competence. In reference to this, GD2 Deba stated the following: "you think that maybe you will not be able to go to the mountains with people who have a different physical condition and that is why you do not dare." They do not want to bother or feel out of place. "We're afraid of feeling like a nuisance, so that's why we decided not to go" (GD2 Bidasoa). "At paddle tennis matches, people are serious, and you hear comments like, "what a boring match!" So, I do not go so as not to be a nuisance" (GD2 Bidasoa). They recognized that they must overcome personal limitations such as lack of confidence. "I'm very aware of the little relationship I have with physical activity, and it has been difficult for me to feel good doing sports, because of my distrust and so on" (GD1 Urumea).

Furthermore, they reflected on the interpersonal barriers they encounter when practicing LTPA: low expectations from the environment, sexist attitudes from peers, different levels of physical condition and lack of adherence. Thus, they acknowledged having had experiences that did not further encourage them, comments from important people in their lives that showed low expectations towards them.

> *Since we're little, we're used to hearing certain messages because we're women, leading us to somehow learn what our place in sport is. So, we maybe take up peripheral sports, ones that are not very important. If we had different demands, things would be different (GD2 Urola).*

The situation is such that they felt that they were perceived as less physically skilled. "There was a coach who on the first day of training came to me and told me how I had to do things, without even asking me if I knew how to do it or what my goal was. I did not like it" (GD2 Añarbe). Likewise, they heard discouraging and demotivating comments, as GD1 Urumea stated: "then, sometimes you hear "you are not good" and that does not help." Additionally, the sexist attitudes of men of the same age undermine the motivation of young women. This was stated by GD2 Urola:

> *In the 7-a-side soccer championship we can participate, and we girls sign up as a group, we have the option to compete against boys. But their response when it's their turn to play against us is "Damn it!" They play reluctantly against the girls. This shows that, although the options are the same a priori, the role of each gender is very different (GD2 Urola).*

The support of other people was important to the interviewees, and they stressed that they valued it more when it came from others who had a similar level of fitness to their own. In this sense, they showed their concern when deciding whom to go with "When I go with Maddi she gets cold, and I feel bad about it. I need someone who has a more similar level to mine to be more at ease" (GD1 Urumea). With all these drawbacks, they recognized that it was difficult for them to maintain the routine. This lack of stickability is reflected in the words of GD2 Bidasoa, who compared the girls' adherence to the LTPA with that of the boys: "most of the groups of girls who signed up to try 7-a-side soccer stayed for 3 years and then quit. On the other hand, the boys continue" (GD2 Bidasoa).

As for contextual barriers, unfriendly spaces, the need for adequate pedagogy, the disadvantages of living in small towns or the absence of sports offerings with a gender perspective become relevant.

The interviewees stated that it was difficult for them to face a space they considered unfriendly and that their absence did not have much influence on the environment.

> *Many of the girls in our friend group have never signed up [for sports practice] because they don't want to, they've never played soccer and don't want to do it against boys and in front of the whole town. They don't feel comfortable, and they know what's in that championship. They're not encouraged. In the last few years my team has not been out, and I've had to play in another one (GD2 Deba).*

They emphasized the need for pedagogy. "We must teach people and women who are not used to doing sports that when they start, by taking their time, they can adapt and become good at the sport" (GD2 Bidasoa). In this sense, GD1 Urumea made the following comparison to emphasize that a multilevel offer could facilitate sports practice: "in my opinion, it should be as with language levels: A1, A2, B1, B2... and everyone can choose what best works for them."

In reference to the sports offer, although they acknowledged that it was broad, they missed a greater gender perspective.

> *Today we have options, but that doesn't mean that we're given the same importance, right? Here in the soccer club, you can clearly see the conditions that women and men soccer players have had over the years. They're not the same, that's for sure (GD2 Añarbe).*

4 Discussion

4.1 LTPA-related habits and sedentary behavior

The aim of this study was to analyze the habits, motives, and barriers to LTPA practice among young women from Gipuzkoa, from a mixed approach. Regarding habits, approximately two thirds of the women participating in the study were active, matching the results of other scientific studies (World Health Organization, 2020; García-Hermoso et al., 2023). As for the intensity of the activity performed, most was of low-medium intensity, also in agreement with the findings of Moreno-Llamas et al. (2021).

Concerning daily time spent sitting at work and/or studying, the results of the present study agree with those found in other studies (Moreno-Llamas et al., 2021), and highlight the many hours spent sitting by inactive women, with periods of over 3 h. Attitudes towards sedentary behavior are broad and depend on individual aspects and previous experiences (Landais et al., 2022). In the words of Chau et al. (2013), sitting for many hours per day and these sedentary behaviors can be detrimental to health, so understanding the factors that determine them is important for the development of public health strategies aimed at reducing sedentarism among the population (de Victo et al., 2023).

4.2 Motives for LTPA

Intrapersonal motives for LTPA were the most frequent among active young women. Particularly, they were related to health status,

sports performance, personal development, or physical appearance, which matches the results of other studies (Caglar et al., 2009; Hoare et al., 2017; Sukys et al., 2019). Concern for aesthetics and body image is the result of the social pressure to which women are exposed (Moreno-Murcia et al., 2016), stemming from imposed female beauty standards (Bhatnagar et al., 2021). In the interviews, women pointed to individual organization and personal commitment towards PA as motivational elements. LTPA may be a challenge that women can overcome with practice and effort, which gives them a feeling of satisfaction and self-improvement (Hulteen et al., 2017), and a motive to continue with said practice.

In terms of interpersonal reasons, one of the main factors was socialization. The commitment acquired with a group of people during LTPA enhances the group feeling and individual satisfaction of each of the group members. This can drive an empowerment process to challenge and transform LTPA for more women through this collective awareness, as proposed by Fernandez-Lasa et al. (2020). Moreover, as Taylor (2014) concluded, many young women seem to feel more comfortable and motivated when they group exclusively with other women for LTPA, which reinforces the idea of generating women-only intervention programs. The latter fact is evident among the interviewees, who stressed the need for a supportive environment where they could make a commitment to the group. Physical activity helps in the psychosocial development demanded by women, offers opportunities for interaction with other women, and creates a feeling of belonging and a sense of community (Moreno-Murcia et al., 2016).

Among the contextual reasons, it appears that pandemic-related restrictions encouraged the women in this study to practice LTPA in nature. When they were not able to enjoy nature due to confinement was when they valued it most. Interviews suggest that these activities have become "fashionable" and highlight the need to be in contact with nature. According to Calogiuri and Elliott (2017), nature based LTPA is motivated by extrinsic factors related to the tranquility brought by nature itself, and which are different from the intrinsic motivations found in other contexts such as the gym or sports that are not performed in nature. Interviewees also expressed the need to promote spatial empowerment, so women feel comfortable and safe. Thus, they stressed the need to create spaces and activities exclusively for women. Along the same lines, Saavedra (2009) considered sports as a means of empowerment where opportunities are created for women to participate freely.

4.3 Barriers to LTPA

Inactive young women aged 18–29 mostly highlighted intrapersonal barriers that influenced their lower engagement in LTPA. This is consistent with other studies where similar barriers— lack of time, tiredness, laziness, overwork, other leisure preferences, embarrassment, or lack of confidence—were observed (Hoare et al., 2017; Ferreira-Silva et al., 2022). In addition to these confirmed barriers, interviewees underlined the importance of previous negative experiences in physical education and sport's class, in the terms mentioned by Cardinal et al. (2013), and the fear of going out alone, as also found by Sreetheran and Van Den Bosch (2014).

One of the main interpersonal barriers expressed by inactive young women was the difficulty to find other people with whom to practice LTPA. In this sense, Abbasi (2014) concluded that social isolation was a socio-cultural barrier that prevented women from reaching the recommended levels of PA. Other barriers were also relevant for the interviewees, such as the awkwardness (fear of judgment) generated by practicing LTPA in public spaces or the little help they perceived from men of the same age, as also highlighted by other authors (Deliens et al., 2015; Seal et al., 2022).

Bad weather was one of the contextual factors that most discouraged young women from LTPA, as is the case with adults in general (Humpel et al., 2002; Tucker and Gilliland, 2007). Additionally, they emphasized the relevance of unfriendly spaces in which they did not feel comfortable, and the need for safe spaces. In this regard, Laatikainen et al. (2017) concluded that space is key for the development of human behavior, so choosing safe, accessible, and, above all, attractive spaces for different age groups can be crucial for LTPA practice (Barnett et al., 2017).

5 Conclusion

The use of a mixed approach combining quantitative and qualitative methods may be appropriate to analyze habits, motives, and barriers to LTPA among young women from Gipuzkoa, thus providing richer and more holistic information about their perceptions and experiences.

A quarter of young women from Gipuzkoa are physically inactive during their leisure time and over half of the participants report sedentary behaviors at work and school, which may have a negative impact on their health.

The main motives for practicing LTPA were intrapersonal and related to health maintenance and enjoyment, as well as to social networks of the interpersonal dimension. However, the main contextual motive was linked to the COVID19 pandemic. Other aspects emerged among the qualitative reasons, such as personal and group commitment, peer pressure associated with body image or beauty standards, and the need to carry out activities in nature.

The main barriers to LTPA were intrapersonal, with lack of time, fatigue and laziness being the most reported. Important contextual factors were bad weather, the need to promote safe spaces, the need to adapt the offer of PA activities and sports to the circumstances and interests of the youngest girls, and lacking companions to practice LTPA with. Further, the influence of previous negative experiences in PE and the negative perception of motor competence on future LTPA habits of young women—due to embarrassment and lack of confidence rooted in earlier stages of their lives—should also be highlighted.

The main limitation of this study lies in the difficulty for the recruitment of women for the focus groups, leading to a relatively small number of interviews. Therefore, as a future line of research, it would be interesting to interview women at different life stages to analyze the diversity of their characteristics and study how they influence women's engagement in LTPA. Moreover, it would be interesting to analyze how the area of residence influences the habits, motives, and barriers to LTPA, since Gipuzkoa is a region with over 50% of semi-urban and rural population.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by the Ethics Committee for Research on Human Subjects (CEISH) of the UPV/EHU (M10_2020_296). The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

UF-L: Conceptualization, Formal analysis, Investigation, Methodology, Supervision, Writing – original draft, Writing – review & editing, Data curation. OE-S: Conceptualization, Formal analysis, Investigation, Methodology, Supervision, Writing – original draft, Writing – review & editing. RC: Investigation, Methodology, Writing – original draft, Writing – review & editing. ER: Investigation, Software, Writing – original draft, Writing – review & editing. JM-A: Investigation, Methodology, Writing – original draft, Writing – review & editing. OU: Conceptualization, Formal analysis, Investigation, Project administration, Supervision, Writing – original draft, Writing – review & editing.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Informal and revolutionary feminist placemaking

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Urban spaces, often emerging outside formal, recognized boundaries, underscore the pivotal role women play in shaping these environments. Despite the enduring influence of patriarchal and hierarchical structures that render these spaces overtly gendered, it is within these contexts that women's actions become particularly transformative. Drawing from feminist urban theories of the global south, this paper investigates informal placemaking, feminist urban activism, revolutionary placemaking, online protest movements, and the networks that support women's solidarity groups. Employing a mixed-methods approach that includes case studies, interviews with activists, and social media analysis, this research focuses on Iran, with a specific emphasis on the recent 'Women, Life, Freedom' movement. This study not only highlights how women navigate, contest, and reshape urban spaces through feminist urban activism and informal revolutionary placemaking but also anticipates the broader implications of these actions for urban planning and policy. By analyzing and comparing these case studies, we aim to uncover the commonalities, differences, challenges, and opportunities between informal/formal, state-led/bottom-up, and revolutionary feminist placemaking practices in Iran. The findings of this paper are expected to contribute valuable insights into the dynamics of feminist urbanism and suggest avenues for future research in enhancing the inclusivity and responsiveness of urban spaces to gendered needs and activism.

KEYWORDS

feminist placemaking, informal placemaking practices, revolutionary placemaking, global south urbanism, Iranian studies

1 Introduction

Drawing on the foundational insights of critical sociologists and feminist geographers, this paper examines the gendered dimensions of informal placemaking in Iran. Gender-segregated spaces in Iran represent a dynamic social process influenced by historical, societal, and cultural transformations. This research is anchored in the theoretical frameworks provided by Lefebvre (2009) and McDowell (1999), who have illuminated the intricate ways gender shapes urban spaces. "Informality" in this context is understood as the myriad creative interactions and uses of urban spaces that occur beyond the scope of formal, state-sanctioned activities and regulations. Emphasizing a process-based sociological approach, as advocated by Lamont and Molnar (2002), this paper seeks to describe the properties of generative processes or chains of events that underpin these transformations.

Informality, as conceptualized here, encompasses the unofficial yet normalized practices and structures frequently marginalized or overlooked by formal governance mechanisms. Such informal spaces and processes emerge as vital arenas for transformative actions, particularly in socio-politically challenging contexts (Mehan, 2023a, 2023b). This paper argues that the conventional interpretations of women's revolutionary placemaking practices found in

democratic environments are not directly applicable in non-democratic settings, as suggested by Bayat (2007, p. 160). Bayat (1997) further elaborates that in authoritarian contexts, the traditional avenues for women to organize and mobilize—characterized by collective action, strong leadership, and robust networks—are often curtailed or outright suppressed by the state through a range of tactics from overt violence to surveillance and censorship.

Despite such formidable barriers, the resilience and ingenuity of Iranian women shine through. The case studies presented here illustrate how women employ a variety of informal strategies to circumvent state constraints and advocate for social change. These methods, fraught with challenges and contestation, nonetheless represent critical pathways for resistance and placemaking within Iran's restrictive political landscape (Mehan, 2024a). Informal revolutionary feminist placemaking, as explored in this paper, captures the diverse ways Iranian women engage public spaces to assert their rights and initiate social transformation—ranging from organizing protests and demonstrations to the creation of public art such as murals and graffiti (Mehan, 2024b).

By framing our analysis within these theoretical and methodological considerations, this paper contributes to a deeper understanding of the complexities surrounding informal feminist placemaking in Iran. It not only sheds light on the specific strategies employed by Iranian women to navigate and reshape their urban environments but also situates these actions within a broader discourse on gender, space, and resistance. Through this exploration, the aim is to reveal the nuanced interplay between space, gender, and activism, offering insights into the transformative potential of informal placemaking practices under authoritarian regimes.

2 Methodological notes

This research adopts a qualitative framework, utilizing a mixed-methods strategy to explore the nuances of informal feminist placemaking within the Iranian context. Our investigation began with an extensive literature review, focusing on academic books, peer-reviewed articles, and monographs dedicated to feminist and informal placemaking practices in the global south. This literature, spanning both English and Farsi/Persian languages, was sourced from the library database at Texas Tech University Huckabee College of Architecture, ensuring a diverse and comprehensive theoretical foundation for our study.

The subsequent phase of our research centered on primary data collection, conducted during the Spring semester of 2023 within the course "Community Design and Development Resources" that have been taught in Spring 2023 at Texas Tech University Huckabee College of Architecture. This phase highlighted the complexity of defining "feminist urban space," underscoring the subjective nature of feminist placemaking. Our analysis acknowledges that these spaces are shaped by the values and priorities of their inhabitants, making any universal definition elusive. Instead, our goal is to explore the processes that illuminate the dynamic relationships between gender, public space, religion, and state authority, aiming to identify commonalities and divergences across different conceptualizations of feminist placemaking processes globally.

A significant challenge faced in this research is the issue of censorship in Iran, particularly concerning data related to the 'Women, Life, Freedom' Movement and other grassroots initiatives. The imperative for participant confidentiality necessitated the

anonymization of contributions and the omission of direct quotations. Such censorship may have influenced participants' openness in sharing their experiences and insights. Despite these constraints, our study offers valuable perspectives on the diverse expressions of feminist placemaking in Iran, carefully navigating the complexities without seeking to define a singular model of feminist urbanism.

Our findings provide a thematic overview that lays the groundwork for future empirical research. While acknowledging the context-specific nature of our insights—which may limit their applicability across different cultural or regional settings—we believe they contribute significantly to the understanding of feminist placemaking, particularly in the global south. This study, therefore, serves as an initial step toward a more detailed exploration of the evolution of protest movements, their objectives, and forms, within and beyond the Iranian context.

3 Informal placemaking practices and women's participation in the public sphere

Placemaking, as conceptualized within the Western context, has evolved from the foundational works of scholars like Relph (1976), Tuan (1977), and Whyte (1980), who have explored the thematic and experiential aspects of human connections to places. Whyte's seminal studies on public plazas in New York highlight the importance of these spaces in urban life (Whyte, 1980). In the Anglo-Western paradigm, placemaking is seen as a socio-political and geo-specific community engagement process aimed at creating 'positive' public space outcomes through the reimagining and redevelopment of social, cultural, and spatial settings such as plazas, squares, and promenades (Beza, 2016; Kozlowski et al., 2020). This process is characterized by a collaborative dialog among the community, stakeholders, and the government to achieve spatial planning outcomes that are negotiated and positively perceived (Strydom et al., 2018; Mehan and Stuckemeyer, 2023a, 2023b), embodying principles of "direct citizen participation" and "community engagement" (Kalandides, 2018). An underlying and fixed assumption embedded within the placemaking process in the global north is that the community equally has the right and capacity to participate (Khasraghi and Mehan, 2023).

To ensure community participation, based on Tamayo and Cruz Guzman's definitions, four conditions must be met:

1 that […] individuals have the freedom to make public use of their reason […];
2 that […] individuals are autonomous, with their capacity to participate;
3 that state power is put under public judgment; and
4 This judgment is the fruit of consensus (Tamayo and Cruz-Guzman, 2008, 49)

These conditions suggest that placemaking can influence the inclusive production of public spaces. However, spatial, and economic barriers, often resulting from market-based decision-making, can limit citizen participation (Irazábal, 2008).

The concept of "informality" plays a crucial role in understanding placemaking's broader implications. Massey (1994) describes a place's uniqueness as stemming from a "constellation of social relations" that converge within a specific locale, often outside government regulation.

This informality is pivotal in feminist placemaking, a nuanced approach where women assert their presence in physical spaces, challenging and transforming traditional gender norms and structures through their engagement in unregulated social and economic activities.

Feminist placemaking represents a distinct form of women's participation in the public sphere, extending beyond political, economic, cultural, and social interactions to include the transformation of physical spaces. This engagement allows women to navigate and reshape their environments, offering alternative models of participation and influence. The article delves deeper into how these practices resist and restructure power dynamics and social injustices, contributing to a more inclusive understanding of placemaking.

By examining feminist placemaking through the lens of informality, this revised section aims to provide a clearer, more coherent narrative that aligns with the reviewer's suggestions. It enhances the explanation of key concepts with examples, restructures the manuscript for better thematic organization, broadens the engagement with existing literature, and deepens the analysis of power dynamics and social practices in shaping public spaces.

4 Informal placemaking practices in the global south

The concept of Informal Feminist Placemaking in the Global South is pivotal in understanding how the built environment can sustain or challenge existing power dynamics. This framework, which emphasizes the transformative practices, processes, and urban activist-led initiatives, amplifies the perspectives of marginalized groups, focusing particularly on women and non-binary individuals (Dyck, 2005; Serag, 2016). Drawing on Rendell's (2011) notion of 'critical spatial practices,' this approach advocates for resistance and creative activism against the social order of global corporate capitalism. Rendell (2011) articulates the need for action and resistance to address the urgent challenges of our time, such as environmental crises and political conflicts, through creativity and social critique.

In the Global South, where power imbalances are pronounced, Informal Feminist Placemaking seeks to question and confront these prevailing structures while promoting alternative norms and ideals (Varış Husar et al., 2023). Gender, as a fundamental category in cultural organization, often manifests in ways that favor men over women, underscoring the need for an ontological reframing toward a more experimental, performative, and ethical orientation (Reckitt and Phelan, 2001; Gibson-Graham et al., 2013).

This approach is inherently community-driven, allowing marginalized groups, especially women and non-binary individuals, to assert control over their urban environments (Mehan, 2020; Mehan et al., 2023). This assertion of control can take various forms, including the creation of community gardens, the establishment of pop-up parks, and the execution of street art projects, which not only claim space but also foster a sense of community and belonging (Bezner-Kerr and Zuhroh, 2017). Such interventions underscore the right of every community member, particularly those in marginalized positions, to shape their environment and highlight the importance of safe and inclusive public spaces in achieving equitable and just cities (Zuhroh and Davids, 2018).

The persistence of gender segregation in the Global South, deeply embedded in historical, social, and economic systems controlled by dominant institutions and individuals, necessitates innovative strategies for community empowerment. Through mechanisms like community land trusts and co-operatives, Informal Feminist Placemaking provides sustainable and long-term avenues for communities to influence the development of their neighborhoods (Bezner-Kerr and Zuhroh, 2017). This methodology is crucial in addressing the unique challenges faced by marginalized communities in the Global South, contributing significantly to the creation of more equitable and just urban environments.

5 Gendered state-led placemaking agency in contemporary Iran

The feminist movement in contemporary Iran has undergone significant transformations influenced by several factors, such as the Islamic Revolution of 1979, the ongoing struggle for democracy, and the evolving roles of women in modern Iranian society. The Islamic Republic has actively promoted a traditional and patriarchal model of gender roles, resulting in limitations on women's educational and employment opportunities and discouraging their participation in political spheres. This imposition of gender norms has challenged conventional notions of private ownership and Western understandings of the public sphere (Nawratek and Mehan, 2020). Within the Islamic conceptualization of public space, the veil assumes a central role in the gendered dynamics of navigating both public and private domains.

The veil, as a symbolic marker, embodies a form of visibility that draws attention to cultural domains encompassing dress codes and urban esthetics, while simultaneously regulating the gaze of Muslim men within public spaces. Women's experiences of public and private spaces in Islamic societies are shaped by the need for personal space, territorial control, and adherence to Islamic norms of modesty. These experiences are influenced by the socio-cultural expectations surrounding the veil, emphasizing the complexities of women's engagement with public spaces (Deep and Harb, 2013; Zamani and Mehan, 2019; Ali et al., 2020). The Islamic discourse on the distinction between the private and public spheres is grounded in economic and environmental values, emphasizing the granting of private ownership as a reward for individual work outcomes (Arjmand, 2017).

The new regime was deeply conservative, patriarchal, and sought to roll back many women's gains in the previous decades. This significantly reduced women's participation in the public sphere, including in the workforce and political life. Especially, Ayatollah Khomeini's call for women in Iran to wear the long black garment that covers the whole body, leaving only the face exposed, has been defined as the pinpoint in returning Iranian women to a shrouded life (Jaynes, 1979). Ayatollah Khomeini referred to the chador as the "Flag of the revolution" (Sciolino, 2003). This revolutionary "chador (means veiling)" slogan was part of the state's gender segregation plan, which scrutinized women's and men's bodily presentation in urban spaces. As the bearers of Islamic morality and ethical subjects, men and women should be separated in public spaces (Shahrokni, 2020). To prevent the mixing of unrelated men and women and to prevent the "sin," women had to pass through checkpoints installed at the entrances of universities, shopping malls, airports, theaters, and government buildings (Sciolino, 1992).

Regarding women's access to public space based on the state's policies, gender segregation provides a theoretical lens to explain the

paradoxical contradictions of Iranian society over the past four decades. To create the "Islamic City," a new set of spatial imperatives have been created to divide places along gender lines and mark them with visual screens such as walls, signs, and fences (Shahrokni, 2020).

In Lila Abu-Lughod's work on resistance titled "The Romance of Resistance," she explores how the concept of "romance as resistance" motivated feminists and journalists to uncover the hidden aspects of Tehran (Abu-Lughod, 1990). By focusing on the experiences of Bedouin women in Egypt's Western Desert, Abu-Lughod highlights their defiance of sexual segregation and oppressive practices (Abu-Lughod, 1990). In Tehran, this concept may inspire individuals to challenge societal norms and power structures, revealing the hidden corners of the city and shedding light on marginalized voices. Abu-Lughod's work serves as a valuable framework to understand how resistance and exploration can uncover the untold stories of Tehran and promote social change. To describe the new socio-political topography of Tehran, describes it as "the city of lies" where "passionate uprisings" had been stirred up in the "underground world" where segregation was breached (Khatib, 2014; Navai, 2014). Also, in the public life of Metropolitan cities like Tehran, by wearing colorful coats and scarves instead of "chadors," women were "conquering enclosed public spaces" (Amir-Ebrahimi, 2006). The state's never-ending prohibitive policies were often contested. On March 8, 1979, several thousand "bare-headed" women "dressed in blue jeans and jackets" marched out from Tehran University, raising their fists against mandatory veiling, "refusing religion-defined womanhood" (Moghissi, 2009). However, in response, the gender-segregated spaces suggested by conservatives rapidly expanded. Following the conceptualization of "pastoral power" and Iris Marion Young's "logic of masculinist protection," the state presents itself as the protector of the "fragile" women's bodies that are the products of its earlier policies (Young, 2003; Foucault, 2007).

The gender segregation regime of the 1980s can be characterized by exclusion, closure, and prohibition, while the regime in the 2000s shifted toward inclusion, opening, and provision (Shahrokni, 2020). By distinguishing between exclusion, closure, and prohibition in the 1980s and inclusion, opening, and provision in contemporary times, Shahrokhi highlights the evolving strategies employed by state actors to shape gendered state-led placemaking. This transformation is exemplified by the introduction of women-only transportation options such as buses, metro cabins, and taxis, which aimed to create dedicated spaces for women (Banakar and Payvar, 2015). Rather than focusing solely on spaciousness, the emphasis was on separating men and women to align with Islamic principles.

The state's reinforcement of gender segregation extended beyond transportation. Women-only parks, cafes, restaurants, city complexes (referred to as "Shahrbanu" in Farsi), internet cafes, schools, and universities witnessed significant expansion, particularly with the rise of conservative influences (Vakil, 2011). It is important to note, however, that these women-only spaces sometimes evolved into "alternative or distinct public spheres" due to the practices of the individuals who frequented them (Habermas, 1989; Fraser, 1990).

6 Informal revolutionary feminist placemaking

Feminist Revolutionary Placemaking is an approach to designing, creating, and transforming public spaces that aim to promote gender equality and asserting the agencies of the marginalized groups, specifically women. This approach challenges traditional patriarchal norms and societal expectations imposed on women and other marginalized groups and seeks to create inclusive and safe, spaces for all (Mehan, 2015). Over the past four decades, Iranian women have used the "power of presence" as an approach to the feminist movement to resist being pushed out of the public domain. This has been demonstrated through the social media campaign "My Stealthy Freedom," which began on Facebook in 2014 and used the hashtag #whitewednesdays. Every Wednesday, images of Iranian women with their hair uncovered and hijabs (veils) held aloft appear on social media (Mehan and Rossi, 2019; Mehan, 2022). In the current decade, Iranian women have been engaging in different waves of activism. They are protesting their lack of bodily autonomy and the compulsory wearing of hijabs by climbing on platforms and benches in public spaces. These protests were sparked by an Iranian woman who stood on a utility box in Tehran's Revolution Street on December 28, 2017. The young protesters, known as "daughters of the revolution," wave white scarves tied to poles to symbolize their protest. However, it is critical to highlight that the struggle is not just about the hijab itself but rather the more significant issue of gender politics and state control over women's bodies. This is evident in the reenactment of the initial protest by other women, who have come to be known as the "Girls of Revolution Street" on social media (Hoodfar, 2018).

Feminist revolutionary placemaking is not limited to Iran but can be seen in various places worldwide. These marches sought to reclaim public spaces, specifically at night, which were traditionally considered unsafe for women. The marches allowed women to assert their right to move freely in public spaces without fear of harassment or violence (see Figure 1).

Addressing counterarguments enriches the discourse around Feminist Revolutionary Placemaking. Critics often point to the societal and governmental resistance that such movements face, questioning their efficacy in effecting long-term systemic change. Concerns about backlash, including legal actions and social stigma, are also prevalent, potentially deterring participation in these feminist efforts (Hoodfar, 2018). However, acknowledging these challenges underscores the resilience and strategic adaptability of feminist movements. The digital dimension of activism, for example, has extended the reach and impact of these movements beyond geographical and societal limitations, fostering a global network of solidarity and support. This adaptability suggests that Feminist Revolutionary Placemaking is not only persisting in the face of adversity but also evolving to become a more inclusive and powerful agent of social change.

In addition to physical spaces, feminist revolutionary placemaking also applies to digital spaces (Tappert et al., 2024). Online platforms such as social media have become powerful tools for women to organize and mobilize and to claim their right to exist and to be heard in the digital public sphere (Mostafavi and Mehan, 2023). The #MeToo movement, which started in 2017, is an example of how digital spaces can be used for feminist revolutionary placemaking. Through hashtags and social media, women worldwide could share their stories of sexual assault and speak out against the systemic patriarchal structures that have allowed these abuses to continue (Mehan, 2023c, 2023d, 2023e).

Furthermore, data on the global spread and influence of the #MeToo movement could offer insights into its transformative impact across different countries and sectors. Visuals and statistics on participation in feminist protests and digital campaigns illuminate the growing momentum behind these movements, highlighting not only the scale of engagement but also the tangible shifts in public discourse and policy

FIGURE 1
This image serves as a poignant reminder of the role feminist placemaking plays in combatting human trafficking. It underscores the need for safe, inclusive spaces that uphold the dignity and rights of all women, free from exploitation and violence. Source: Karla D. Hernandez and Tahseen Reza Anika, 2023.

reforms that have been stimulated by such activism. Through this approach, the narrative around Feminist Revolutionary Placemaking gains depth, showcasing the movement's tangible impacts on societal attitudes toward gender equality and the visibility of feminist activism. This discussion not only addresses the critiques and challenges faced by the movement but also highlights the significant achievements and ongoing evolution of feminist placemaking strategies in promoting inclusivity and justice in both the physical and digital realms.

Feminist revolutionary placemaking is a powerful tool for promoting gender equality and asserting the agencies of the marginalized groups, specifically women. Whether in physical or digital spaces, feminist revolutionary placemaking is a way for women and other marginalized groups to assert their agency and claim their right to exist and to be heard in the public sphere. As an example of feminist revolutionary placemaking, the next section will focus on the "Woman, Life, Freedom" movement, led by Iranian women who challenge traditional societal norms and government policies that restrict their rights and limit their agency in public spaces.

7 'Woman, life, freedom' movement

The phrase "Women, life, freedom" has gained prominence as a slogan for the feminist movement in Iran, which was sparked by the

death of 22-year-old Mahsa (Jina) Amini in September 2022. Amini passed away while in the custody of the morality police for alleged violation of Iran's strict hijab laws. Her death mobilized social media, and videos of women defying the government by removing their headscarves, cutting their hair, and protesting spread quickly. As a result, the government shut down the internet to try to quell public demonstrations.

The movement primarily demands the abolishment of laws that discriminate against women, including the obligatory hijab law that enforces women to cover their hair in public. Furthermore, the movement advocates for the cessation of patriarchal attitudes and practices, such as forced marriages and domestic violence, which serve to undermine women's rights and freedom. The "Woman, Life, Freedom" movement has witnessed substantial growth and support via social media and digital platforms, acting as primary means for activists to disseminate information, mobilize supporters, and organize protests.

The movement has gained traction and support through social media and online platforms, which have allowed activists to share information, mobilize, and organize protests and campaigns. The movement began as a social media campaign, with Iranian women posting pictures of themselves without wearing the mandatory headscarf, or hijab, in public spaces. The campaign quickly gained traction, with thousands of women participating and sharing their

stories of harassment and discrimination for not wearing the hijab. Despite the government's attempts to silence and repress the movement, it has continued to grow and gain momentum. Reflecting on Fielding-Smith, during the revolution, background, religious affiliation, political affiliation, regional affiliation, and ethnicity were not considered (Fielding-Smith, 2011).

The reference to Fielding-Smith (2011) in the context of the "Woman, Life, Freedom" movement serves to underscore the unifying nature of the protests, transcending individual differences such as background, religious affiliation, political views, and ethnicity. Fielding-Smith's analysis suggests that during revolutionary movements, traditional divisions are often set aside in favor of common goals, illustrating the formation of nonhierarchical and horizontal relationships among participants. This concept aligns with the idea of rhizomes proposed by Deleuze and Guattari (1994), where movements grow and spread through interconnected yet decentralized networks, embodying a collective force without central leadership (Deleuze and Guattari, 1994, 110). In the case of the "Woman, Life, Freedom" movement, this framework helps explain how diverse groups of Iranian women and allies come together, leveraging both digital and physical spaces to challenge authoritarian constraints and advocate for gender equality.

This process of becoming involves "people to come" who are missing or lacking in the actual world and have the chance to invent themselves by resisting what is intolerable in the present. This act of asserting one's presence in the public sphere through vocal protest is a crucial aspect of street-level resistance, which can escalate from small acts of insubordination to larger insurrections against authoritarian power (Elkin, 1985; Phillips, 1998; Ahmed, 2017). In this context, a poignant example of such collective action occurred at one of Tehran's Art Universities. In solidarity with the "Woman, Life, Freedom" movement, female students, forbidden to sing in public under Iran's Islamic regime, performed a well-known revolutionary chant. This performance, which took place in the campus's main building—where women's performances have been proscribed for years—garnered participation from both male and female students. Spectators were invited to join the singing, a symbolic act of defiance against the imposed restrictions.

The movement's resistance extends beyond the digital realm to physical public spaces, where women engage in civil disobedience acts like publicly removing their hijabs and holding placards bearing the movement's slogan. These acts are shaping a new narrative for women in Iran and transforming public spaces' perception and use. Despite the state's punitive responses—manifested in harsh repression, arrests, and imprisonment—the movement continues to evolve. Women leverage social media, digital art, graffiti, street art, and other creative expressions to claim public spaces, thereby asserting their right to self-expression and autonomy, and further challenging the state's repressive mechanisms (see Figures 2, 3).

The "Woman, Life, Freedom" movement represents a critical juncture in feminist activism within Iran, propelled by the tragic death

FIGURE 2
A collage of defiance and peace: a juxtaposition of women's activism and symbolism in 'Woman, Life, Freedom' Movement with layered images of protest, hashtags, cultural elements, and a call for freedom. Sources: Karla D. Hernandez and Tahseen Reza Anika, 2023.

FIGURE 3
A powerful montage advocating bodily autonomy: the iconic Supreme Court backdrop amplifies the fervor of protestors defending reproductive rights, encapsulated by a vibrant red overlay symbolizing urgency and solidarity. Sources: Karla D. Hernandez and Tahseen Reza Anika, 2023.

of Mahsa (Jina) Amini and marked by significant acts of defiance against systemic oppression. Through a combination of digital activism and physical protests, Iranian women and their global allies have showcased remarkable courage and resilience, challenging not only specific laws like the mandatory hijab but also broader issues of gender discrimination, forced marriages, and domestic violence.

The movement has harnessed the power of social media to circumvent state censorship, amplify voices, and organize protests, illustrating a significant shift toward digital feminist activism. Despite facing severe state repression, the "Woman, Life, Freedom" movement continues to evolve, with women at the forefront of claiming their rights and reshaping the public discourse on gender equality in Iran and beyond. This grassroots, informal placemaking has not only raised awareness about women's rights issues in Iran but has also contributed to a global dialog on gender equality, showcasing the interconnectedness of feminist struggles worldwide.

8 Concluding notes

The quest for women's rights in Iran is a tenacious struggle that mandates the ongoing efforts of not only women but also men, and the government. This study delves into the key role of informal revolutionary

feminist placemaking in Iran, centering on the "Women, Life, Freedom" Movement. It accentuates how this form of placemaking empowers activists to contest traditional gender norms by seizing public spaces as platforms for activism and resistance. As discussed in the main body of this research, informal placemaking often arises from grassroots movements, providing space for innovation and spontaneity, yet it may lack sustained resources and formal recognition. Formal placemaking, by contrast, typically benefits from organizational support and funding but may be subject to bureaucratic delays or be less responsive to localized needs. Both types can interact, with informal initiatives becoming formalized over time, and formal programs incorporating informal, community-led activities (Mehan & Mostafavi, 2023). State-led placemaking can have extensive resources and a broad reach but may not address specific local needs or empower local communities. Conversely, bottom-up initiatives, often being community-led, have the advantage of being highly responsive to local needs, but might struggle with limited resources or capacity, and potential clashes with state-level policies (Mehan, 2023f).

The commonalities among these diverse forms of placemaking lie in their shared goal of reshaping public space to address gender equality, while their differences stem from the variance in the origin of initiatives, resources, and approaches to community engagement. Challenges span across resource constraints, state

suppression, and social stigma, while opportunities arise in the form of mobilizing public support, fostering innovation, and driving systemic change.

Revolutionary feminist placemaking, as embodied by the "Women, Life, Freedom" Movement, is a potent force in challenging traditional norms and patriarchal structures, even amidst the challenges of state suppression and social stigma. Iranian state, to suppress the movement, employs a wide array of mechanisms to suppress the "Woman, Life, Freedom" movement, necessitating critically exploring these tactics. Among the notable techniques is internet censorship, a manifestation of state power aimed at disrupting the digital momentum of the movement and obstructing inter-activist communication. However, the sustained mobilization and organization of protests, despite such impediments, underscores the resilience of the activists and challenges the efficacy of the state's digital control. Furthermore, the state apparatus—evident in law enforcement and discriminatory legislation such as the mandatory hijab law—functions as a tool of social control. Nevertheless, the public defiance exhibited by activists disrupts the intended impact of these oppressive laws, simultaneously symbolizing resistance and revealing cracks in the state's power structure.

The state's reliance on surveillance and intimidation strategies also merits attention. While designed to discourage activist participation, the movement's continued growth in the face of such tactics attests to the potency of feminist defiance. The state's use of punitive measures, such as arrests and imprisonment, paradoxically enhances the movement's visibility, attracting domestic and international attention and inadvertently bolstering support for the cause. In addition, the state's endorsement of restrictive cultural norms limits women's participation in public spaces. In a counteractive stance, activists engage in placemaking—public performances, art creation—to challenge these norms and reassert women's claim to public spaces.

A critical analysis of state suppression tactics reveals a dichotomy—while these tactics demonstrate the extensive reach of state power, they are simultaneously met with activist resilience that challenges and undermines this power. This resistance, primarily through the lens of placemaking, offers a compelling counter-narrative to state control and highlights the transformative potential of the feminist movement. The solidarity-action frame became dominant among activists fighting for freedom as they pushed for equality among Iranian women involved in the movement. This led to the creation of inclusive alliances driven by a collective desire for equality. In this interpretation, informal feminist placemaking in the context of non-democratic societies can be viewed as essential manifestations of the constitutive dimension of politics, specifically for subaltern groups

and minorities who experience oppression and violence, which are not mobilizing for a specific end but to assert their presence in the public sphere and to speak out against injustices. Finally, it's important to note the critical role of feminist placemaking in building a more inclusive society in Iran. Despite daunting challenges including state censorship, social stigma, and resource scarcity, the inspiring efforts of activists showcase the potential to establish empowering spaces for women. Hence, the steadfast commitment to organize, protest, and raise awareness is a testament to the resilience and transformative potential of the Iranian feminist movement. Future studies should delve deeper into the nuances of these placemaking practices, examining their unique and shared impacts on the struggle for women's rights in Iran and beyond.

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Befriending the body through clothes: the role of clothing in secular and religious women's body appreciation

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Background: Women invest in their appearance through clothes, and the way they view their bodies translates into how they choose to dress. Nonetheless, body image research often overlooks the role of clothing in fostering body appreciation. This study examined the impact of a psychoeducational feministic course on the sociology and psychology of attire, on students' clothing functions and body appreciation.

Methods: The participants were 114 female MA students (47 secular, 67 religious) between the ages of 24 and 64 who completed the Body Appreciation Scale and Function of Clothing scale at the beginning and end of the course.

Results: The results support the contribution of the course to changes in participants' clothing functions and improvement in their body appreciation $F(1,96) = 32.33$, $p < 0.001$, partial Eta squared = 0.25. Surprisingly, religiousness had no impact on the results.

Discussion: This research contributes to the field of positive body image by presenting the potential role of clothing in fostering body appreciation among women. It demonstrates the benefits of investing in clothing that are less driven by external standards and more by the expression of valued aspects of the self.

KEYWORDS

body appreciation, clothing functions, body image, feministic, religiosity

1 Introduction

Women in many cultures, particularly in Western cultures, are socialized to prioritize beauty and fashion (Rudd and Lennon, 2000). The way women perceive and interpret appearance-related messages significantly impacts their body image, i.e., their positive and negative perceptions and attitudes toward their body and appearance (Cash, 2004). Body image concerns are prevalent globally, including in the Middle East, due to strong pressures to conform to appearance ideals (Rodgers et al., 2023). Given the detrimental effects on global mental and physical health, body dissatisfaction becomes a focal point for numerous interventions and prevention programs. Evidence suggests that cultivating positive body image should also be a key intervention target (Guest et al., 2019). Positive body image entails respecting, honoring, loving, and expressing gratitude toward one's body. Most research in the field of positive body image focuses on body appreciation (Tylka and Piran, 2019).

Body image research shows that many aspects of how women view their bodies translate into their choices of attire (Tiggemann and Lacey, 2009). Shim et al. (1990) found that women

dissatisfied with their bodies harbored negative attitudes toward clothing, exhibited less confidence in their clothing selection, and were less inclined to be fashion innovators. Frith and Gleeson (2008) noted that women often use clothing to alter or manage their body's appearance and their feelings of bodily anxiety, particularly on what they define as "fat days." Similarly, Kwon and Parham (1994) found that women tended to select clothes more for camouflage purposes and less for individual self-expression when they felt "fat" as opposed to when they felt thinner. In their study, a higher body mass index (BMI) was related to camouflage. Tiggemann and Andrew (2012) also found that body weight is positively correlated with seeking clothing for camouflage. Further, their findings showed that the importance individuals placed on their physical appearance (i.e., self-objectification) correlated positively with choosing clothes for fashion, but negatively with seeking clothing for comfort. To conclude, research demonstrates that body image can influence women's clothing practices (Kaiser, 1985; Tiggemann, 2004; Tiggemann and Andrew, 2012).

The impact of clothing on body image is multifaceted. Clothing may serve as an "appearance-fixing" behavior, associated with greater body dissatisfaction, as individuals seek to conform to beauty ideals (Cash et al., 2005). In such cases, clothing becomes an externally driven pursuit, reflecting the desire to align with societal beauty standards. Clothing also functions as a tool for impression management and may indicate self-objectification (Tiggemann and Andrew, 2012). In other cases, clothing may serve as a coping strategy that allows a sense of mastery over the body and a shift to a more positive body image state (Frith and Gleeson, 2008). Qualitative research found that women use clothing to befriend the body, to love it as it is with its imperfections (Masuch and Hefferon, 2014). Cash (2008) coined the term "flexible groomer" to describe individuals who enjoy using clothing for mastery and pleasure rather than rigidly adhering to socially acceptable appearance norms.

There is evidence that clothing practices can directly shape cognitive processes. Experimental research has demonstrated this concept of 'enclothed cognition'; when donning a white lab coat, participants performance improved significantly on attention- related tasks (Adam and Galinsky, 2012). Clothing may contribute to perceived life quality (Sontag and Lee, 2004) by expressing one's identity (Rocamora, 2017; Valaei and Nikhashemi, 2017; McNeill and Venter, 2019), providing comfort and safety (Kwon and Shim, 1999; Rahman et al., 2021), and altering mood states (Moody et al., 2010; Koksal, 2014; McNeill and Venter, 2019).

The therapeutic potential of clothing was identified by a select group of researchers who use the term 'fashion therapy' to describe the positive psychological effects of clothing on the wearer. They focus on actual changes in appearance as noted by fashion experts (Callis, 1982; Lee et al., 2020). This approach originated in psychiatric wards for patients with poor hygiene and grooming skills (Roach and Eicher, 1965; Wong et al., 1988). However, therapeutic utilization of fashion requires an understanding of the complex relationship between women and clothing (Guy and Banim, 2000), as well as societal pressures on women's appearance (Tiggemann, 2004). If clothing practices prioritize attaining fashionable standards, it may exacerbate self-objectification and body dissatisfaction (Lemma, 2014; Engeln and Zola, 2021). The positive aspect of clothing lies in the flexibility and playfulness that Cash (2008) defined as "flexible grooming." From a feminist perspective, it is the difference between dressing for the male gaze and dressing out of a personal narrative (Braizaz, 2018).

Body image interventions generally aim to prevent body image disturbances while promoting body appreciation. These interventions, often implemented in educational settings, include components such as media literacy, body acceptance, a broad conceptualization of beauty, emotional regulation skills, self-compassion, and mindfulness training (Guest et al., 2019; Yager, 2019). Additionally, body image interventions are informed by feminist perspectives, seeking to resist objectification through critiques of gender roles and stereotypes (Murnen and Seabrook, 2012). Feminist ideologies were found to have a positive effect on body image (Snyder and Hasbrouck, 1996; Peterson et al., 2006). The literature review for this research failed to uncover any findings regarding the use of clothing as a modality within existing body image interventions (e.g., Guest et al., 2019).

Israel presents an opportunity to study the relationship between clothing and body image in a diverse society with varying religious identities. The Jewish population in Israel can be categorized into three religious sub-groups: Orthodox and ultra-Orthodox, Modern Orthodox, and secular. These groups differ in terms of clothing practices and views on female modesty (Geller et al., 2020). Modesty norms entail gender separation from a young age and strict standards of dress and behavior. Orthodox and Ultra-Orthodox women are instructed to cover most of their bodies, including elbows, knees, collarbones, and toes. Clothing must be unobtrusive, resulting in common colors such as white, black, gray, dark blue, and brown in the Orthodox female wardrobe. The Modern orthodox dress code is less strict and meticulous (Taragin-Zeller, 2014). Moreover, the Modern Orthodox society is more exposed to western media in an attempt to synthesize compliance with Jewish law with the secular modern world (Seigelshifer and Hartman, 2011).

Within the cultural context of body image, various aspects of religious practices and affiliation have been identified as protective factors against body image dissatisfaction (Mussap, 2009; Handelzalts et al., 2017). Modest dress codes have been associated with lower experiences of objectification, allowing women to affirm themselves as human beings rather than solely as sexual objects. Consequently, this may serve as a buffering mechanism against societal appearance pressures (Mussap, 2009). Indeed, Handelzalts et al. (2017) found that ultra-Orthodox Jewish women maintained more positive attitudes toward their bodies. Media exposure has been suggested as a mediator for the relationship between religiosity levels and body image (Geller et al., 2020), given its established detrimental role in promoting body- and weight-dissatisfaction (Halliwell, 2013). However, the relationship between religion and positive body image needs to be further examined, as contrary findings suggest no significant correlation between religion and body image concerns (Akrawi et al., 2015).

The present study aims to investigate the potential contribution of clothing to body appreciation among religious and secular adult women in Israel. Specifically, it focuses on five clothing functions: camouflage, comfort, assurance, fashion, and individuality. These functions are explored within a context similar to existing body image interventions, particularly those informed by feminist perspective.

1.1 The present study

This study explored the relationship between clothing, body appreciation, and religiosity. The study included religious and secular adult women who enrolled in an elective course named "Styling as Self-Expression" as part of their MA in Society and the Arts. The

course has been part of the MA program for 4 years before the research was conducted and was not specially designed for the study. The course outline, contents and aims are presented in Table 1. This psychoeducational course discusses the sociology and psychology of attire from a feminist perspective, placing emphasis on cultivating body appreciation. The course aimed to present a novel view of clothing as a societal construct with significant psychological implications that could benefit body image and overall well-being. It comprised 13 lessons, each lasting 2 academic hours, and encouraged participants to explore their self-expression and playfulness with clothes. While homework was voluntary and unsupervised, participation was mandatory.

Given the diverse religiosity within the student population, including ultra-Orthodox and secular students, the study aimed to examine the effect of the course on body appreciation while considering the participants' level of religiosity.

It was hypothesized that: (a) The course would increase participants' levels of body appreciation; (b) Religious students would demonstrate higher levels of body appreciation at both time points; (c) The course would contribute to changes in the clothing functions of participants, resulting in lower levels of camouflage and higher levels of individuality and assurance.

2 Methods

2.1 Participants and procedure

To ensure the ethical treatment of human participants, this study was carried out according to the ethics principles of the Academic College of Society and the Arts and its institutional research committee. Participation was entirely voluntary, and consent was obtained in advance. The participants were 114 female MA students (47 secular, 67 religious) aged between 24 and 64 ($M = 42.7$, $SD = 9.5$). The participants were invited to fill out self-report questionnaires confidentially at two time points (at the end of the first lesson and immediately after the last one). They completed the questionnaires anonymously and provided a 4-digit number so that their questionnaires from the two time points could be aligned. The participants took part voluntarily and were not remunerated for their time. There were no exclusion criteria, but incomplete forms or those filled out at only one time point were excluded from the research. Additionally, 27 students did not volunteer to participate and were thus excluded from the sample. Missing data accounted for 2–13% of the dataset. Two variables, BMI and comfort, had substantial missing data. Little's MCAR test: Chi-Square = 193.123, DF = 68, Sig. = 0.000 with the exclusion of these two variables, Little's test was not significant, indicating that for BMI and comfort, the missing data was not random. This issue is further addressed in the discussion.

2.2 Measures

2.2.1 Function of clothing scale

Functions of clothing were assessed using items developed by Kwon and Parham (1994). This scale measures the choice of clothing for its comfort, camouflage, assurance, fashion, and individuality functions. The items are assessed on a Likert scale ranging from 1 (not

at all agree) to 5 (very much agree) in response to the stem "I tend to select…" The five categories are: Fashion (e.g., "clothes that are stylish"; 3 items), Camouflage (e.g., "clothes that camouflage my figure problems"; 3 items), Assurance (e.g., "clothes that give me self-confidence"; 5 items), Individuality (e.g., "clothes that make me distinctive"; 3 items), and Comfort (e.g., "clothes that are comfortable"; 1 item). The scale was translated to Hebrew using a translation/back translation procedure by the author and a native English speaker and used in former study (Stolovy, 2021). In the present sample, Cronbach's alpha was 0.72 at time 1 and 0.71 at time 2.

2.2.2 Body appreciation

Body appreciation was assessed by the Body Appreciation Scale (BAS) developed by Avalos et al. (2005). This 13-item scale contains items addressing the appreciation, acceptance, respect, and attention given to one's body (e.g., "I respect my body," "Despite my flaws, I accept my body for what it is"). Responses are on a 5-point Likert scale (1 = never, 5 = always) and averaged, with higher scores reflecting greater body appreciation. The scale was translated to Hebrew using a translation/back translation procedure by the author and a native English speaker. Tylka and Wood-Barcalow (2015) report Cronbach's alpha as being above 0.90, indicating high internal consistency. In the present sample, Cronbach's alpha was 0.87 at time 1 and 0.91 at time 2.

2.2.3 Sociodemographic data

Each participant was asked to indicate her age, height and weight for calculation of body mass index (BMI), place of residence, marital status, health, financial status and religious denomination.

2.3 Statistical analyses

A power analysis was conducted to determine the required sample size for detecting the hypothesized effect. Based on an expected effect size of $d = 0.30$, an alpha level of 0.05, and a desired power of 0.80, a minimum sample size of 90 participants was calculated using G*Power software (Faul et al., 2007). After excluding missing data, the final sample size was 114 participants. The data were analyzed with SPSS 19.0 software. The relationships between clothing functions, body appreciation, and background data (i.e., age, marital status, health and financial statuses, and places of residence) were analyzed using Pearson's correlations and chi-square tests. A two way MANOVA (multivariate analysis of variance) was used to explore the combined effect of participation in the course (effect of time) and religious affiliation (inter-group differences) on the research variables, i.e., clothing functions and body appreciation.

3 Results

3.1 Characteristics of the sample

The sample comprised 114 women from urban and rural areas in Israel; the participants' ages ranged from 24 to 64 ($M = 42.7$, $SD = 9.5$). Descriptive data is presented in Table 2. As can be seen, approximately half of the sample consider themselves to be religious ($N = 67$, 58.8%) and the rest are secular ($N = 47$, 41.2%). Most of the sample are married ($N = 89$, 78.1%) with children ($N = 99$, 86.8%). BMI scores

TABLE 1 "Styling as self-expression" — course outline, contents*, and aims.

Lesson	Content	Psychoeducational aim
1	Introduction to concepts and theories on the psychology of clothes	Restructuring the meaning of fashion for women and exploring emotional meaning of clothing
2–3	Clothing functions (Kwon and Parham, 1994)	Guided self-discovery of personal and social motives for daily choices of clothing (personal and social identities are interdependent)
4–5	Objectification theory (Fredrickson and Roberts, 1997)	Feministic perspective on beauty standards, gender expectations and risks of self-objectification
6–7	Body image (Cash, 2008)	Fostering body acceptance through "flexible grooming"; Adjusting clothes to personal needs and preferences and not vice versa; Critical thinking about clothing size and fashion's exclusivity; Focusing on the body's assets and not imperfections; Media literacy around fashion, style and beauty expectations
8	Self compassion (Neff, 2003; Gilbert, 2015)	Befriending the body and self; Minimizing self-criticism in the context of the gaze in the mirror; Fostering self-compassion skills for moments of fluctuations in body image
9	Clothing styles and personality traits (Stolovy, 2021)	Clothing as a path for self-expression rather than the exclusive focus on body presentation – what kind of story do we want to express through clothes?
10	Enclothed cognition (Adam and Galinsky, 2012)	Utilizing the psychological effect of clothes from a point of agency and empowerment; Expressing strength of character through symbolic meaning of clothes
11	Openness to experience (Costa and McCrae, 1992)	Fostering playfulness with clothes; Guided self discovery of different expressions through clothes; The courage to challenge societal and personal expectations around styling (dressing in different ways)
12	Emotional regulation through clothing practices	Personal exploration of emotional effects of colors, fabrics, shapes, and tactical qualities of attire; Striving for positive body connection and comfort through clothing choices; Enhancing positive emotions and wellbeing through colors
13	Psychology of clothing consumption (Benson, 2000)	Exploring motives of shopping; Fostering mindfulness in shopping; Understanding the internal dialog while measuring clothes in stores

*References presented in this table are basis for the course content.

ranged from 16.18 to 54.43 ($M = 24.9$, $SD = 5.06$). Chi-squared tests found no association between descriptive data, clothing functions and body appreciation.

TABLE 2 Descriptive statistics for sample characteristics ($N = 114$).

Variable	Mean, SD
Age	42.7, 9.5
Height (cm)	162.8, 5.4
Weight (kg)	66.1, 13.7
BMI	24.88, 5.06
Variable	N*, % of the sample
Marital status	
Single	15, 13.2%
Married or living as married	89, 78.1%
Divorced	8, 7%
Widowed	1, 0.9%
Children	
Yes	99, 86.8%
No	15, 13.2%
Religious affiliation	
Secular	47, 41.2%
Religious	67, 58.8%
Financial status	
Very good	24, 21.1%
Good	48, 42.1%
Moderate	41, 36.0%
Not good	1, 0.9%
Health condition	
Very good	51, 44.7%
Good	53, 46.5%
Moderate	10, 8.8%
Place of residence	
North country	38, 33.3%
Central country	74, 65%
South country	1, 0.9%

*N presented excluding missing data.

3.2 Body appreciation and clothing functions

The patterns of correlations between body appreciation (BAS), clothing functions, and BMI are shown in Tables 3, 4. As can be seen, at time 1, BAS is positively correlated with assurance and negatively correlated with BMI and camouflage. It is interesting that, at time 2, BAS is positively correlated with all clothing functions including camouflage. BMI presents the expected correlations with clothing functions; at time 1, it is positively correlated with camouflage, and negatively correlated with assurance, fashion, and BAS. At time 2, BMI is no longer correlated with comfort or fashion. At time 1, fashion is negatively correlated with BMI, but at time 2, it is not. However, it correlates with all clothing functions. All correlations are presented in Tables 3, 4 and will be thoroughly discussed.

TABLE 3 Descriptive statistics and correlations of body appreciation (BAS) and clothing functions − time 1 (*N* = 114).

Variables	*M*	*SD*	1	2	3	4	5	6	7
1. BAS	3.55	0.63	–	−0.52***	0.15	0.12	0.28**	−0.44***	−0.04
2. BMI	24.88	5.06		–	−0.20*	−0.09	−0.22*	0.34***	0.25*
3. Fashion	2.85	0.99			–	0.52***	0.58***	−0.06	−0.18*
4. Individuality	3.0	0.93				–	0.54***	0.02	−0.10
5. Assurance	3.58	0.67					–	−0.13	0.15
6. Camouflage	3.11	1.09						–	0.28**
7. Comfort	4.15	0.85							–

*Indicates significance at *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

TABLE 4 Descriptive statistics and correlations of body appreciation (BAS) and clothing functions − time 2 (*N* = 114).

Variables	*M*	*SD*	1	2	3	4	5	6	7
1. BAS	4.38	1.6	–	−0.47***	0.86***	0.86***	0.92***	0.80***	0.82***
2. BMI	24.84	5.02		–	−0.47	−0.19	−0.26*	0.52***	0.05
3. Fashion	3.59	1.99			–	0.88***	0.93***	0.79***	0.75***
4. Individuality	3.82	1.91				–	0.91***	0.79***	0.72***
5. Assurance	4.38	1.63					–	0.82***	0.81***
6. Camouflage	3.49	1.99						–	0.82***
7. Comfort	4.62	1.67							–

*Indicates significance at *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

3.3 Effect of course participation on clothing functions and body appreciation

A multivariate analysis of variance (MANOVA) procedure was employed to investigate potential differences in BAS and clothing functions across the two measurement times, while considering participants' religious affiliation. Table 5 presents estimated marginal means and MANOVA results for the main univariate effects of time across outcomes.

The multivariate effect of time was significant [$F(7,90) = 7.44$, $p < 0.001$, partial Eta squared $= 0.37$]. BAS scores showed an increase between the two measurement times [$F(1,96) = 32.33$, $p < 0.001$, partial Eta squared $= 0.25$], while BMI remained unchanged [$F(1,96) = 0.003$, $p = 0.96$]. However, average values of camouflage decreased [$F(1,96) = 4.36$, $p = 0.04$, partial Eta squared $= 0.04$], while assurance [$F(1,96) = 30.55$, $p < 0.001$, partial Eta squared $= 0.24$], fashion [$F(1,96) = p = 0.004$, partial Eta squared $= 0.08$], and individuality [$F(1,96) = 10.08$, $p = 0.002$, Eta squared $= 0.10$] increased between the two time points.

The MANOVA indicated that the effect of religiosity was not significant: $F(7,90) = 1.70$, $p = 0.12$. Table 6 provides means and standard deviations separately for secular women and religious women.

4 Discussion

This study investigated the influence of clothing on body appreciation among both secular and religious women. Specifically, it explored how a psychoeducational feminist course focusing on the sociology and psychology of attire affected students' clothing functions and body appreciation. Overall, the findings suggest that the course may

have had beneficial impact in altering participants' clothing functions and enhancing their body appreciation. Surprisingly, participants' religious domination did not appear to effect the outcomes.

Consistent with prior research (Shim et al., 1990; Kwon and Parham, 1994; Tiggemann and Lacey, 2009), the study revealed a correlation between body dissatisfaction and the tendency to use clothes for camouflage. At the initial time point (time 1) of the study, participants demonstrated a higher inclination toward camouflage as their BMI increased. This inclination to conceal the body was associated with lower body appreciation scores. Additionally, Fashion was inversely related to BMI, indicating that participants perceived fashionable clothing as associated with a thinner body. This highlights the intricate relationship women have with fashion, where they often equate it with a slim figure and strive to conform to societal standards (Apeagyei, 2008). Notably, the fashion industry tends to offer limited choices and creates a discouraging shopping environment for individuals who do not fit into standardized, small apparel sizes (Colls, 2004; Christel, 2014; Peters, 2014). The findings indicate that participants gained more confidence with fashion and clothing over time, regardless of their body size. Fashion became correlated with all clothing functions and no longer correlated with body size. This enhanced confidence aligns with one of the primary goals of the course, which is fostered by its feminist perspective. Feminist interventions take a proactive stance against societal pressures related to beauty standards (Murnen and Seabrook, 2012) and employ psychoeducation to identify and counter harmful messages regarding appearance and gender roles (Tylka and Piran, 2019).

The primary message of the course emphasized that clothing should be tailored to suit the individual wearer, rather than expecting the wearer to conform to clothing standards. The course included

TABLE 5 Estimated marginal means and main effects of time for the research variables (N = 114).

	EMM Time 1	EMM Time 2	Main effect of time	p-value	η^2_p
BAS	3.56 (0.07)	3.86 (0.06)	$F(1,96) = 32.32$	<0.001	0.25
BMI	24.90 (0.53)	24.90 (0.52)	$F(1,96) = 0.00$	0.96	0.00
Comfort	4.24 (0.08)	4.19 (0.09)	$F(1,96) = 0.24$	0.62	0.00
Camouflage	3.12 (0.12)	2.90 (0.08)	$F(1,96) = 4.36$	<0.05	0.04
Assurance	3.62 (0.07)	3.90 (0.06)	$F(1,96) = 30.55$	<0.001	0.24
Fashion	2.80 (0.09)	3.01 (0.09)	$F(1,96) = 8.95$	<0.01	0.09
Individuality	2.99 (0.09)	3.24 (0.09)	$F(1,96) = 10.07$	<0.01	0.10

EMM, estimated marginal means; BAS, body appreciation scale; BMI, body mass index.

TABLE 6 Mean and standard deviations of research variables according to religion (N = 114).

	Secular (N = 47)		Religious (N = 67)	
	Time 1 M (SD)	Time 2 M (SD)	Time 1 M (SD)	Time 2 M (SD)
BAS	3.55 (0.67)	3.87 (0.54)	3.56 (0.61)	3.86 (0.64)
BMI	25.19 (5.81)	25.03 (5.36)	24.61 (4.69)	24.76 (4.80)
Comfort	4.44 (0.67)	4.37 (0.70)	4.04 (0.89)	4.02 (0.96)
Camouflage	3.09 (0.93)	2.88 (0.92)	3.15 (1.30)	2.93 (0.73)
Assurance	3.72 (0.62)	3.97 (0.61)	3.52 (0.66)	3.85 (0.61)
Fashion	2.76 (0.98)	3.10 (0.98)	2.82 (0.93)	2.92 (0.86)
Individuality	2.97 (0.92)	3.11 (0.88)	3.01 (0.96)	3.37 (0.88)

BAS, body appreciation scale; BMI, body mass index.

psychoeducation to address common challenges women face in their interactions with fashion. For many women, the act of shopping for and trying on clothes can serve as a stark reminder that their bodies do not align with societal norms (Tiggemann and Lacey, 2009). Therefore, the course aimed to transform the fashion experience from one of self-evaluation to one of compassion. Through tools such as media literacy, self-compassion exercises, and playful exploration of clothing, participants were encouraged to develop a sense of self-confidence in their fashion choices. The course depicted fashion and style as opportunities for individuals to express valued aspects of their identity, rather than merely showcasing their bodies.

The MANOVA results provide further support for the course's impact on participants' body appreciation. As body appreciation increased over time, so did participants' levels of assurance, fashion, and individuality with clothing. It is plausible that participants felt empowered to express their individuality through fashion (Belk, 1997), and this self-expression had a positive effect on their body appreciation, consistent with findings from previous studies (Masuch and Hefferon, 2014; Stolovy, 2021).

Participants' attitudes toward camouflage underwent an intriguing shift. Initially, at time 1, camouflage was correlated with higher BMI

and comfort. However, at time 2, camouflage demonstrated multiple correlations with clothing functions. This suggests that participants may have perceived camouflage as a means of exerting control and enhancing confidence through their clothing, rather than solely as a method of concealing body flaws. This aligns with Frith and Gleeson's (2008) research, which indicates that women utilize clothing to both conceal and highlight aspects of their bodies. For some women, the act of using clothes to conceal certain body features can lead to increased feelings of confidence. This differs from a generalized desire to conceal the body due to its size and associated feelings of dissatisfaction, which often result in negative attitudes toward clothing (e.g., Tiggemann, 2004). These findings suggest that the course encouraged participants to expand their perceptions of clothing functions, irrespective of their body size. It is important to note that weight and height reports presented substantial missing data, indicating that self-reported BMI may be biased. Women face a widespread and socially acceptable stigma associated with heavier body weight and the utility of BMI measurement may be poor.

Tiggemann and Lacey (2009) suggested that clothing choices may influence how women feel about their bodies. The present study demonstrates that, by enhancing enjoyment and flexibility with clothing, women can enhance body appreciation. As previously suggested by Frith and Gleeson (2008), clothing practices can serve not only to present body image but also to manage fluctuations in body image.

The course described above used the known positive impact of feminist ideologies on cognitive restructuring, re-labeling women's thoughts and experiences (Srebnik and Saltzberg, 1994), and its positive effect on body image (Snyder and Hasbrouck, 1996; Peterson et al., 2006). It is different from "fashion therapy" (Callis, 1982; Lee et al., 2020; Kang and Kim, 2021) since it involves no directive guidelines for fashionable or recommended clothing. Participants were encouraged to explore different expressions through fashion and to challenge their perceptions of clothing functions. Moreover, the relationship with clothes was put within the context of attuned self-care and the bodily sensation of fabrics and textures to enhance the connection to one's embodied self (Piran, 2016).

Finally, the similarities between secular and religious participants must be considered. Religion has been described as a protective factor for body image (Kim, 2006; Mussap, 2009), and Handelzalts et al. (2017) found that ultra-Orthodox Jewish women maintained more positive attitudes toward their bodies. It was surprising that religious participants had no advantage over their secular colleagues in terms of body appreciation and clothing functions. This similarity may be understood in light of Geller et al.'s (2020) findings among the religious community in Israel. Geller et al. (2020) found differences in positive body image

between Ultra-Orthodox women compared to Modern Orthodox and secular women, but no difference between secular and Modern Orthodox women. Media exposure mediated the relationship between religiosity and body image. Modern Orthodox women are found to be more open to modern life and more exposed to Western media (Geller et al., 2020). Participants in the current study may fit the definition of Modern Orthodox: adhering to religious laws and most traditions, with an openness to modern life and Western media (Seigelshifer and Hartman, 2011). The religious participants in this study attended the course at a secular institution for higher education, alongside secular women. Their media exposure possibly resembles that of their secular colleagues, as does their body appreciation. Moreover, the relationship between religion and positive body image needs further examination, as there are findings that do not support the correlation between religion and body image concerns (Akrawi et al., 2015).

5 Conclusion

This study highlights the relationship between clothing and body appreciation among women in a diverse society with varying religious identities. Given the detrimental effects of body image concerns on global mental and physical health, programs and interventions that can protect or improve body image, are sorely needed. This study highlights the potential contribution of clothing to these interventions. The study also considers the potential contribution of religiosity to body appreciation, an issue that receives little attention compared to the extensive literature on the benefits of religion for mental health (Akrawi et al., 2015).

5.1 Limitations

Although the current study extended previous research, there are several limitations that need to be acknowledged. Firstly, the study lacked a control group or a follow-up, which means caution is warranted when drawing conclusions from the results. Secondly, the study relied on self-reports by MA students who were aware of the course's feminist body-positive ideology. This awareness could have influenced their responses, introducing the possibility of bias. The missing data on BMI suggests that self-perception of weight should be measured in other ways, maybe by asking "how would you describe your body size." Future research could also benefit from incorporating qualitative data to delve deeper into the nature of changes in body appreciation. Additionally, in the context of religion and body appreciation, it would be valuable to directly evaluate media exposure.

Nevertheless, this research demonstrated the role of clothing in body appreciation and shed light on a developing field of research in the psychology of clothing.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by Academic College of Society and the Arts and its institutional research committee. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

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Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Career women's mental wellbeing in the era of population decline: the effects of working environment and family environment on the mental wellbeing

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Introduction: In recent years, it has become increasingly evident that the population in many countries has been declining. China, which was previously the world's most populous nation and is often categorized as an emerging economy, officially entered an era of population decline in 2022. The advent of this era has make China's economic development more uncertain and aging of population more pronounced. To address the population decline, the Chinese government implemented the "Three-Child Policy" to encourage childbirth, aiming to reverse the negative population growth. However, this policy has not achieved the expected goals. Instead, it has increased the pressure on women to bear children, particularly for career women, where such pressure may conflict with their existing work and family environments, subsequently affecting their mental wellbeing.

Methods: A survey was conducted to investigate the mental wellbeing status of career women in Changchun City, Jilin Province, Northeast China. It analyzes the impact of working and family environments on the mental wellbeing of these women.

Results: Based on the survey, this study draws five conclusions: **A.** The mental wellbeing status of career women varies across different ages, industries, and childbirth statuses. **B.** The perceived adverse impact of childbirth on the working environment may negatively affect the mental wellbeing of career women. **C.** The perceived adverse impact of childbirth on the family environment may negatively affect the mental wellbeing of career women. **D.** Career women are not satisfied with the effectiveness of current policies in protecting women's rights. **E.** Compared to working environments, there is a greater demand for career women in the family environments, particularly in reducing various family burdens.

Discussion: The pro-natalist policies introduced in response to negative population growth can worsen the mental wellbeing of career women, while the deterioration of their mental wellbeing could further accelerate population decline. Given the current challenges, this study suggests that effectively improving the mental wellbeing of career women requires building psychological resilience among childless career women, reducing the burden of family on career women, and continuously improving policies and regulations that protect the rights of career women.

1 Introduction

According to the statistics from the Population Division of the United Nations, the global rate of natural change has shown a declining trend from 2000 to 2021.[1] This decline is particularly pronounced in high-income countries, where negative population growth is more evident. As of 2021, more than half of these countries, specifically 19, have experienced population decline. Meanwhile, several emerging economies have also begun to enter an era of population decline. From 2000 to 2021, India, as the world's second-most populous country during that period, saw its natural population growth rate drop from 18.3% to 7.0%, indicating a trend toward population decline. China, previously the world's most populous nation and a major emerging economy, has also been significantly affected by negative population growth and officially entered an era of population decline in 2022. China's demographic challenges are closely linked to its historical population policies. The One-Child Policy, implemented from the late 1970s to 2015, was designed to curb the rapidly growing population, given the economic conditions and social issues of that time [1, 2]. This policy, while effective in slowing population growth, has led to a significant imbalance in the population structure, with an aging population and a shrinking workforce becoming increasingly evident [3]. The policy resulted in what is commonly referred to as the "4-2-1" family structure, where one child is responsible for supporting two parents and four grandparents. In response to these demographic shifts, the Chinese government introduced the Two-Child Policy on January 1, 2016, allowing families to have two children in an effort to mitigate the aging population problem. However, this policy had limited success; according to data from China's National Bureau of Statistics, the natural population growth rate briefly increased by 1.6% in 2016 compared to 2015 but continued to decline thereafter.[2] As a result, the government further relaxed birth restrictions by implementing the Three-Child Policy in May 2021. The implications of these policies have been profound, particularly for career women. With the gradual relaxation of birth control policies, career women face increasing pressure to balance professional responsibilities with family duties. Not only are they expected to contribute to the household income, but they also bear a significant portion of family caregiving responsibilities, which may impact their mental wellbeing and career progression.

According to the "Green Paper on the Mental Wellbeing of Chinese Career Women, 2019," approximately 30% of women reported feeling "anxious and depressed from time to time," while 7% indicated that they "are always in a state of anxiety or depression," highlighting the increasing mental wellbeing challenges among career women.[3] Compared to non-career

women, career women face unique and multifaceted pressures that arise from their dual roles in both professional and domestic spheres. As a significant part of the workforce, career women not only contend with workplace demands, such as job performance pressure, promotion competition, and economic uncertainties, but they also shoulder substantial family responsibilities, including childcare and eldercare. This study focuses exclusively on career women due to the distinct and heightened challenges they face in balancing work and family life. The pressures stemming from these dual roles may contribute to a higher risk of mental wellbeing issues, making this demographic particularly vulnerable [4]. While a comparative analysis with non-career women could offer additional insights, the unique stressors and societal expectations placed upon career women warrant an in-depth and focused examination in this research. In the working environments, because of economic uncertainties, companies may reduce expenses by laying off employees and intensified the workload of remaining staffs. It has further deteriorated the work environments [5]. In the family environments, because of the population aging and increasing life expectancy, a family may have to fully support up to four older adults simultaneously [6]. It could significantly increase the families' financial burden. Moreover, influenced by the Three-Child Policy and traditional Chinese beliefs, some women are expected by their families to take on more childbirth responsibilities. Thus, maintaining mental wellbeing amidst the pressures of a challenging work environment and demanding family responsibilities is a common dilemma faced by career women in China.

This study, in the context of China's negative population growth, examines the impact of the working environments and family environments on the mental wellbeing of career women. This research not only enriches the understanding of women's mental wellbeing but also provides valuable insights for other emerging economies facing similar population decline issues. Additionally, this study holds significant practical implications for social stability, corporate development, and family happiness. From a perspective of society, investigating the mental wellbeing of career women in the context of population decline helps improve the effectiveness, rationality, and practicality of population policies and economic policies. For a perspective of employer, there is a direct relation between employees' mental wellbeing and their performance. Maintaining the mental wellbeing of career women can enhance operational efficiency and effectiveness [7]. From a perspective of family, women's wellbeing is closely tied to family's stability; their mental wellbeing significantly impacts their children's and partners' physical and psychological wellbeing [8].

2 Literature review

Initially, population decline was measured by the positive or negative natural growth rate [9, 10]. As research progressed, Wang Feng and his colleagues [11] argued that using only the natural growth rate to measure population changes is not comprehensive. They suggested excluding the influence of the population age structure and using the intrinsic natural growth rate to measure population changes. The causes of population decline can be categorized into exogenous and endogenous factors. Exogenous

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causes include events that distort social development, such as wars, plagues, and famines (12). Endogenous causes stem from factors such as increased life expectancy, an aging age structure, a long-term decline in birth rates, and shifts in social ideologies (13). China's population decline is mainly attributed to endogenous factors (14). Population decline inevitably exacerbates population aging and the imbalance in the age structure. To encounter these issues, the government would implement policies to encourage childbirth. However, such pro-natalist policies increase the costs for companies to hire female employees, potentially reducing their willingness to hire women and leading to greater employment discrimination against career women (15). Moreover, in Chinese society, women's mental wellbeing could be impacted by the deeply entrenched belief that women should shoulder more family responsibilities. On one hand, this belief leads many women to accept these duties as their obligation. On the other hand, they find it increasingly difficult to cope with the ever-growing family obligations. This conflicting mindset often triggers mental wellbeing issues (16, 17). The employment pressure faced by career women in the workplace, combined with the expectations for childbirth and family obligations, can lead to varying degrees of mental health issues, thereby affecting their willingness to have children (18). Additionally, factors such as pessimism about economic prospects, pressure related to children's education, and the burden of high mortgage payments further contribute to the decline in women's willingness to have children (19). As a result, the government may introduce more policies to stimulate childbirth. However, these policies often overlook the employment and family pressures that career women endure, and additional pro-natalist policies may exacerbate the current predicament faced by career women (20).

With the progress of society, women have increasingly become an indispensable labor force in the work. Although career women today bear the majority of family and work responsibilities, they often do not receive adequate recognition from either their families or work. This leads to poorer mental wellbeing outcomes for career women compared to men (21). Wang et al. (22) conducted a mental wellbeing survey using the Symptom Checklist-90 (SCL-90) on women from 10 industries across 24 provinces and regions in China. The results showed that over one-third of the participants exhibited tendencies toward mental wellbeing issues. According to the Global Burden of Disease study, mental wellbeing issues have become significant factors affecting life expectancy and contributing to various diseases. Anxiety and depression are the primary causes of deteriorating mental wellbeing (23). Clinical research also indicates that women are more likely to be diagnosed with depression and anxiety compared to men (24). Yan et al. (25) investigated the mental wellbeing status of career women in Shanghai and found that the rates of people with anxiety and depression were 48.3% and 70.3%. Lv et al. (26) conducted a mental wellbeing survey on women in various professions in northwest China and discovered that female workers scored the highest for anxiety and depression. Gao et al. (27) found that nearly half of the participants in their study of career women in different communities showed mild to severe depression. To improve the mental wellbeing of career women, scholars have conducted various studies. Lv et al. (28)

found that career women experience significant psychological stress during pregnancy, and psychological counseling and interventions through the mobile application WeChat can alleviate this stress. Additionally, for specific occupational groups such as female veterans, it is recommended to hire more female healthcare providers to meet their mental wellbeing needs (29).

Different working environments can have different impacts on employees' mental wellbeing. Factors such as organizational structure, work processes, and compensation systems influence employees' mental wellbeing (30). The "Three-Child Policy" may result in lower salaries and fewer promotion opportunities for career women compared to men, and the income gap between the two may gradually widen. Low-income career women are more prone to mental wellbeing issues, often stemming from domestic violence, work discrimination, and parenting pressures (31, 32). At home, women need to invest more time and energy in childbirth and nurture. It could be difficult for them to balance these responsibilities with their work. Consequently, career women are more susceptible to mental wellbeing issues during pregnancy (33, 34). Empirical results indicate that work-family conflict increases the likelihood of depression among career women (35).

Currently, there is plenty of studies on the mental wellbeing of career women. Many scholars have explored the impact of working or family environments on their mental wellbeing and offered various perspectives. However, there remains a gap examining the impacts within the context of population decline in emerging economies. Based on this, this study aims to answer the following questions: **A.** What factors influence the mental wellbeing of career women? **B.** Are the adverse effects of population decline on the working or family environments of career women contributing to the deterioration of their mental wellbeing? **C.** Do career women understand or are they satisfied with the current policies protecting women's rights?

3 Materials and methods

3.1 Participants

The survey was distributed in several districts of Changchun, Jilin Province, located in Northeast China, including Nanguan, Kuancheng, Chaoyang, Erdao, Lvyuan, Shuangyang, and Jiutai. The choice of this region for the survey is based on two reasons:

A. **Representative Population Decline:** According to data from the National Bureau of Statistics of China, Jilin Province was the third province in China to experience population decline, making it a representative area for studying this phenomenon.
B. **Comprehensive Industrial Structure:** Changchun, the capital city of Jilin Province, is also one of the central cities in Northeast China and a significant industrial base city. With a comprehensive industrial structure and a relatively advanced economy, this city provides a setting to study the mental wellbeing of career women across various industries.

In this study, we selected participants aged 20 to 45. The lower age limit of 20 was chosen because women cannot marry before this age by Chinese law. The upper age limit of 45 was

selected because women beyond this age may be no longer in their prime childbearing years and are less affected by issues related to childbirth. The 20 to 45 age range is significant as it encompasses the period when most women choose to have children and are also progressing in their careers. Therefore, this age range is particularly relevant for investigating the mental wellbeing of career women in the context of population decline. Understanding their mental wellbeing and needs is essential for this study.

The survey was distributed both online and offline in Changchun. A total of 793 surveys were collected, and 688 surveys were deemed valid, accounting for 86.76% of the total.

3.2 Survey design

The survey consists of three sections. The first section gathers basic information, including the participant's age, industry, education level, salaries, and marital status. This section aims to collect essential demographic data about the participants.

The second section of the survey focuses on the participants' mental wellbeing status. This study employs the Simplified Scale for Depression and Anxiety Screening (SSADS) to measure the mental wellbeing status of career women (36, 37). This scale is formulated by the Self-Rating Anxiety Scale (SAS-20 items), the Self-Rating Depression Scale (SDS-20 items), and the Symptom Checklist-90 (SCL-90). Specifically, SCL-90 incorporates 13 items related to depression and 10 items related to anxiety. As a result, the scale has good reliability and validity, and it is suitable for screening depression and anxiety among career women in various industries. SSADS comprises 14 items related to two factors: depression (9 items) and anxiety (5 items). Each items is scored on a scale of 1 to 5, with higher scores indicating more severe symptoms. The participants' mental wellbeing status is assessed using both the mean factor scores and the total scale score. The mean factor score is calculated by dividing the total score for the relevant items by the number of items. If the mean factor score exceeds 2, it is considered positive for that factor, indicating that the individual may have anxiety or depression. The total scale score is the sum of all item scores, with a maximum possible score of 70. A total score exceeding 25 is considered positive, indicating the presence of mental wellbeing issues.

For the reliability and validity tests of the 688 valid questionnaires collected in this study, the results are as follows:

Reliability test: The overall Cronbach's α coefficient of the questionnaire was 0.939, with the Cronbach's α coefficient for the depression factor being 0.939 and for the anxiety factor being 0.955, all of which passed the reliability test.

Validity test: The overall KMO (Kaiser-Meyer-Olkin) coefficient of the questionnaire was 0.956, with a Bartlett's sphericity test value of 8,889.895 ($P < 0.001$). The KMO coefficient for the depression factor was 0.946, with a Bartlett's sphericity test value of 4,944.502 ($P < 0.001$), and the KMO coefficient for the anxiety factor was 0.884, with a Bartlett's sphericity test value of 3,123.786 ($P < 0.001$).

The third section of the survey investigates the impact of working and family environments on the mental wellbeing status of career women. This section is divided into three groups:

A. **Impact of working environment:** The first group focuses on the impact of the working environment on the mental wellbeing status of career women. Specifically, it aims to investigate whether childbirth negatively affects the existing working environments. And in turn, adverse effects worsen the mental wellbeing status of career women.
B. **Impact of family environment:** This group explores the impact of the family environment on the mental wellbeing status of career women. Specifically, it aims to investigate whether childbirth negatively affects the existing family environments. And in turn, adverse effects worsen the mental wellbeing status of career women.
C. **Assessment of satisfaction and needs:** This group assesses the satisfaction and needs of career women regarding their current situation. It examines their awareness and satisfaction with current policies, as well as their needs in the family, workplace, and society.

Additionally, the survey includes two sets of surveys designed for women who have not had children and those who have. This allows for a comparison of how different childbearing statuses affect the working and family environments and, consequently, the mental wellbeing status of career women.

3.3 Descriptive statistics

As shown in Table 1, there is a total of 688 participants in this survey, with 35.02% experiencing mental wellbeing challenges. This figure aligns with the data mentioned earlier from the *"Green Paper on the Mental Wellbeing of Chinese Career Woman, 2019"*, which reported that around 30% of Chinese career women have mental wellbeing issues. However, it is notable that the data from the Green Paper was collected in 2019, before the COVID-19 pandemic. Currently, with increasing economic uncertainties in China and the additional pressures from the "Three-Child Policy", the mental wellbeing of career women continues to deteriorate. The survey was conducted in Northeast China, a region known for having the highest happiness index for women in the country (38). Despite this, one-third of the career women surveyed face mental wellbeing challenges, which means that the mental wellbeing status of Chinese career women could be a concern.

According to the basic information reported in Table 1, the age distribution of the participants is reasonable: 8.14% are aged 20–25, 14.39% are aged 26–30, 26.16% are aged 31–35, 31.4% are aged 36–40, and 19.91% are aged 41–45. The industry distribution of the surveyed participants closely aligns with that of women in Jilin Province, as reported in the Jilin Statistical Yearbook 2023. Specifically, 10.76% work in the financial industry, 13.81% in education, 11.92% in healthcare, 9.15% in government agencies, 4.22% in cultural and arts sectors, 35.76% in mechanical manufacturing, and 14.38% in other industries. This distribution helps us gain deeper understanding into the impact of age and industry on the mental wellbeing of career women.

TABLE 1 Descriptive analysis of the basic information of the participants.

Statistical content	Variables	Number	Proportion
Portion of positive test results	-	241	35.02%
Age	20–25	56	8.14%
	26–30	99	14.39%
	31–35	180	26.16%
	36–40	216	31.4%
	41–45	137	19.91%
Industry	Financial	74	10.76%
	Education	95	13.81%
	Healthcare	82	11.92%
	Government agencies	63	9.15%
	Cultural and arts	29	4.22%
	Mechanical manufacturing	246	35.76%
	Other	99	14.38%
Education level	Primary school education	4	0.58%
	Middle school education	39	5.67%
	High school/Vocational school degree	59	8.58%
	Associate degree	128	18.6%
	Bachelor's degree	330	47.97%
	Graduate degree or higher	128	18.6%
Monthly income	<1,300	12	1.74%
	1,300–2,200	19	2.76%
	2,200–3,400	132	19.19%
	3,400–5,000	158	22.97%
	5,000–9,000	252	36.63%
	>9,000	115	16.72%
Marital status	Unmarried	169	24.56%
	Married	494	71.8%
	Divorced	24	3.49%
	Widowed	1	0.15%
Actual number of children raised	0	225	32.7%
	1	383	55.67%
	2	78	11.34%
	3	1	0.15%
	>3	1	0.14%
Expected number of children to be raised	0	141	20.49%
	1	344	50%
	2	180	26.16%
	3	9	1.31%
	>3	14	2.04%

The majority of the participants have an education level of associate degree or higher, accounting for 85.17%. Specifically, 18.6% have a graduate degree or higher, 47.97% have a bachelor's degree, 18.6% have an associate degree, 8.58% have a high school/vocational school degree, 5.67% have a middle school education, and 0.58% have a primary school education. Based on previous studies on women's income in Northeast China, this survey categorizes women's monthly income into six levels: very low, low, lower-middle, middle, upper-middle, and high (39). Among the participants, 76.31% have an income above the middle level. Specifically, 16.72% earn over 9,000 RMB, 36.63% earn between 5,000 and 9,000 RMB, 22.97% earn between 3,400 and 5,000 RMB, 19.19% earn between 2,200 and 3,400 RMB, 2.76% earn between 1,300 and 2,200 RMB, and 1.74% earn between 0 and 1,300 RMB. Regarding marital status, 71.8% of the participants are married, 24.56% are unmarried, 3.49% are divorced, and 0.15% are widowed. The high proportion of married women in the survey sample helps provide a more accurate study of the impact of working and family environments on the mental wellbeing of career women.

4 Results

4.1 There are differences in the mental wellbeing of career women across various ages, industries, and childbirth statuses

4.1.1 Mental wellbeing challenges are most pronounced among career women aged 31–35

As shown in Table 2, the mental wellbeing status of career women varies significantly across different age groups. According to the chi-square test results shown on the right side of Table 2, there is a significant difference in the mental wellbeing levels among career women of different age groups. Among these, the highest portion of positive test results was observed among women aged 31–35 at 41.11%, and lowest was observed among women aged 41–45 at 21.90%. The highest portion of positive test results among women aged 31–35 can be attributed to two main reasons. Firstly, women in this age group are often at a critical stage of their professional development. They have to face significant work competition and pressure. Secondly, nearly 70% of women in this age group are mothers. They need to invest substantial time and energy in caring for their children and managing household chores. Additionally, they face multiple financial pressures, including mortgage, car loans, and children's education expenses. These combined stresses result in highest levels of anxiety and depression among career women aged 31–35. Conversely, women aged 41–45 exhibit the best mental wellbeing may be primarily because women in this age group have typically reached a stable phase in their careers. Their positions and incomes are relatively stable, and they face less working stress. Additionally, they have accumulated extensive professional experiences and skills, enabling them to better handle challenges from working environments. Secondly, their children are usually in their teenage or adult years and are becoming increasingly independent. They

no longer need to invest significant time and energy in taking care of them. Finally, women aged 41–45 generally have more mature psychological coping mechanisms and more effective stress management skills. They are better able to manage their emotions and mental wellbeing.

4.1.2 Mental wellbeing challenges are more severe among career women in education, healthcare, and machinery manufacturing

As shown in Table 3, the mental wellbeing status of career women in the education, healthcare, and machinery manufacturing sectors exhibits more positive test results, at 44.21%, 40.24%, and 38.62%, respectively. According to the chi-square test results shown on the right side of Table 3, there is a significant difference in the mental wellbeing levels among career women across different industries. The highest positive rate in the education sector may be attributed to the dual responsibilities from family and work, which can potentially lead to increased anxiety and depression. This interpretation aligns with findings from previous studies, which suggest that the combined pressures of professional and domestic duties can have a significant impact on mental wellbeing (40). On one hand, educators frequently take heavy workloads and must take their personal time for planning lessons, grading assignments, and addressing various student issues. Their inability to effectively separate work and personal time often results in anxiety and depression (41). On the other hand, compared to other industries, men in China are more likely to choose teachers as their spouses, which is mainly because teaching work offer flexible schedules and long summer and winter vacations. Consequently, women in the education industry are expected to invest more time and energy in caring for children and managing family responsibilities. For women in the healthcare industry, the high positive rate may be associated with the intense nature of their work. Professionals in this industry need to treat a large number of patients daily and handle emergencies frequently. They have limited discretionary time and face immense work pressure (42). In the machinery manufacturing industry, many positions require highly repetitive tasks, which can easily lead to psychological fatigue. Additionally, as the industry is traditionally male-dominated, women may encounter gender discrimination and bias to career advancement. These factors contribute to increased levels of anxiety and depression among women in this industry.

4.1.3 Mental wellbeing challenges are most significant among married career women with two children

As shown in Table 4, compared to the mental wellbeing status of career women with different childbirth statuses, married women with two children exhibit the highest portion of positive test results at 42.67%. According to the chi-square test results shown on the right side of Table 4, there is a significant difference in the mental wellbeing levels among career women with different childbirth statuses. There may be two reasons: firstly, most of women's time may be occupied taking care of two children. It limits their flexibility in the work and affects their career development, leading to job insecurity, which negatively impacts their mental

wellbeing. Secondly, two children require more attention and care, continuously draining a woman's time and energy besides work. This makes it difficult for them to get adequate relaxation. Consequently, accumulated exhaustion and psychological stress can result in mental wellbeing issues.

4.2 The perceived adverse impact of childbirth on the working environment may worsen career women's mental wellbeing

Combining the items on working environment in Section 3 with mental wellbeing status data in Section 2, a comparative analysis can be conducted between career women with and without children. This analysis explores how the perception of childbearing affects the existing working environment and may further worsen the mental wellbeing of career women.

4.2.1 The perceived adverse effect of childbearing on the working environment negatively affects the mental wellbeing of career women

According to the survey results shown in Table 5, for the item 1 "Does childbearing negatively impact career development?", 48.71% of childless career women who answered affirmatively showed positive test results, which is higher than that of those who answered negatively at 32.40%. This indicates that the proportion of mental wellbeing issues is higher among childless career women who perceive that childbearing negatively impacts career development compared to those who do not. There may be a correlation between the perceived adverse impact of childbearing on the working environment and the mental wellbeing status of childless career women. The study posed a similar question to career women with children. The survey results for item 1 showed that 50.97% of women who agreed had positive test results, which is higher than the 19.34% of those who disagreed. This evidence provides a definitive "yes" answer to the second item posed by this study: "Are the adverse effects of population decline on the working environments of career women contributing to the deterioration of their mental wellbeing?"

Further investigation reveals that childbearing negatively impacts the working environment in several ways, including "reduced promotion opportunities," "lower income," "downward job transfers," and "forced career interruptions," as shown in Table 6. Regardless of whether career women have children or not, those who perceive that childbearing negatively impacts the working environment show a higher rate of mental wellbeing issues than those who disagree. This further supports the statement: "The perceived adverse impact of childbearing on the working environment is one of the factors contributing to the deterioration of career women's mental wellbeing."

4.2.2 Childless career women are overly concerned about the negative impact of childbearing on career development

Compared to career women with children, childless career women have stronger concerns about the negative impact

TABLE 2 Mental wellbeing status of career women across different age groups.

Statistical content	Variables	Number	Portion of positive test results	Positive rate of depression	Positive rate of anxiety	Chi-square test		
						DF	Chi-value	P-value
Age	20–25	56	28.57%	30.36%	17.86%	4	15.985	0.003
	26–30	99	37.37%	36.36%	16.16%			
	31–35	180	41.11%	42.22%	20.56%			
	36–40	216	38.89%	40.28%	22.22%			
	41–45	137	21.90%	25.55%	13.87%			

TABLE 3 Mental wellbeing status of career women in different industries.

Statistical content	Variables	Number	Portion of positive test results	Positive rate of depression	Positive rate of anxiety	Chi-square test		
						DF	Chi-value	P-value
Industry	Financial	74	28.38%	32.43%	16.22%	6	22.999	0.000
	Education	95	44.21%	44.21%	20.00%			
	Healthcare	82	40.24%	43.90%	19.51%			
	Government agencies	63	17.24%	17.24%	10.35%			
	Cultural and arts	29	20.69%	27.59%	6.90%			
	Machinery manufacturing	246	38.62%	39.43%	26.02%			
	Other	99	29.32%	29.32%	10.53%			

TABLE 4 Mental wellbeing status of career women with different childbirth status.

Statistical content	Variables	Number	Portion of positive test results	Positive rate of depression	Positive rate of anxiety	Chi-square test		
						DF	Chi-value	P-value
Childbirth status	**Childless**	225	40.88%	41.33%	20.44%	2	9.427	0.009
	Women with one **children**	383	30.26%	32.11%	16.71%			
	Women with two **or more children**	80	42.50%	43.75%	25.00%			

TABLE 5 Survey on the impact of childbearing on the working environment and mental wellbeing status of career women.

Num.	Childbirth status	Items	Answer	Portion of positive test results
1	Women without children	Assuming you have plans to have children, do you think this would negatively impact your career development?	Yes	48.71%
			No	32.40%
	Women with children	Has having children negatively impacted your career development?	Yes	50.79%
			No	19.34%

of childbearing on career development and exhibit lower psychological resilience. As shown in Table 7, 52% of childless career women agreed that "childbearing negatively impacts career development," whereas 40.82% of career women with children shared this view. The difference between the two groups indicates that childless career women are more worried about the negative impact of childbearing on their career development and have weaker stress-coping abilities compared to their counterparts with children.

Subsequent survey results further confirm this point. For the statements that childbearing would "make it difficult for career women to find desirable jobs," "reduce promotion opportunities," "reduce training opportunities," and "reduce labor income," the percentages of childless career women who agreed were 55.56%, 59.56%, 62.22%, and 57.78%, respectively. These percentages are higher than those of career women with children, who agreed at rates of 23.76%, 30.02%, 37.58%, and 36.93%, respectively. The reasons for these survey results may primarily be attributed to

TABLE 6 Survey on the specific impact of childbearing on the working environment and mental wellbeing status of career women.

Num.	Childbirth status	Items	Answer	Portion of positive test results
2	Women without children	Assuming you have plans to have children, do you think this would make it difficult for you to find a desirable job?	Yes	48.80%
			No	31.00%
	Women with children	Has having children made it difficult for you to find a desirable job?	Yes	51.81%
			No	26.06%
3	Women without children	Assuming you have plans to have children, do you think this would reduce your promotion opportunities?	Yes	44.77%
			No	35.16%
	Women with children	Has having children reduced your promotion opportunities?	Yes	50.35%
			No	24.38%
4	Women without children	Assuming you have plans to have children, do you think this would reduce your training opportunities?	Yes	44.28%
			No	35.29%
	Women with children	Has having children reduced your training opportunities?	Yes	57.82%
			No	22.83%
5	Women without children	Assuming you have plans to have children, do you think this would reduce your income?	Yes	45.38%
			No	34.73%
	Women with children	Has having children reduced your income?	Yes	45.02%
			No	24.65%
6	Women without children	Assuming you have plans to have children, do you think this would force you to take a demotion?	Yes	52.38%
			No	34.04%
	Women with children	Has having children forced you to take a demotion?	Yes	52.50%
			No	27.93%
7	Women without children	Assuming you have plans to have children, do you think this would make you interrupt your career?	Yes	45.34%
			No	38.12%
	Women with children	Has Having Children made you interrupt your career?	Yes	44.20%
			No	27.07%

TABLE 7 Survey on the specific impact of childbearing on the working environment.

Num.	Childbirth status	Items	Answer	Number	Proportion
1	Women without children	Assuming you have plans to have children, do you think this would negatively impact your career development?	Yes	117	52.00%
	Women with children	Has having children negatively impacted your career development?	Yes	189	40.82%
2	Women without children	Assuming you have plans to have children, do you think this would make it difficult for you to find a desirable job?	Yes	125	55.56%
	Women with children	Has having children made it difficult for you to find a desirable job?	Yes	110	23.76%
3	Women without children	Assuming you have plans to have children, do you think this would reduce your promotion opportunities?	Yes	134	59.56%
	Women with children	Has having children reduced your promotion opportunities?	Yes	139	30.02%
4	Women without children	Assuming you have plans to have children, do you think this would reduce your training opportunities?	Yes	140	62.22%
	Women with children	Has having children reduced your training opportunities?	Yes	174	37.58%
5	Women without children	Assuming you have plans to have children, do you think this would reduce your income?	Yes	130	57.78%
	Women with children	Has having children reduced your income?	Yes	171	36.93%

two factors. Firstly, after giving birth, career women take on the role of "mother," which enhances their sense of responsibility and self-worth. This transformation boosts their psychological resilience and alleviates depression and anxiety among women with children. Secondly, digital technology has led to the rapid development of social media, which has amplified the fear of childbirth among childless career women. Childbearing itself is a concern for these women, and the personalized algorithmic recommendations on social platforms have further deepened their fears and negative emotions regarding childbirth (43). Additionally, the current economic instability has also affected the mental wellbeing of childless career women by fostering a pessimistic attitude toward their employment prospects. Most childless career women are in the early stages of their careers, and according to the research by Li et al. (44) and Yan et al. (45), there is a close correlation between optimism about employment prospects and the presence of depressive symptoms.

4.3 The perceived adverse impact of childbirth on the family environment may worsen the mental wellbeing of career women

Combining the items on family environment in Section 3 with mental wellbeing status data in Section 2, a comparative analysis can be conducted between career women with and without children. This analysis explores how childbearing affects the existing family environment, further worsening the mental wellbeing of career women.

4.3.1 The perceived adverse impact of childbearing on the family relationships and its potential effects on the mental wellbeing of career women

According to the data in Table 8, this survey found that "the adverse impact of childbearing on family relationships worsens the mental wellbeing of career women." From Table 8, the survey results for item 1 indicate that a higher portion of positive test results was observed among childless career women who agreed with this statement, at 47.82%, compared to those who disagreed, at 37.82%. It suggests that the negative impact of childbearing on family relationships is likely to cause mental wellbeing problems for career women. The survey results for career women with children also support this conclusion. The highest portion of positive test results was observed among those who agreed with the statement, at 65.42%, which is higher than that of those who disagreed.

According to the data from Item 2 and Item 3 in Table 8, 49.43% of childless career women who believe that childbearing affects marital relationships had positive test results. Similarly, 63.04% of career women with children who hold the same belief had positive test results. These rates are higher than those of women who disagreed. This implies that discord in marital relationships could have a detrimental effect on the mental wellbeing of career women. According to previous literature, marital status has an impact on women's mental health, with harmonious marriages

offering a protective effect that can effectively improve women's mental wellbeing (46, 47). Additionally, 50.70% of career women who reported experiencing family conflicts with their first child, possibly as a result of having multiple children, showed positive test results. This rate is higher than that of those who did not report such conflicts. This suggests that conflicts with the first child arising from having additional children are likely to worsen the mental wellbeing of career women.

4.3.2 The increased household responsibilities from childbearing worsen the mental wellbeing of career women

The analysis of Tables 9–12 reveals that most career women agree that "childbearing increases household responsibilities," including housework, childcare, and financial burdens. Moreover, career women who affirm that "childbearing increases household responsibilities" tend to have poorer mental wellbeing compared to those who disagree. This suggests that the increased household responsibilities associated with childbearing may negatively impact the mental wellbeing of career women.

According to the responses to Items 4 and 5 in Table 9, this study finds that social conceptions in China are beginning to change, with most people believing that childbearing is not necessarily a responsibility that women must bear. For Item 4, "Do you think childbearing is a family responsibility that women must bear?", 24.71% of career women agreed, while 75.29% disagreed. The results for Item 5, "Have you experienced pressure from your spouse older adults to have children?" show that 79.36% of career women have not experienced such pressure. However, according to the survey results in Tables 10–12 regarding the specific household responsibilities undertaken by career women, women still bear the majority of household care responsibilities. The traditional belief that "men bring home the bacon, women take care of the house"[4] remains deeply rooted in China (48).

The results from Table 10 indicate that childbearing increases the household labor responsibilities of career women, thereby worsening their mental wellbeing. Over 50% of career women answered yes to Item 6, "Does childbearing make you responsible for more household chores?" Among those who agreed, about 50% experienced mental wellbeing issues. In contrast, the lower portion of positive test results was observed among childless career women at 26.80% and among career women with children at 19.61%, both of whom disagreed with this statement, lower than those who agreed. In today's society, women's roles are often stereotypically seen as those of mothers and wives, confining them to household chores that neither reflect their personal value nor their societal contribution. Statistics show that Chinese women spend 2.6 times more time on unpaid household labor than men (49). Globally, 75% of unpaid work is done by women, who spend 3 to 6 h a day on such tasks, while men spend an average of 30 min to 2 h (50). The extended hours of unpaid household chores make it difficult for women to achieve a sense of self-actualization, leading to a

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4 This phrase is a local expression reflecting traditional gender roles, deeply rooted in Confucian thought in China, where men were seen as the providers and women as the caretakers of the household.

TABLE 8 Survey on the impact of childbearing on family relationships.

Num.	Childbirth status	Items	Answer	Portion of positive test results
1	Women without children	Assuming you have plans to have children, do you think this would negatively impact your family relationships?	Yes	47.82%
			No	37.82%
	Women with children	Has having children negatively impacted your family relationships?	Yes	65.42%
			No	22.19%
2	Women without children	Assuming you have plans to have children, do you think this would affect your marital relationship?	Yes	49.43%
			No	35.29%
	Women with children	Has having children affected your marital relationship?	Yes	63.04%
			No	24.52%
3	Women with children	Have you had conflicts with their first child due to having multiple children?	Yes	50.70%
			No	28.82%

TABLE 9 Survey on the specific impact of childbearing on family responsibility.

Num.	Items	Answer	Proportion
4	Do you think childbearing is a family responsibility that women must bear?	Yes	24.71%
		No	75.29%
5	Have you experienced pressure from your spouse or older adults to have children	Yes	20.64%
		No	79.36%

TABLE 10 Survey on the specific impact of childbearing on household labor responsibilities.

Num.	Childbirth status	Items	Answer	Proportion	Portion of positive test results
6	Women without Children	Assuming you have plans to have children, do you think this will make you take on more household chores in the future?	Yes	56.89%	51.56%
			No	43.11%	26.80%
	Women with Children	Has having children caused you to take on more household chores?	Yes	54.86%	42.51%
			No	45.14%	19.61%

TABLE 11 Survey on the impact of childbearing on responsibilities in caring for young children.

Num.	Childbirth status	Items	Answer	Proportion	Portion of positive test results
7	Women without children	Assuming you have plans to have children, do you think this will make you take on more childcare responsibilities in the future?	Yes	64.44%	48.96%
			No	35.56%	26.25%
	Women with children	Has having children caused you to take on more childcare responsibilities?	Yes	69.33%	39.25%
			No	30.67%	16.19%

TABLE 12 Survey on whether childbearing increases the economic burden on career women.

Num.	Childbirth statuses	Items	Answer	Proportion	Portion of positive test results
8	Women without children	Assuming you have plans to have children, do you think this will increases your economic burden?	Yes	64.89%	47.94%
			No	35.11%	27.84%
	Women with children	Has having children increased your economic burden?	Yes	63.93%	42.56%
			No	36.07%	13.06%

TABLE 13 Survey on career women's awareness and satisfaction with women's rights protection policies.

Statistical content	Items	Answer	Proportion
Awareness	Are you aware of local or organization-specific women's rights protection policies[1]?	Very understandable	8.58%
		Understandable	16.86%
		General	41.86%
		Un-understandable	24.71%
		Completely un-understandable	7.99%
	Are you aware of local policies specifically protecting the rights of women having a second or third child[2]?	Very understandable	8.14%
		Understandable	17.59%
		General	36.19%
		Un-understandable	29.8%
		Completely un-understandable	8.28%
Satisfaction	Are you satisfied with the current women's rights protection policies?	Very satisfied	7.99%
		Satisfied	22.09%
		General	54.07%
		dissatisfied	10.90%
		Completely dissatisfied	4.95%
	Are you satisfied with your organization's efforts to protect women's rights?	Very satisfied	11.77%
		satisfied	32.99%
		General	43.46%
		dissatisfied	7.12%
		Completely dissatisfied	4.66%

1. Local policies for screening and treatment of gynecological diseases, such as cervical cancer and breast cancer; local community policies on the distribution of hygiene products; and organization policies on the protection of women's special rights.

2. The specific number of days for maternity leave, breastfeeding leave, childcare leave, and paternity leave in the local area, as well as whether the number of leave days differs for the first, second, and third child. For example, in a certain province, maternity leave is 158 days for the first child and 188 days for the second and third child; the distribution of maternity benefits and salaries during maternity leave, and whether the maternity benefits differ for the first, second, and third child. For example, in a certain city, a one-time subsidy of 2,000 RMB is provided for the second child, and a one-time subsidy of 5,000 RMB is provided for the third child.

higher likelihood of mental wellbeing issues among career women over time.

The results from Table 11 indicate that childbearing increases the responsibilities of career women in caring for young children, thereby worsening their mental wellbeing. For Item 7, "Do you think childbearing will lead to more childcare responsibilities?", 64.44% of childless career women and 69.33% of career women with children responded affirmatively. Among those who agreed, the higher portion of positive test result was observed among childless women at 48.96% and among women with children at 39.25%, both higher than those who disagreed. This shows that childbearing increases the childcare responsibilities of career women, leading to mental wellbeing issues. In China, many career women often face the challenge of "single-handed parenting," where the father is not involved in day-to-day childcare, leaving the mother to handle the majority of the responsibilities alone. Unlike ordinary women, career women with higher education and income levels also face greater work-related pressure. The burden of "single-handed parenting" impacts their mental wellbeing, causing severe psychological issues. After a day of high-pressure work, career women must undertake a "second shift" at home to care for their children, depleting their already limited energy and subjecting them to intense mental strain (51). Additionally, most career

women today were born after China's implementation of the One-child Policy. As a result, most families have only one child who receives the most attention and best resources from the entire family. Especially in the case of only daughters, they are often spoiled as the "princess" of the family. However, after marriage, these women must take on the responsibility of caring for four older adults in addition to raising their own children. This significant role shift forces women to shoulder a heavy household burden, resulting in substantial psychological discrepancies. The increased household responsibilities and psychological gaps intensify the stress on career women, leading to more severe mental wellbeing issues (52).

Table 12 shows whether childbearing increases the economic burden on career women. The results align with expectations, showing that childbearing indeed exacerbates the economic burden on career women, thereby worsening their mental wellbeing. Among career women, 64.89% of those without children and 63.93% of those with children agreed with this statement. The higher portion of positive test results was observed among childless women at 47.94% and among women with children at 42.56%, higher than the portion for those who disagreed, which were 27.84% and 13.06%, respectively. This indicates that the increased economic burden from childbearing is likely to trigger mental

wellbeing issues in career women. In today's climate of increased economic uncertainty, career women need to share financial responsibilities with men. When children are 0–3 years old, career women often have to devote most of their energy to childcare, sometimes even quitting their jobs to become full-time housewives. This career interruption can hinder their professional development. In today's competitive employment market, extended periods of absence can heighten reemployment difficulties among career women. Additionally, this period is typically when families face the greatest pressure from mortgage and car loan payments. If women quit their jobs, it cuts off a significant source of household income. Men have to shoulder the heavy financial burden alone. This increases men's anxiety. The accumulated stress can lead to frequent arguments between spouses, further exacerbating women's anxiety and depression.

4.4 Current policy satisfaction and mental wellbeing needs of career women

4.4.1 Lack of awareness about women's rights protection policies leads to no satisfaction among career women

At present, the "Three-Child Policy" has been fully implemented, leading more career women to face the question of "how many children to have." This increases the pressure on career women both in the workplace and at home. Women's rights protection policies, as the most important means of safeguarding their rights in both the workplace and the home, are neither well-known nor satisfactory to many career women. This lack of awareness and satisfaction is a significant factor contributing to the anxiety and depression experienced by career women (53). Before investigating career women's satisfaction with current policies and their mental wellbeing needs, this study first surveyed their awareness of women's rights protection policies. From Table 13, the survey results show that only 25.44% of career women are aware of local or organization-specific policies on protecting women's special rights. Regarding the policies protecting the specific rights related to women's childbirth, only 25.73% of career women are aware, while 74.27% are unaware. The survey also reveals that only 30.08% of career women are satisfied with the current women's rights protection policies. Additionally, 44.76% of career women are satisfied with their current organization's efforts to protect women's rights. The majority of career women do not feel satisfied with the current women's rights protection policies or their organization's efforts in this regard.

4.4.2 Career women's needs primarily focus on reducing family burden

As shown in Table 14, the survey finds that career women's needs are largely focused on reducing family responsibilities and alleviating the stress caused by these responsibilities. Within the family, most career women believe that "sharing childcare duties among family members," "actively participating in household chores," and "sharing the economic burden" are effective measures to alleviate mental wellbeing issues. This aligns with previous findings that childbearing increases family responsibilities for career women and supports the conclusion that "the mental wellbeing issues of career women are related to family responsibilities." In the workplace, the top three needs of career women are "flexible working hours," "reasonable bonuses and subsidies," and "equal promotion opportunities for men and women," accounting for 71.80%, 58.28%, and 49.13% of the total participants, respectively. At the same time, options specifically aimed at protecting women's special rights, such as "equal opportunities for vocational skills training," "consideration of women's participation in team-building activities," "construction of female-specific facilities," "mental wellbeing training," and "provision of essential female hygiene products in restrooms," were considered necessary by only a small portion of career women. On a societal level, the top three needs for career women are "extended maternity leave, spouse paternity leave, and childcare leave," "provision of maternity and childcare subsidies," and "establishment of professional childcare facilities."

The mental wellbeing needs of career women are mainly focused on reducing family responsibilities. This indicates that the causes of their mental wellbeing issues stem more from the family environment rather than the workplace. Within the family, career women hope that family members can share household responsibilities instead of adhering to the traditional notion of "men bring home the bacon, women take care of the house." In the workplace, the need for flexible working hours largely arises from the necessity to better care for the family, reflecting the reality that many career women still prioritize the belief that "women should prioritize the family." The coexistence of these two beliefs within the same individual fully reflects the current self-contradictory mindset of career women. On one hand, they want to break free from the traditional notion, but on the other hand, they still take on most of the family responsibilities themselves.

5 Discussion

As shown in Figure 1, the pro-natalist policies introduced in response to population decline can worsen the mental wellbeing of career women, while the deterioration of their mental wellbeing can further accelerate the trend of population decline. Currently, the "Three-Child Policy" in China shifts the focus for career women from "whether to have children" to "how many children to have." This requires women to devote substantial time and energy to pregnancy and child-rearing, which increases the costs for companies employing female employees (54). Consequently, this leads to a decrease in companies' willingness to hire female employees and exacerbates work discrimination (55). At the same time, as analyzed above, although women now have much greater freedom in deciding "whether to have children," traditional family values remain deeply entrenched. Career women still lack options when it comes to deciding "whether to raise children" or "who should take on more family responsibilities." They often have no choice but to compromise (56). Having multiple children increases the family responsibilities of career women, further reducing their willingness to have children (57). In response to population decline, the government is likely to introduce more pro-natalist policies, creating a vicious cycle that negatively impacts the mental wellbeing and fertility intentions of career women (58).

TABLE 14 Survey on career women's mental wellbeing needs.

Statistical content	Items	Proportion
Needs from family	Sharing childcare duties among family members	70.78%
	Actively participating in household chores	67.01%
	Sharing the economic burden	57.56%
	Understanding each other	39.1%
	Childbearing decisions are made jointly by the couple	14.39%
	Learning understanding mental wellbeing knowledge together	13.81%
	Others	3.78%
Needs from workplace	Flexible working hours	71.80%
	Reasonable bonuses and subsidies	58.28%
	Equal promotion opportunities for men and women	49.13%
	Effective communication mechanism	29.36%
	Equal opportunities for vocational skills training	13.52%
	Consideration of women's participation in team-building activities	11.48%
	Construction of female-specific facilities	10.03%
	mental wellbeing training	8.87%
	Provision of essential female hygiene products in restrooms	7.70%
	Others	3.34%
Needs from society	Extended maternity leave, spouse paternity leave, and childcare leave	67.01%
	Provision of maternity and childcare subsidies	62.35%
	Establishment of professional childcare facilities	42.88%
	Strengthen the publicity of mental wellbeing	26.60%
	Organize lectures related to women's reproductive health	24.27%
	Offering employment guidance and training	19.33%
	Establish mental wellbeing counseling rooms in the community	11.19%
	Others	4.65%

FIGURE 1
The vicious cycle of population decline.
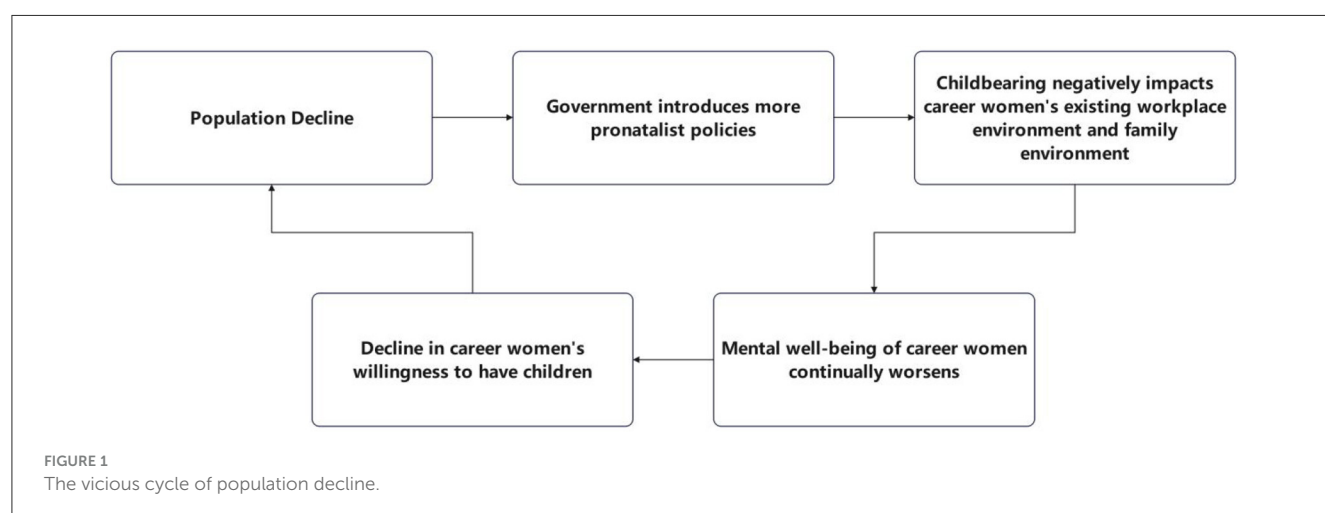
5.1 Challenges

However, it is important to note that several challenges should be discussed. First, how can the fear of childbearing among childless career women be alleviated, and their psychological resilience enhanced? The survey results indicate that 83.55% of childless career women are under the age of 35, suggesting a high potential for fertility. Therefore, it is necessary to address their concerns

about the negative impact of childbearing on career development and to improve the willingness of this group to have children. This can not only enhance the overall mental wellbeing of women in China but also help increase the birth rate and support the implementation of the "Three-Child Policy." Second, how can the family responsibilities of career women be reduced? While the economic burden of the family is generally shared by both spouses, the responsibilities of household labor and childcare are often primarily or solely borne by women. Therefore, it is crucial to encourage spouses to share these responsibilities. Third, how can the awareness and satisfaction with women's rights protection policies among career women be improved? Currently, with the full implementation of the "Three-Child Policy," the number of families having a second or third child is on the rise. This increases the pressure on career women both in the workplace and at home. However, it is concerning that career women generally have low levels of awareness and satisfaction with women's rights protection policies, which is a key factor contributing to their anxiety and depression.

5.2 Recommendations

First, it is crucial to focus on the psychological wellbeing of childless career women. From the individual perspective career women should maintain a healthy lifestyle, including a balanced diet, regular exercise, and adequate sleep. This helps to relax the body and mind, thereby alleviating stress (59). Additionally, career women should actively learn about laws, regulations, rules, and other normative documents related to women's rights, to increase their awareness of their rights and know how to protect their legal rights. From the corporate perspective, the concerns of childless career women often stem from work discrimination against pregnant employees. Companies should rigorously implement women's rights protection policies, strictly adhere to relevant labor regulations, and avoid covert gender discrimination. Additionally, companies should provide humane care by establishing nursing rooms and improving the work environment for women. At the societal level, the government can actively organize lectures related to women's reproductive health, enriching career women's theoretical knowledge in this area. Childless career women can benefit from scientific knowledge about the reproductive process, prenatal care, and postnatal recovery through expert lectures, online resources, and books, thereby eliminating misconceptions and fears about childbirth. From a societal perspective, the government can actively organize lectures on women's reproductive health to enrich the theoretical knowledge of career women. Through expert lectures, official online resources, and related books, childless career women can gain scientific knowledge about the reproductive process, prenatal care, and postnatal recovery, thereby eliminating misconceptions and fears about childbirth.

Second, it is necessary to reduce the burden of family responsibilities on career women. The first and most important step is to change the traditional notion of "men bring home the bacon, women take care of the house" in society. This can be achieved by distributing informational pamphlets in communities and organizing public lectures to enhance men's awareness of family responsibilities. Men should recognize that women's needs are not only material but also include psychological companionship and emotional support. Furthermore, women need to liberate themselves from the traditional mindset of being solely responsible for household duties. In families, women often take on most, if not all, household chores and childcare responsibilities, either voluntarily or involuntarily. Over time, this creates a habitual mindset in men that these responsibilities inherently belong to women, which is detrimental to the mental wellbeing of career women. Cooperation between men and women in household chores and childcare not only improves family happiness but also benefits the development of children (60). Therefore, women should actively involve their spouses in sharing family responsibilities, especially in childcare. If women shoulder too much of the childcare burden, it can lead to the absence of a father figure in the child's development, negatively impacting the child's growth. Finally, the country should vigorously develop childcare facilities, establish professional day-care centers, and improve public services to alleviate the family burdens on career women. There should be increased regulation and strict supervision of childcare facilities and personnel. Currently, one of the main reasons for increased childcare pressure on women is the lack of professionalism in childcare facilities. Frequent reports of child abuse and mistreatment force women to invest excessive energy in childcare.

Third, it is practical to continuously improve policies and laws protecting the rights of career women. To begin with, digital information technology and social media platforms can be utilized to enhance the promotion of women's rights protection policies and related laws. In the aforementioned survey, most career women were not aware of these policies. Therefore, the government can use internet platforms such as WeChat, TikTok, and Weibo to publicize these policies, thereby increasing awareness among career women. Furthermore, the legal framework for protecting women's rights should be improved. Women should be encouraged and given more opportunities to engage actively in political activities. This will enhance their representation and voice, enabling the country and society to understand the needs and challenges faced by career women. As a result, relevant policies can be formulated to address these issues and protect the rights of career women. Finally, women's rights protection agencies should be established to encourage women to participate in safeguarding their rights. These agencies should provide legal consultation and assistance services to women, empowering them and ensuring they have access to the support needed to uphold their rights.

6 Conclusion

This study provides a comprehensive analysis of the mental wellbeing of career women in the context of China's population decline, focusing on the perceived impact of both working and family environments on their mental wellbeing. The results from the chi-square tests indicate significant differences in mental wellbeing across different age groups, industries, and childbirth statuses. Specifically, career women in the middle-aged group, those working in education, healthcare, and machinery manufacturing, and those with two children exhibit higher

levels of mental wellbeing issues. These findings underscore the importance of considering demographic and occupational factors when addressing the mental health challenges faced by career women. In addition to these demographic and occupational factors, the study also highlights the perceived adverse impacts of childbirth on career development and family relationships as significant contributors to mental health challenges among career women. These perceived impacts, although not definitive, suggest that the dual pressures from professional responsibilities and family obligations may exacerbate mental wellbeing issues. Furthermore, the research indicates that career women are not satisfied with the current policies protecting women's rights, particularly in relation to pro-natalist policies. These policies, while intended to encourage childbirth, may inadvertently exacerbate the challenges faced by career women, especially in balancing work and family life. There seems to be a clear need for comprehensive policies that reduce family responsibilities, enhance workplace flexibility, and improve awareness of women's rights protection. Given these findings, it is essential to consider a multifaceted approach involving both individual and societal interventions to address the mental wellbeing challenges faced by career women. Encouraging greater involvement of men in household duties, improving childcare facilities, enhancing workplace flexibility, and reinforcing legal protections for women in the workforce are vital steps, among others. These measures should be supported by ongoing research and data collection to monitor their effectiveness and to adapt policies as needed. By addressing these areas comprehensively, not only can the mental health of career women be significantly improved, but these efforts may also contribute to creating a more supportive environment for women, potentially reversing the negative trends in population growth.

6.1 Limitations

Although this study expands upon previous research, it still has certain limitations. First, this study did not include another significant group of women—non-career women. In the context of population decline, pro-natalist policies may have a considerable impact on this group. Since non-career women do not need to work outside the home, they may be expected to take on more family responsibilities, including childbirth. However, career women and non-career women differ significantly in their social roles, responsibilities, and sources of stress. Combining these two groups in a single study could lead to confounded results that do not accurately reflect the unique mental health challenges faced by career women. Therefore, future research should further focus on non-career women as a distinct group to enhance the depth and scope of the research. Second, the study is geographically limited to China, so the findings and proposed solutions may not be applicable to countries and regions with significantly different population structures and levels of economic development. Additionally, while the study compares the mental wellbeing of career women with and without children, it is important to acknowledge that the responses from childless women are based on perceived impacts, which may differ from the actual experiences of women with children. Therefore, future research

could include longitudinal studies on childless women to better understand the evolution of their perceptions and experiences over time.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

Ethical approval was not required for the study involving humans in accordance with the local legislation and institutional requirements. Written informed consent to participate in this study was not required from the participants or the participants' legal guardians/next of kin in accordance with the national legislation and the institutional requirements.

Author contributions

BZ: Conceptualization, Formal analysis, Investigation, Methodology, Supervision, Writing – original draft, Writing – review & editing. XW: Conceptualization, Formal analysis, Investigation, Methodology, Writing – original draft, Writing – review & editing. RG: Conceptualization, Formal analysis, Writing – original draft, Writing – review & editing. DZ: Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Feminism in the borderscape: Juarense women against injustice

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This article critically examines the feminist movement in Ciudad Juárez, Mexico, highlighting the struggles and activism of Juarense women against social injustices, particularly those exacerbated by machismo, the Narco War, and the manufacturing industry. The analysis explores the roots of machismo in Mexican culture, the impact of the maquiladora industry on women's lives, and the rise of feminist activism in response to these challenges. Emphasizing the intersection of gender violence and legal frameworks, the article incorporates feminist legal theory to argue for substantial legal reforms to combat the normalization of machismo and feminicide. It further discusses the resilience and determination of Juarense women, portraying their efforts as part of the broader global feminist movement.

KEYWORDS

activism, women's rights, social justice, Ciudad Juarez, machismo, gender violence

Introduction

Ciudad Juárez, a vibrant yet troubled border city in Chihuahua, Mexico, is marked by social injustices, including gender violence. Multiple social issues such as "Machismo" (EntreMundos, 2019), and "micromachismos" (EntreMundos, 2019), the constant mobilization of people in the manufacturing industry and the "Narco War" (Staff, 2010) have led to multiple catastrophes that have unfortunately marked the lives of thousands of women in the area. The Feminist Movement, being a result of the gender violence induced by the Narco War, the systematic and communal behaviors pushed by Machismo, and the highly influential manufacturing industry which women have been extremely affected by, has become stronger and stronger in this part of the world over the last few decades (De Reufels and Huhle, 2022).

The feminist movement in Juárez emerged in response to the gender violence induced by these issues, strengthening over the past decades. Thankfully for the people who suffer from these casualties—and unfortunately that they were affected by these social issues in the first place—borderland women (Herrera, 2021) are acting by rising to the authorities demanding them to make changes to the current faulty system. Women have increasingly mobilized to demand justice through protests, legal reform, and social media campaigns, drawing attention to the urgent need for systemic change (Alizadeh et al., 2024).

Women in the borderscape have demanded a response from the authorities through protests on at least every Women's International Day which takes place on March 8th since 2016 (Ebrary, 2023), law suggestions such as legalizing abortion on a national level (Gallegos, 2020) and the mobilization of the movement through social media (Ebrary, 2023) to tirelessly inform the population, bringing awareness of these extremely tragic situations in the city. This fight has been one of the most harsh, violent, and drastic movements within the city. This academic article delves into the events that triggered this

upheaval and examines the efforts of Mexican and Latin American women to enact societal changes, with a particular emphasis on Juarense women.

Methodology

The authors, as scholars in architectural humanities and urban anthropology, aim to shed light on the spatial, economic, and structural conditions contributing to gender violence in Ciudad Juárez. Leveraging their fluency in Spanish, Italian, and English, they combine feminist legal theory with their expertise in urban studies and anthropology to offer a unique perspective on how these interconnected forces shape the experiences of women in the city and contribute to the ongoing feminicides.

In this context, it is crucial to differentiate between the terms *femicide* and *feminicide*, both of which are used throughout this article. While often overlapping, these concepts carry distinct meanings that are critical to understanding the specific forms of gender violence in Ciudad Juárez and similar contexts (See Figure 1).

Femicide broadly refers to the killing of women because of their gender, a term that underscores the gendered nature of the violence but often lacks specific reference to the structural or institutional factors that may enable or perpetuate such acts. This term is frequently employed in international legal frameworks and human rights discourse, where it is understood as the extreme manifestation of misogyny and gender-based violence. It places the focus on individual acts of violence, often perpetrated by intimate partners or others within a domestic or social context. However, the use of *femicide* does not always consider the broader socio-political conditions that may allow such violence to persist, nor does it always address the systemic failures that can exacerbate these conditions.

On the other hand, *feminicide* is a more politically charged term, which goes beyond the individual act of violence to emphasize the complicity or failure of institutions, particularly the state, in preventing, prosecuting, and addressing violence against women. This concept, largely developed by feminist scholars and activists such as Marcela Lagarde, is especially relevant in contexts like Ciudad Juárez, where the persistence of gender violence is tied to a combination of patriarchal norms, impunity, corruption, and systemic neglect. By using the term *feminicide*, the authors aim to draw attention to the broader socio-political conditions—including legal frameworks, policing, and governmental responses—that have failed to adequately protect women and prevent such violence. *Feminicide* thus highlights not only the act of killing but also the structures that perpetuate impunity, neglect, and indifference (See Figure 2).

In Ciudad Juárez, the distinction between these two terms is especially significant, as the city has long been marked by both rampant gender-based violence and institutional failures to address it. The term *feminicide* is used intentionally to reflect the intersection of state failure, the normalization of machismo, and the economic exploitation of women in industries such as the maquiladoras, which together create an environment of pervasive insecurity for women. This approach allows for a more comprehensive critique of the conditions that enable gender violence in the city.

Their methodological approach integrates feminist legal theory with insights from architectural humanities and urban anthropology, using this interdisciplinary lens to investigate how the built environment, including urban planning and architectural design, impacts gender relations and violence (Varış Husar et al., 2023; Erek and Krasznahorkai, 2024). For example, the spatial organization of maquiladoras (manufacturing factories) and the broader urban landscape of Ciudad Juárez are critical to understanding the structural factors that contribute to gender-based violence and the barriers women face in accessing justice and safety. By analyzing how urban forms can either perpetuate or resist gender-based violence, the authors explore how spatial inequality, poor urban planning, and economic exploitation intersect with gender violence.

This methodology also emphasizes the role of physical spaces in shaping gendered experiences. For instance, the isolation of maquiladora workers, who often live on the outskirts of the city and must navigate long, unsafe commutes to their workplaces, is a key factor in the heightened vulnerability of women in Ciudad Juárez. These spatial dynamics, coupled with a legal system that has historically failed to protect women, create an environment where feminicide thrives. The feminist movement in Juárez, therefore, is not only a response to direct acts of violence but also a reaction to the broader socio-spatial and legal conditions that perpetuate gender inequality.

While previous studies have explored feminicide from various angles, this article emphasizes the spatial and structural dimensions of these injustices. By situating this discussion within both activist and academic contexts, the authors highlight the complex interplay between built environments, gender dynamics, and legal structures. This interdisciplinary approach aims to provide new insights that resonate with both activist and scholarly audiences, offering a more nuanced understanding of how gender violence is embedded in both physical and institutional spaces.

Struggles and progress: women's rights movement in Latin America

To understand the feminist struggle in Ciudad Juárez, it is essential to recognize the broader historical context of women's rights movements in Latin America. From the late 19th to the mid-20th century, a constant mobilization of women throughout the region sought to push for social issues to be addressed by local and national governments such as labor laws, civil status, education, and political rights (Mehan, 2024c). These movements were diverse and encompassed a range of political ideologies and social classes (Mehan, 2024d).

It is important to note how the diversity of women's backgrounds and social issues they wanted to address became an important factor in the whole Latin American movement. Cora Fernandez Anderson in his academic article mentions how the movement encompassed multiple political spaces, from liberal to socialist movements, and how it involved women from different social classes (La Verdad, 2019). The creativity of women through all their struggles is shown by noting their various mediums to express their anger and discontent (Mehan, 2024e,f). During this time, multiple academic writings emerged from the
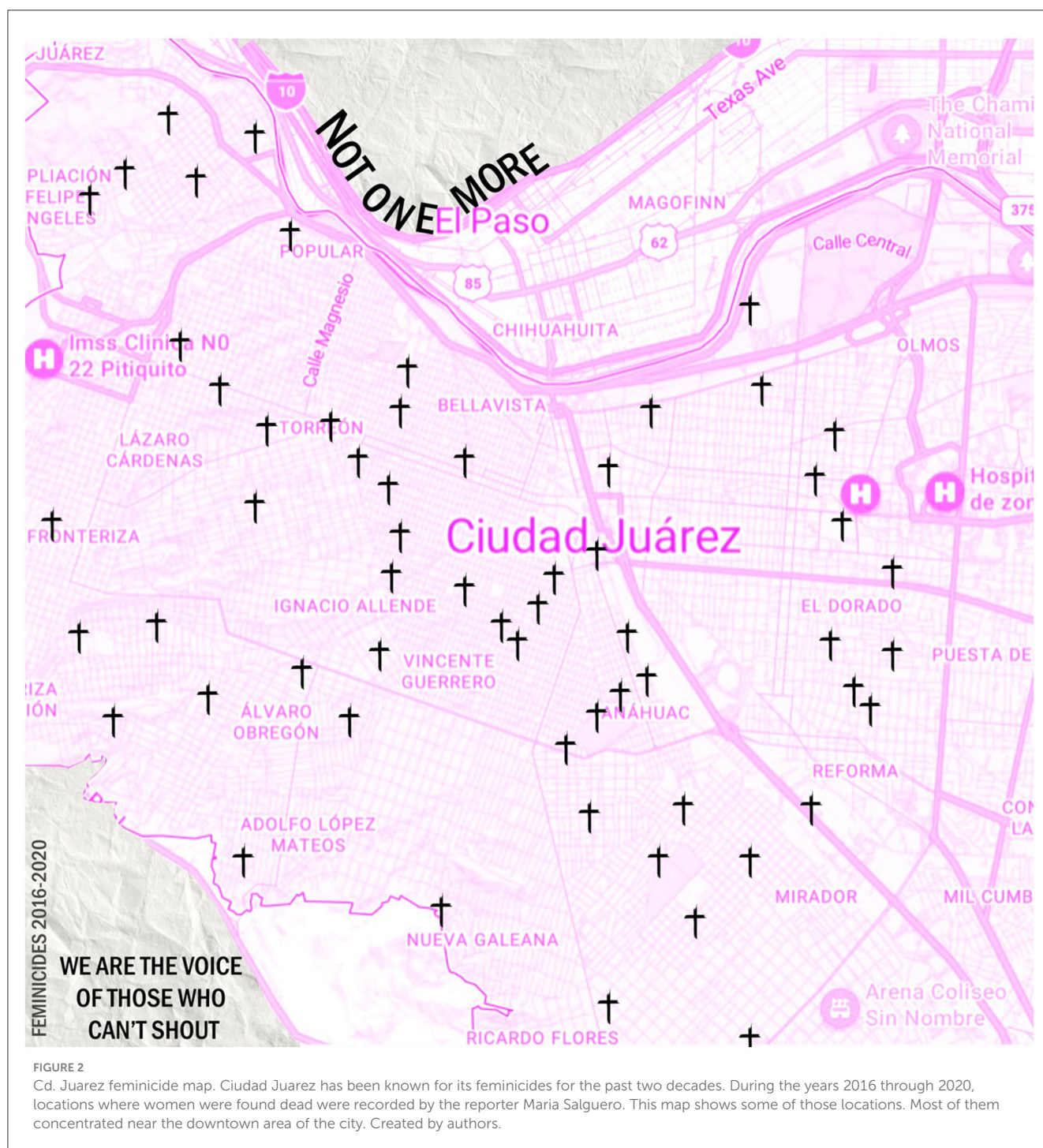
discontent of governmental indifference toward these social issues (Nawratek and Mehan, 2020). The unconformity manifested in poetic and prose works and publications in women's magazines came from educated and elite women, while the middle class used the form of protests to manifest their increasing concerns about their educational opportunities and civil status (Rodríguez, 2014).

While the women's movement in Latin America emerged during the mid-20th century, labor movements coincided in the region. Thus, women from different professions, including domestic workers, launderers, and textile workers united with their male colleagues to demand maternity leave, fair wages, and better and improved working conditions. While this happened, women's suffrage was still not addressed until 1961 by every Latin American country. Through the years, we have seen a notable fight by all Latin American women seeking their rights to be implemented into the national governmental system, labor conditions and safety for women are still a very constant controversy that

FIGURE 2
Cd. Juarez feminicide map. Ciudad Juarez has been known for its feminicides for the past two decades. During the years 2016 through 2020, locations where women were found dead were recorded by the reporter Maria Salguero. This map shows some of those locations. Most of them concentrated near the downtown area of the city. Created by authors.

women in Latin America, specifically Juarense women have struggled with.

Unveiling the layers of machismo: impact on women in Mexican society

Machismo, characterized by hypermasculinity and aggression toward women, remains deeply embedded in Mexican society and is a significant barrier to gender equality. "Machismo" comes from the word "macho", meaning a man with exaggerated masculinity, oftentimes leading to aggressive and dominant behavior toward women (openDemocracy, 2012). This cultural construct has historically entrenched toxic masculinity, where dominance, control, and violence against women are normalized (Reuter's, 2010; Vallentin, 2009).

The widespread issue of toxic masculinity manifests in both micro and macro levels, from everyday interactions to systemic oppression. This ranges from the trivialization of

FIGURE 3
Victims of femicides. Feminists manifest during tough times, to demand the justice for the victims of feminicide. During feminist marches, the names and faces were plastered in the walls of the Municipal Institute of the women in the march for the International Women's Day in 2019 (8th of March). The poster mentions a few of the names of these women that were killed in Ciudad Juarez in the past three decades. Created by author. Inspired from: Paley (2020).

women's emotions (e.g., calling them "crazy" or "too sensitive") to more violent forms, such as feminicide, where women are killed because of their gender (De La Morena, 2020). These patterns reflect not only individual behaviors but a cultural norm that perpetuates gender inequality (Connell, 1987). This toxic masculinity, reinforced by societal expectations of male dominance, is also reflected in workplace environments, where women are often treated as second-class citizens (Lagarde, 2010). In Ciudad Juárez, this is particularly evident in the maquiladora industry, where women workers face both physical and psychological oppression, contributing to an environment that fosters violence against them (See Figure 3) (Monárrez Fragoso, 2002).

Feminist legal theory, as outlined by Simone (2024), provides a crucial framework for addressing these deep-rooted issues. Legal feminism emphasizes the importance of creating legal tools that challenge and dismantle sexist norms and practices that perpetuate

violence against women. Incorporating this perspective, the article advocates for a more comprehensive approach to combating gender violence, recognizing the normalization of "machismo" as both a legal and social issue.

To fully understand how this affects gender inequality and gender-based violence, we must consider the concept of hegemonic masculinity, as theorized by Connell (1987). Hegemonic masculinity refers to the societal standards that position men as dominant, further reinforcing gender stereotypes and toxic masculinist behaviors. In the context of Ciudad Juárez, these behaviors permeate not only domestic spaces but public and institutional spheres as well, contributing to the systemic violence against women (Monárrez Fragoso, 2002).

Local feminist scholars such as Lagarde (2010) and Monárrez Fragoso (2002) have critically analyzed how patriarchal structures perpetuate violence, especially through the normalization of

machismo and its institutional manifestations. Lagarde's theory of "captive women" explores how societal structures keep women socially and economically dependent, making them more susceptible to violence. Monárrez Fragoso's analysis of feminicide emphasizes the systemic failures of the state to protect women, where machismo shapes both gender relations and the broader culture of violence.

Not only do women have to fight against political incompetence from their government, but there is also a systematic fault that creates aggressive and violent behaviors in civilians. This has been a historical issue for centuries, starting around the colonization of Mexico, as previously discussed, and yet it is still a huge part of the interaction between genders not only in Juarez but at the national level too. Machismo on a small scale can look as simple as calling your girlfriend "crazy" or "too sensitive" when expressing her feelings, to something more violent like the killing of your girlfriend for speaking to other

men. This type of behavior has become more and more usual to the point where the authorities recognize the murder of women, simply because they're women, as "Feminicide" (De La Morena, 2020). This term finally gave the seriousness of the effects of internalized and externalized machismo to the feminist fight.

A violent act on a smaller scale is called micro machismo, which contributes to the overall gender violence happening in Ciudad Juarez. In a report on micromachismos (EntreMundos, 2019), four different aspects are identified as contributing to the widespread problem of gender violence in Mexico and across Latin America. The first aspect, "Utilitarian Micromachismo", refers to the domestic environment and the traditional roles assigned to women within it, such as taking care of children and handling household chores. This reinforces gender stereotypes and restricts women's freedom and opportunities in both private and public spheres. "Hidden micromachismos", refers to the imposition of the

FIGURE 4
Poem for Juarez. The current situation in Ciudad Juarez has greatly affected its citizens. For those who have immigrated from the city, they find it hard to come back without the feeling of unsafety and uneasiness. This poem written by Authors came from a place of disturbance and anger when coming back to Cd Juarez. Nevertheless, the fight continues, and feminists of the area do not give up easily. Written and created by authors.

masculine "rights" of the men of the house, which oftentimes leaves women without a voice, rendering them invisible in the decision-making process in the household or a community (EntreMundos, 2019). This technique uses manipulation on women to keep following the path the men would want them to. Crisis-related micromachismos are used with the conscious unequal positions that women and men have in a relationship. For example, pointing fingers and assigning the fault of arguments on the woman, simply because men know they have the "upper hand" in the relationship. Multiple feelings like guilt, shame, and manipulation toward women are used with this micromachismo (See Figure 4). Coercive micromachismos (EntreMundos, 2019) refers to the use of moral, emotional, and economic power over women. The main impact that women have through this micromachismo, is the constraint of freedom to make decisions, such as forcibly wanting to pay for the bill on a night out or the imposition of "lady-like" attitudes that align in a patriarchal society. Phrases that are heard every day not only in Ciudad Juarez but in the whole country of Mexico, that could be taken as "culturally acceptable" contribute to the gender violence that women suffer. Sentences like "You fight like a girl," "I can't stand her today, it must be that time of the month," "she only got promoted because she slept with someone," "dressed in those clothes, she was practically begging for it" add to this erroneous idea that men all over in Mexico have. Women in this part of the world, struggle with these societal-engrained issues every day of their lives, unfortunately, it is not only in Mexico, but the whole region of Latin America has had its fights and struggles as well.

Maquiladoras in Ciudad Juarez: economic backbone and employment hub

The maquiladora industry, a key economic driver in Ciudad Juárez, involves manufacturing factories that import raw materials, process them, and export finished products to other parts of the world (Grajeda, 2023). Women, who comprise nearly half of the labor force, face numerous challenges, including workplace discrimination, unsafe conditions, and the constant threat of gender-based violence (Mexico Industry, 2021). It is crucial to consider how the spatial organization of maquiladoras and the broader urban landscape impact gender relations. For instance, the remote locations of many maquiladoras, often far from residential areas, force women to navigate unsafe commuting routes. These spatial conditions exacerbate the risks of gender violence and limit women's access to justice and support services.

Due to its proximity to the United States—the city of El Paso, TX in particular—creates an interconnected area, or "sister cities", with well-established industrial and business clusters (Grajeda, 2023). Almost 60% of the economic contribution comes from maquiladoras in Ciudad Juarez (Grajeda, 2023), making it one of the biggest businesses in the borderland area. Maquilas in the area are primarily international companies, making Ciudad Juarez the lead provider of employment in this industry in the entirety of the country, providing more than 300,000 jobs and employing a significant portion of the city's workforce (Grajeda, 2023). Because

of this, a constant mobilization of people from all over the Mexican country seek job opportunities in the region of Juarez.

Despite contributing significantly to the city's economy, female workers experience inequities that reflect broader societal norms rooted in machismo. There is a critical need for policy reforms that protect women's rights and ensure safe working environments, drawing on feminist legal frameworks to argue for substantial changes in labor laws and workplace practices (Maquiladoras, 2003).

Maquiladoras in Ciudad Juárez: women's labor, challenges, and the feminist fight

Juarez has always been a city of immigrants, and one of the greater factors that pushed for immigration during the 1980s was the booming of the maquiladora industry (Ramírez, 2016). This industry offers a lot of incentives to push for immigration to the city such as free transportation from home and to work, meals provided during shifts and other seasonal bonuses (Ramírez, 2016). In an article by Israel Molina, a reporter for Mexico Industry Magazine, many people from different backgrounds, including young women and single mothers, who make up almost 36%, or almost a million women, of the maquiladora workers (Mexico Industry, 2021), have migrated from everywhere in the country to Juarez. Most of these industries are located deep in the center of the city or very close to its edges, while most of the workers live on the outskirts of the city, where water, electricity, and garbage disposal are very hard to reach (Maquiladoras, 2003), due to its remoteness compared to their employment location. A big concentration of maquiladora workers lives on the west side of the city, close to the mountains (Maquiladoras, 2003). According to a reporter of La Jornada Magazine, Rosa Isela Perez Torres, the disappearances and killings of women workers in the industry, are not taken a closer look by the international consortiums and they "feel they have no responsibility for the problem" (Maquiladoras, 2003). But seeing how the female workers for the maquiladora industry form almost half of its population, it should and is their clear responsibility to address.

Due to the size of the city, where the maquilas are located, and where most laborers live, they must take the transportation units 2 h before their shifts. This means, that the routes of commuting can be dangerous for many of these women. There have been many cases in which women disappear on their way to work or from home. According to a report for Debate Magazine, in 2019, Anabel Montañez Lopez was last seen getting out of her job, in one of the maquiladoras in the city. Her body was tragically found 9 days later without a sign of vitality (Audelo, 2019). Just Like Anabel, many more have been lamentably taken from their families and friends and left alone to die. Because of this, the manufacturing industry, or maquilas, has played a significant role in femicides in Juarez. It is infuriating to see how Juarense women struggle through so many adversities, in their own homes, in public areas, and even in their own work environments. It is important to note the importance of Juarense women in the Mexican workforce and their contribution to the city's economic growth. A report from 2022 by the local

newspaper El Diario shows that 4 in every 10 employments are occupied by women.

Even though their contribution to the economy in the city is growing exponentially, women in the borderland still see various issues in their workplaces. Making up almost 50% of the laborers, women in Ciudad Juarez still encounter various inequalities compared to the Juarense men in the area. In a report for Just Associates.org from April 28th, 2023, the Luxembourg Pink Women Collective of Ciudad Juarez (Colectiva de Mujeres Rosa Luxemburgo de Ciudad Juarez) is striving to bring, inform, improve, and start a dialogue about the health and safety of labor conditions that women in the area have (Lo Laboral, 2023). With the help of this collective and other women's organizations, borderland women have a bright future ahead, but while powerful, conscious, and strong women bring that to the table, there are still various issues that women encounter in the workplace. Many find that the inequality that they face in the workplace is a huge part of their overall health and safety as women.

The workplace can also be a very toxic environment for mothers and young women in the borderscape area. An interview with a former female maquiladora worker (who is 51 years old and worked for the maquiladora industry for over 10 years), conducted by Natalia Dominguez on September 16, 2023, informed us how the top-to-bottom interaction is between men and women in this industry. When talking to the interviewee, various subjects such as the difference in salary, toxic masculinity, and the expectations that each gender has in the workplace were covered.

"As women, we felt more compromised to not miss any days for personal reasons compared to our male peers. It was easier for men to get permission from their supervisor to take some hours off or swap time during the shift because of personal matters such as attending a school meeting, a doctor's appointment. As for women, all those reasons to miss part of their shifts would make us less reliable in the company's eyes, which also means that that made us good candidates to lose the job. Most of my female peers did not take that risk", she said.

This proves how the difference in treatment from men to women in the workplace can affect women in an exponential way. Most women that work in the maquiladora industry, are providers for their whole family, just like the interviewee was. It is obviously not fair how women are treated in the workplace.

"In the supervisor level, I was the only woman, in a group of 12 people, the rest of the company's female workers worked in lower positions like operators, warehouse staff and clerical level positions", she said, "Most of the time, I was given instructions and expectations of duties that took more than 12- hour shifts for all my team, but I was still expected to get it done".

The women in the maquiladora industry have harsher standards in the work environment that affects them not only in the physical level, but in the mental level too. The interviewee continued to describe her experience in the maquila saying, "it was super tough for me and my family. I was not able to attend various family events such as school meetings, school presentations, doctor's appointments and even spending time with my kids... I had to juggle all the pressure at work while still being a provider for my family and a full-time mom. And as for many women in my workplace, ended up divorced because of this".

In addition to the testimony of the senior female worker highlighted earlier, further voices from women in different positions across the maquiladora industry add depth to this analysis. For example, Maria, a 25-year-old factory worker, shared her experience: "I leave home at 4 a.m. to catch the company bus, and it's always a risk. Many of my colleagues have been harassed or worse during these commutes, but we have no other choice. The factory is the only source of income for my family" (Grajeda, 2023). Another worker, Ana, highlighted the disparities in wages and treatment between male and female workers: "Even though I've worked here for 10 years, I'm still earning less than some of the men who started recently. They get promoted faster, and they don't have to balance work and family the way we do." These testimonies underscore the layered forms of oppression faced by women in the maquiladoras, where they are not only underpaid and overworked but also face daily threats to their safety (Grajeda, 2023).

Unveiling femicides: gender-based violence in Juarez, Mexico

Feminicide, the deliberate killing of women due to their gender, represents the most extreme manifestation of gender-based violence in Juárez (De La Morena, 2020; Offiong, 2021). This form of violence has been politically legitimized, often underpinned by the normalization of machismo. Feminist legal theory underscores the necessity of aligning formal equality with substantial equality, ensuring that legal protections translate into real-world safety and security for women (Simone, 2024). According to the World Health Organization (WHO), a significant majority of femicides are committed by current or former partners and often involve a history of domestic abuse, threats, intimidation, or situations where women have less power or resources than their partners (Offiong, 2021). However, these statistics often conflate the murder of women and children, complicating efforts to understand the specific patterns and impacts of feminicide (McInnes, 2024). There is an urgent need for policy reforms and legal interventions that address the systemic roots of feminicide, as recommended by international Charters of Rights and Conventions (Staff, 2010; openDemocracy, 2012).

Unveiling femicides: the impact of the Narco War on Juarense women

Gender Inequality and gender violence manifested itself throughout the region of Juarez in the early 2000s. In 2001, the escapade of the powerful drug lord Joaquin "Shorty" Guzman (alias El Chapo) from a Mexican prison started the hectic era when he tried to seize control of Mexico's drug trade (Staff, 2010). By the following year, the Mexican law enforcement captured the Tijuana cartel's leader as well as one of his brothers, this event weakened the cartel's influence in the Narco War. In the following years, multiple battles between the armed forces and the members of the cartel left multiple civilian and law enforcement casualties. The initiative that former Mexican President Felipe

Calderon imposed the minute he arrived in office in 2006 (Staff, 2010) was a pretended resolution to the war on drugs in Mexico. The timeline of events that happened right on the first day of his term, December 1, highlights the tempestuous and violent nature of his presidential term. In his efforts, former President Felipe Calderon declared the war on drugs to the cartels stationed in Juarez.

Militarizing every corner of the city (Staff, 2010), Calderon wanted an end to the business that was created by these gangs in the city. With a very blurred line between good vs. evil, civilians, especially women, were the group most affected by this. Authorities made no further changes to the security measures around the city to protect this already vulnerable group of citizens. War is usually conducted and created by men, but women usually take the fall and Juarense women during President Felipe Calderon's term were not an exception (openDemocracy, 2012). During his term, Felipe Calderon did not address the issues women have been suffering from, and the root of the problem is a failed justice system of an endless cycle of violence and unpaid crimes (openDemocracy, 2012). Laura Carson, a reporter of openDemocracy (2012), conducted a study with multiple female participants from the border area affected by the Narco War, where they found disparities in the justice system. According to her study, only 2% of crimes committed in Mexico, are successfully processed and the criminals responsible are imprisoned. This leaves a very untrustworthy system for the region's population. "Why in Mexico?", a participant in Carson's study said, "Because they can get away with it." (openDemocracy, 2012). Mothers are also the ones to look for their sons after cartel stand-offs, with nowhere to look and no response from a war that they did not participate in or have a say in openDemocracy (2012). It is fair to say that at every step, Juarense women have suffered a lot throughout the last three decades.

At the beginning of the 1990s, the bodies of multiple women appeared in a communal grave (Gallegos, 2020) and this was believed to be the doing of a possible serial killer or an active satanic cult in the area. The bodies were found in horrible conditions, something that no human deserves. Even if these were the speculations of authorities back then, this is still a reality for women in the borderscape (Guillén, 2022). It has slowly become a fight known to the rest of the world, bringing awareness of this issue to the masses. According to reporter Itzel Ramirez (Gallegos, 2020), the Executive Secretary of the National System of Public Safety in Mexico, Juarez received first place for having the most femicides in all 100 municipalities in the northern Mexican state of Chihuahua. This integer is a nerve-wracking place to hold, in any place in the world. If we take a closer look at the names and faces of the victims, then we can humanize them, and not leave them to be forgotten, to be a part of a percentage. On the 15th of January 2022 (Gallegos, 2020), two women were killed, dismembered, and left on the side of the road on the Juarez/Chihuahua highway. Their names: Tania and Nohemi (Gallegos, 2020). It is important to note their names and lives to respect their humanity and their dignity. Just like Tania and Nohemi, there have been thousands of women violented on the side of roads, or in municipal barren fields, left for dead, and even some are not found most of the time.

Voices of resilience: activism and remembrance in Ciudad Juarez

The feminist movement in Juárez is characterized by its resilience and determination (Mehan and Dominguez, 2024; Tappert et al., 2024). Activists like Marisela Escobedo Ortiz, who fought tirelessly for justice for her daughter, and Luis Castillo, who continues to search for his missing daughter, exemplify the relentless fight against gender violence and impunity (The Three Deaths, 2020; Infobae, 2022). These stories, along with countless others, serve as powerful reminders of the need for legal reforms that hold perpetrators accountable and protect women's rights (Mehan, 2024a,b). The integration of feminist legal theory argues for a more robust legal framework that supports these grassroots efforts and fosters a culture of justice and equality (Paley, 2020).

Marisela Escobedo Ortiz became the face of the movement during the early 2000s (The Three Deaths, 2020). Her daughter, Rubi Frayre, disappeared after meeting her perpetrator Sergio Rafael Barraza Bocanegra. She was later found atrociously dismembered in a barren field in the outskirts of the city (The Three Deaths, 2020). Marisela Escobedo then started her long and tragic fight for justice for her daughter, demanding the authorities find the criminal and make them pay for his doings. After receiving a dismissive and disrespectful response from the local police, she decided that if she wanted to see the criminal in jail (The Three Deaths, 2020), she had to conduct the investigation herself. The determination she had from the moment Rubi disappeared, until the moment of Marisela's last breath, is recognized and supported by the whole feminist community in Ciudad Juarez. She became the martyr in the fight against femicides during the early 2000s in the area, giving women hope, strength, and a fight to continue for the new generation of activists. The documentary "The Three Deaths of Marisela Escobedo", narrates the fight she went through for her last year and a half of her life. The name itself lets us know how hard her fight was. The first "death" took place when Rubi was found tragically dead, the second, when she took the case to the court and the jury decided to leave Rubi's perpetrator free with impunity, and her third, was when she was killed while doing a peaceful protest outside of the Municipal Palace in Chihuahua city. When watching the documentary, as an audience member we can all feel her grief and anger as if we were there with her the whole process.

Fourteen years ago, Esmeralda Castillo was last seen in downtown Juarez (Infobae, 2022), in the early hours of the morning. Her parents have not stopped looking for her ever since. Luis Castillo, her father, has attended every single feminist march since 2009, so much so that his picture wearing Esmeralda's face has circulated all over national news and social media. Usually, during feminist marches, women are the ones leading the protest, but Luis Castillo is the only man who walks in front of the protest (Infobae, 2022), supporting and demanding answers from the authorities of the whereabouts of his daughter (Infobae, 2022). He has become a legend in the feminist movement in Ciudad Juarez because of his perseverance and determination over the years. He has approached the three levels of the Juarense/Mexican government for any news about Esmeralda, but for over a decade, he has received nothing but bribery from the authorities to keep him quiet (Infobae, 2022). Luis,

of course, has denied this failed attempt at bribery. The authorities are worried that his voice is becoming too loud, reaching too many people about Esmeralda's case. But she is not the only one. A record shows in 2022 (Infobae, 2022), that 10 women in Mexico are killed every single day, and Juarez takes a big percentage of that amount (Infobae, 2022). But because of activists like Luis Castillo and Marisela Escobedo, and the rest of Esmeralda's family, we have a certain degree of hope to continue the battle to eradicate the danger of women's safety in Juarez and everywhere in the world.

The use of public spaces for activism—such as marches, protests, and public art installations—highlights the importance of spatial justice in feminist movements. The physical spaces of Ciudad Juárez become sites of both oppression and resistance, where women reclaim their right to safety and justice. The way that activists such as the Castillo family and Marisela Escobedo demonstrate their anger and determination, is using the city as their white canvas to paint. During multiple feminists' protests, activists painted Juarez in pink and purple; the official colors of the movement recognized worldwide. Monuments of multiple historic figures are spray painted and written on to demonstrate the discontent that the whole women population feels with this social issue. These monuments most of the time represent a shady past that does not align with the present or the future that activists want for everyone. In 2019 (Gallegos, 2020), one of these marches took place in downtown Juarez, because of police brutality against women happening in the city. The big mass walked through the center of the city and finished the route in the Municipal Institute for Women (Instituto Municipal de la Mujer). Names of girls and women were roll called to remember them and to demand justice for all their disappearances and for their deaths. Through the manifestations of feminists, the stories of the victims will not be forgotten, and will not be part of a percentage, but they become the fire that lights up the fight of the feminist movement.

In our modern era, there are remarkable social activists utilizing today's technology to amplify their voices. Jessica Fernandez, hailing from northern Mexico, stands out by hosting insightful interviews in podcast form, available on platforms like YouTube and Spotify. Her podcast serves as a platform for guests to delve into critical feminist topics, ranging from gender violence and mental health to economic challenges affecting women. With over 80 episodes under her belt, Jessica Fernandez engages with a diverse array of guests. From female entrepreneurs to scientists, social activists, mothers of victims, and even the victims themselves, her podcast provides a safe and open space for these individuals to share their knowledge and personal experiences. Through these conversations, she creates an avenue for exploration and empowerment, shedding light on various aspects of the feminist movement and offering a platform for marginalized voices to be heard and understood. In an interview conducted by Heraldo de Mexico, he helps tell Jessica Fernandez's story. "At 24 years old, Jessica Fernandez Garcia is a well-known activist on social media, in which she uploads videos addressing issues related to women such as feminism, empowerment, and self-love, aiming to raise awareness about these issues in her followers, who range in the age group of 14–35 years of age" (De México, 2020). Jessica utilizes her social media platform to create informative videos aimed at educating the public about these critical issues and the

ongoing efforts by activists to eliminate them. Her goal is to raise awareness and provide insight into these significant challenges, shedding light on the work being done by activists striving to bring about positive change. Jessica extends her impact beyond creating educational content; she actively engages through conferences held across Mexico (Valdez, 2022). These gatherings specifically target high school and university students, serving as platforms to inform the younger generation about pressing social issues (Valdez, 2022 sense of empowerment among them for a brighter and more equitable future.

Progressive strides and empowerment: transformative movements in Ciudad Juarez

Feminist collectives in Ciudad Juárez have been at the forefront of the struggle against gender-based violence, yet their relationship with state authorities has been fraught with tension (Saigol, 2016). While these groups demand justice for the countless women who have fallen victim to feminicide, state responses have often been inadequate or outright dismissive (Paley, 2020). This dynamic is not unique to Mexico.

Drawing comparisons with Saigol's (2016) analysis of feminist movements in Pakistan, where state support fluctuated based on political regimes, we see that the changing nature of governance can significantly alter the state's engagement with feminist collectives. In Ciudad Juárez, local feminist movements have had to contend with both a culture of impunity and state indifference, like what feminist groups in Pakistan have experienced.

In the past decade, feminist collectives in Ciudad Juárez have pushed for legal reforms such as *Ley Olimpia*, which targets digital violence against women (The Yucatan Times, 2021). However, much of the legal framework remains insufficient to address the systemic issues that allow machismo and gender violence to persist. Feminist groups continue to face roadblocks, as the state's response remains largely superficial, addressing symptoms without tackling the root causes of violence (Paley, 2020).

"Ley Olimpia" law draws its name from Olimpia, a woman whose private content was maliciously shared without her consent by an ex-partner (The Yucatan Times, 2021). Implemented in 19 out of Mexico's 32 states, Ley Olimpia stands as a shield to protect individuals whose intimate content has been shared across social media platforms without their permission. It's a law designed to safeguard anyone, irrespective of gender or sexual orientation, from such violations (The Yucatan Times, 2021). What's striking about Ley Olimpia is that it's emblematic of the feminist movement's inclusive approach. It transcends mere gender boundaries, advocating not only for women but for anyone who faces any form of violence. This broader perspective underscores that the battle for women's rights in Mexico is far from over. Yet, it's these very initiatives that fuel optimism and promise for the forthcoming generations. They represent a crucial step toward building a society that respects individual privacy, autonomy, and dignity, fostering a more just and equitable environment for all. Just like Ley Olimpia, the feminists across Mexico have seen the fruits of their work today.

Reproductive rights have been one of the fights women in the region have encountered to be unsatisfied by their government. Through various demonstrations of discontent and law suggestions, Mexican women have the desire to have body ownership for themselves and for every woman in the region. In more recent years, due to the arduous fights of feminist activists, the government is acting in a direction that favors women and their body ownership. In a pivotal move reported on July 8th, 2021, through the online magazine Expansion Politica, Claudia Sheinbaum, the head of the Mexican government, led legislation advocating for reproductive rights (Navarrete, 2021). Under the banner of Voluntary Interruption of Pregnancy (Interrupcion Voluntaria del Embarazo), this legislation advocates for the right to terminate pregnancies within the first 12 weeks (Navarrete, 2021), marking a significant stride toward granting women across Mexico autonomy over their bodies. What's particularly noteworthy is the government's acknowledgment of the prevailing gender inequality and its link to pervasive gender-based violence in the country. Within the same article, the legislation is seen as a responsive measure, addressing gender violence such as rape and sexual abuse. It introduces provisions allowing pregnancies of up to 20 weeks (or 5 months) to be eligible for this procedure in cases of rape, eliminating the necessity for evidence or formal complaints to access this right (Navarrete, 2021). This multifaceted approach reflects an enormous evolution in Mexico's legislative landscape, recognizing and accommodating the diverse and often challenging circumstances women face throughout the country.

In an article of La Nueva Verdad Magazine, published on September 1st, 2020, the reporter Victoria Rossi speaks about the struggles of women in the border to find support from their government to safely of through an undesired pregnancy (La Nueva Mañana, 2020). Women in this part of the world, are obliged to either travel very far distances to find a clinic to get the abortion procedure done, or simply stay with crossed arms without any help from their officials. An interviewee (who decided to remain anonymous) provides the necessary medication for an early pregnancy to be interpreted for women in Juarez (La Verdad, 2021). She distributes Misoprostol, a medication used generally for internal ulcers but is also a great resource for a clandestine abortion during the early stages (La Verdad, 2021). CC, the interviewee, buys the medication through acquaintances and offers the help needed through her social media (La Verdad, 2021). It is incredible to note how women in need, help each other in difficult times, when support and aid is nowhere to be found in authorities or officials. Along the side of CC, various defense organizations, resources online and online pharmacies, are trying to bring these resources for those who cannot easily access them. Although it is a very complicated and arduous process to go through, the sense of community among Juarense women is stronger than ever. Changes are starting to be made in the governmental system in Juares. Last year, 2023, was filled with victories for the women not only in Ciudad Juarez but also in the whole country of Mexico. The fight for reproductive rights has been one of the grandest demands that Latin American women have sought for the last few decades, and it has finally been addressed by the national government as a human right for individuals who identify as

capable of bringing life into the world. The demand started in Argentina in the early 2000s (Hatto, 2023) when feminists gathered and fought peacefully for the legalization of abortion and the protection of reproductive rights for all Latin American women. Through their efforts, Latin American women have come together to legalize a safe and healthy interrupted pregnancy. It is now a national law in Mexico, for abortion to be unpenalized as of the 6th of September of this year (Hatto, 2023). At last, Juarense women, and Mexican women in general, can finally take a victory in their constant fight, which shows that constant mobilization in the movement, perseverance, and most of all, hope, do bring fruits of their fight.

Conclusion and further discussions

The feminist movement in Ciudad Juárez exemplifies the strength and resilience of women confronting systemic gender violence. This article integrates feminist legal theory to highlight the urgent need for comprehensive legal reforms to address machismo, feminicide, and broader forms of gender-based violence. The struggle of Juarense women is embedded within a larger global feminist movement advocating for justice, equality, and human rights. Their efforts, if supported by robust legal frameworks, have the potential to create a safer and more equitable future (Khasraghi and Mehan, 2023).

Ciudad Juárez has long been perceived as a site of danger, shaped by the violent Narco War of the early 2000s, the migratory influx driven by the maquiladora industry, and the persistence of patriarchal social constructs such as machismo and micromachismo. These factors contribute to the daily violence experienced by women. However, feminist activism is challenging these perceptions and working to reshape the region's socio-political landscape. Feminists in Ciudad Juárez have mobilized to demand systemic change through legislative advocacy, protests, and digital campaigns, contributing to significant reforms such as *Ley Olimpia*, which addresses digital violence. Activists such as Marisela Escobedo Ortiz, Luis Castillo, and Jessica Fernandez have emerged as prominent figures in this movement, offering hope and inspiring future generations. The struggle faced by women in Juárez is not isolated but is indicative of broader societal challenges that require urgent attention.

To effectively address the culture of gender-based violence in Ciudad Juárez, several key reforms are essential. First, the state must strengthen its legal frameworks to protect women from both physical and economic violence, particularly in industries such as the maquiladora sector, where women face unsafe working conditions and unequal pay. Beyond labor reform, the government must extend protections to encompass public and private spaces, addressing the vulnerabilities women face in transit, at home, and at work. Feminist collectives should play an active role in policy development, as their intimate knowledge of the lived experiences of women is crucial for shaping effective responses. Comparative lessons can be drawn from feminist movements in Argentina and Chile, where collective input has shaped national policies on reproductive rights and gender equality. Additionally, public

campaigns must target toxic masculinity and entrenched gender stereotypes, with educational initiatives aimed at deconstructing machismo and promoting gender equality in schools and workplaces.

While significant strides have been made by the feminist movement in Ciudad Juárez, systemic challenges remain. The entrenched nature of gender violence, rooted in toxic masculinity, gender inequality, and state inaction, demands sustained advocacy and structural reforms. By incorporating feminist legal theory and centering the voices of local women, this article highlights the ongoing struggles while providing concrete policy recommendations to dismantle the culture of violence pervasive in the city.

This is a crucial moment to critically examine the social issues that have long affected Ciudad Juárez. Education and awareness are powerful tools in addressing the deep-seated history of gender violence that characterizes the region. By understanding the root causes and complex dynamics of this violence, activists and policymakers alike can generate meaningful and sustainable change. The activism of figures such as Jessica Fernandez, Luis Castillo, and Marisela Escobedo Ortiz demonstrates that collective action is key to exposing and confronting the realities of gender-based violence in Juárez. Progress requires a collective effort to recognize the widespread impact of these issues, and to channel this understanding into action that promotes systemic change.

The path forward involves more than awareness; it necessitates finding solutions and implementing innovative approaches to address these deeply entrenched problems. Cultivating a culture of respect, equality, and safety is essential for ensuring the security and wellbeing of all individuals in the community. Solidarity is crucial in this fight—by standing together and challenging the systems of violence and oppression, the community can create lasting change. A future in which every individual, regardless of gender, feels safe and empowered is possible, but it requires concerted effort. Ciudad Juárez and its border region can transform into spaces where security, equality, and opportunity thrive, free from the fear of violence or discrimination. The power to achieve this lies in the unity of collective voices and actions. Through continued advocacy, education, and solidarity, a just and equitable society can be realized for all.

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AM: Conceptualization, Writing – original draft, Writing – review & editing, Investigation, Funding acquisition, Methodology, Project administration, Resources, Supervision, Validation, Software, Data curation, Formal analysis. ND: Conceptualization, Investigation, Writing – original draft, Writing – review & editing, Data curation, Formal analysis, Software, Validation, Visualization, Resources, Methodology.

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The need for assisted reproductive technology regulations: a case for women in the Philippines

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No laws regulate Assisted Reproductive Technology (ART) in the Philippines. Because of this, women who suffer from infertility must settle with specific guidelines crafted by medical and fertility specialists and professional organizations. As a result, women have limited access to ART and rely on scarce healthcare services and facilities, which may be at the mercy of several guidelines influenced by personal and religious beliefs. In this essay, I examine these regulations (or lack thereof), their socio-cultural motivations, and their dire implications on women and their reproductive rights. I show that Philippine ART regulations lag compared to some developing countries; women have limited choices to address their fertility and reproductive health issues, and they lack the support that they need in dealing with infertility. Thus, regulations need to be crafted to make ART practices more inclusive and less inhibiting for women in the Philippines.

KEYWORDS

in vitro fertilization, RH law, Philippines, infertility, reproductive rights

Introduction

In vitro fertilization (IVF) technology is one of the most common procedures used in assisted reproductive technologies (ART), wherein fertility-related issues are treated through medical interventions by manipulating gametes or embryos (Jain and Singh, 2025). The process involves the collecting oocytes from the ovary, fertilizing them *in vitro*, and transferring the resulting embryo into the uterus (Jain and Singh, 2025). Other associated techniques would also include cryopreservation and intracytoplasmic sperm injection (ICSI). The first successful IVF live birth occurred in the United Kingdom in 1978. In a developing country such as the Philippines, the first live IVF birth occurred in 1996 (Dupont, 2013).

Despite the availability of ART, however, many women and couples all over the world still struggle to conceive. In the Philippines alone, one out of four couples still deal with infertility issues (Flores, 2016). In Taguibao and Bance's study (2022, p. 32), for instance, some Filipino women shared that dealing with their fertility issues is an "uphill battle." From the realities of treatment and diagnosis to the emotional pain brought about by unsuccessful procedures, women feel stressed and powerless (Taguibao and Bance, 2022, p. 32–33). Financial stress is also significant burden, especially when considering the costs of workups, medications, and other necessary resources. In perspective, one IVF cycle in the Philippines costs about half a million pesos (~10,000 USD). This estimate does not include the additional costs of medications required for the procedure. As such, some couples would resort to undergoing the procedure in other countries, such as Taiwan.

At present, centers in the country offer many ART services in addition to IVF. These include follicular monitoring, intrauterine insemination (IUI), ICSI, assisted hatching, cryopreservation, embryo transfer, blastocyst transfer and culture, and others. Unfortunately, infertility issues are not covered by health insurance in the country, so all these costs are shouldered out of pocket. Like the rest of the world, the question of who should have access to such technologies and who should pay for it is still being debated (Nugent, 2018). In the Philippines, the Republic Act No. 10354 or the Responsible Parenthood and Reproductive Health Law could have included provisions for infertility treatments and ART to support women and couples with fertility issues. Its coverage and implementation, however, is limited and hindered by the opposition of some ultra-conservative groups.

The reproductive health law of the Philippines

The reproductive health law (RH Law), Republic Act No. 10354, or the Responsible Parenthood and Reproductive Health Act of 2012, is one of the most highly debated laws in the Philippines. With a predominantly Catholic population, several fundamental groups have questioned its constitutionality and fought to hamper its implementation. It is not surprising that what the government would consider as "groundbreaking" with this law is just mere access to contraceptives, information on family planning, reproductive health education, and women's rights to postabortion care. While developed countries would consider these provisions as fundamental human or health rights, the law's full implementation has yet to happen despite being passed more than 10 years ago.

The law defines reproductive health as "all matters relating to the reproductive system and its functions and processes." Still, it does not comprehensively include fertility for its citizens' complete physical, mental, and social well being. Despite its mention of "infertility" twice, concerning the prevention, treatment, and management of infertility and sexual dysfunction and reasonable procedures for poor and marginalized couples, it does not specify these treatments at all. Furthermore, while reproductive health care is defined as access to a full range of methods, facilities, services, and supplies that contribute to reproductive health and well being by addressing reproductive health-related problems, it does not mention (ART) in its provisions.

A lack of law for assisted reproductive technology

The RH Law has no provisions or support for ART methods or services such as IUI, IVF, and other reproductive health methods facilities, services, and supplies. This means that while the law seeks to provide citizens with reproductive health care, it is unclear on its provision for reasonable procedures when it comes to infertility. As such, there are two immediate implications of this omittance or the lack of a law on ART thereof; first, persons with fertility problems who require more advanced technologies are neglected in their quest for reproductive well

being, and second, medical specialists and professional societies would self-regulate their guidelines and policies on ART. I argue that this non-regulation or lack of regulation results in Filipino women's deprivation of their reproductive autonomy and their inaccessibility to fertility treatments, which the World Health Organization (WHO) recognizes as essential medical healthcare (Hill, 2020).

The inaccessibility of fertility treatments and the existence of ART were introduced to policymaking by a female lawmaker in the country in 2007 and 2010. In the first regular session of the Fourteenth and Fifteenth Congress of the Republic of the Philippines, respectively, Senator Miriam Defensor Santiago filed versions of the Family Building Act, which requires coverage for infertility treatment in any group health plan or health insurance. This act acknowledges that millions of Filipino women and men are suffering from fertility issues. Considering that the majority of group health plans do not provide coverage for infertility treatments, the act recognizes the impossibility for low and middle-income families to avail of ART services. The act also defines infertility as a disease or condition of the reproductive system and ART as treatments or procedures such as IVF, gamete intrafallopian transfer, zygote intrafallopian transfer, embryo cryopreservation, egg or embryo donation, and surrogate birth.

The Family Building Act was so progressive that it was never ratified into law. Consequently, since the RH Law does not mention ART, no other law in the country regulates or mentions ART besides the Family Code, which recognizes artificial insemination. Likewise, there are no regulatory frameworks for egg freezing or surrogacy. Furthermore, while the Department of Health has rules and regulations governing "other" health facilities, such as specialized out-patient facilities like IVF services, no specific laws governing their establishments or licensing procedures exist for ART services (In-Vitro Fertilisation, Laws and Regulations, 2021). As such, medical specialists and professional organizations such as the Philippine Society for Reproductive Medicine (PSRM), the Philippine Society of Reproductive Endocrinology and Infertility (PSREI), and the Philippine Obstetrical and Gynecological Society (POGS) are left to craft their guidelines for lack of available regulation on ART, precisely the *Guidelines on the Ethics and Practice of Assisted Reproductive Technology and Intrauterine Insemination*. The trouble with privatizing such self-regulation is that policies may be motivated by non-altruistic moral preferences (Baron, 2010) and need more accountability in the event of regulatory failures (Priest, 1997).

One of the primary motivations of the RH Law is to ensure that reproductive healthcare is not refused to a person based on the healthcare provider's sociocultural views or the citizen's intersectional factors such as marital status, gender, etc. Such refusal is deemed prejudicial to women from low-income classes, especially those who rely on more modern family planning methods. Some examples of prohibitions in refusal include "voluntary ligation and vasectomy and other legal and medically-safe reproductive health care services" (Cabral, 2013). In the United States, for instance, Catholic hospitals prohibit sterilizations, but the ban is not enforced uniformly as some obstetrician-gynecologists are conflicted with such religiously motivated policies (Stulberg et al., 2014). Incidentally, there are many cases wherein ethical or religious views of healthcare providers become the basis for their

refusal to provide care, since procedures are seen as anti-life or anti-family by some Philippine religious institutions and their practitioners (Chiu, 2012).

Experiencing ART

With ART absent in the RH Law provisions, my struggles with infertility are my personal struggles alone. With no information or health support, I had to rely on women's online forums, friends, and the Internet. On top of the social pressure of having to conceive as a woman and the emotional and psychological stress, my consultations with fertility specialists were time-consuming and expensive. I could not take a sick day leave, and no private or public health insurance would cover obstetrician-gynecologists or specialists' consultations and fertility workups. The doctors would ask me if I was committed to "treating" my infertility and accounting for expenses that came with it. They would require various tests such as blood tests for hormonal levels (such as the follicle-stimulating hormone, luteinizing hormone, estradiol, and others), transvaginal ultrasound procedures (TVS), and the Hysterosalpingogram (HSG) (which is a test to check the fallopian tubes for possible blockages).

Committing to ART, I would undergo these blood tests and TVSs every week, and I would also take prescription medications to stimulate hormones and produce high quality eggs. I would undergo various ART interventions to conceive. These would include timed intercourse, intrauterine insemination (IUI), and eventually IVF. Since the fertility specialist was somewhat conservative, I had to start with the least aggressive and "cheaper" ART methods. Having to spend for these less-aggressive methods turned out to be more expensive in the long run. If we had gone straight to IVF, we would have had higher chances of conceiving with the least amount of stress, time and money. Proper information, guidance, and support would have been beneficial to women who have fertility challenges like me.

Motivations of ART guidelines

With a lack of explicit governmental policy regarding ART services, I argue that moral and religious views have motivated ART providers' professional self-regulation and policies in the Philippines. In fact, some provisions in the guidelines are even labeled "pro-life" and "pro-marriage," to insinuate their reflection of Catholic or Christian values (Chiong, 2022). The same goes with the RH Law, wherein it puts a premium on the freedom of conscience when it comes to decision-making concerning medical procedures and state-sponsored reproductive health programs. This means that "the state cannot compel any of its personnel to implement any contraceptive or reproductive health procedures that may be deemed unethical or immoral by them (based on their religious convictions)" (Lofredo, 2016, p. 332). As such, available reproductive health services depend highly on ethical and religious beliefs or convictions. Such conscientious objections, however, are deemed unethical as they can be abused to compel patients, specifically women, to adhere to spiritual or religious values they do not believe in (Dickens, 2006). Dickens (2006)

believes that the only way conscientious objections may be "ethical" is if healthcare providers refer women to other providers and the government ensures access to these providers. Given the case of ART and the silence of the RH Law about it, one can infer two contradictory things: that the government must ensure access to fertility treatments or methods. Still, given the operational word "reasonable," it does not need to provide access to more expensive ART treatments. Thus, one can ask whether conscience-based regulations on ART are ethical, given that the government is not mandated to ensure access to ART providers.

Without actual laws on ART in the country, the same subjective conscience-based rulemaking (which may be altruistic or not) is the basis of existing professional regulations on ART (Aguilar et al., 2024). One of these self-regulated guidelines includes the previous prohibition of preimplantation genetic screening (PGS) or the screening of embryos for any chromosomal abnormalities to help avoid natural abortion. As a result, Filipinos previously traveled to Taiwan or other countries to undergo such screening. While preimplantation genetic testing for aneuploidies (PGT-A) is available in some major ART centers in the country (Abad et al., 2023), this test does not cover the service usually requested by those with known hereditary diseases that may be passed on to their offspring. In 2016, preimplantation genetic diagnosis (PGD) and preimplantation genetic screening (PGS) have been deemed ethically acceptable in cases of genetically transmitted conditions "which are serious, and no safe and effective interventions are available (Chiong, 2022, p. 508)." Embryonic gender identification is also now allowable "in cases where a strong family history of sex-linked genetically transmissible disease exists (Chiong, 2022, p. 508)." If a case does not fall under "serious" or "strong family history," then sex screening cannot be performed. Should a couple have other sex-linked genetic diseases, they would have to go elsewhere for such tests. As a result, Filipinos must rely on existing (possibly conscience-based) guidelines alone since there are few genetic counselors in local IVF centers (Abad et al., 2023). Such cases are confirmed by a study with predominantly Christian respondents which show the correlation between the decision to undergo PGS and the importance of religious beliefs and ethical values (Gebhart et al., 2016). Another study explicitly finds that accepting PGT as an antenatal option is decided by one's religion (Zuckerman et al., 2020).

Other "rules" for ART and IVF in the country include a maximum of two embryos allowed for transfer during a single procedure (Dupont, 2013). Kato Repro Biotech Center (Kato), a leading ART center in the Philippines, prefers "single embryo transfer to lessen the complications of multiple gestations" (FAQs | Kato Repro Biotech Center, 2025). The only time Kato allows the transfer of two embryos is when couples wish to increase their chances of having twins. In the US, there have been debates on whether the State should regulate the allowable number of embryos to be transferred. Some argue that limiting the number of embryos in one transfer goes against the right to procreate (Forman, 2011). In the Philippines, however, the RH Law explicitly states that:

> "The State shall promote programs that: (1) enable individuals and couples to have the number of children they desire with due consideration to the health, particularly of

> women, and the resources available and affordable to them
> and in accordance with existing laws, public morals and their
> religious convictions: Provided, That no one shall be deprived,
> for economic reasons, of the rights to have children…"

If we were to follow this strictly, then the local professional regulation of multiple embryo transfers could be questioned. While such a guideline is for the safety and benefit of the mother and babies, the lack of mention of ART in the RH Law assumes that refusing multiple embryo transfers without explicit medical justification is against the law, specifically the right to have (the desired number of) children.

The most conservative and perhaps discriminatory ART guideline is that only legally married couples can undergo ART procedures in the Philippines. As such, third-party donor eggs, sperm, or embryos may not be used in the treatment. This means that unmarried couples, same-sex couples, or single people cannot avail of ART services in the country. This is quite ironic given that the Family Code of the Philippines acknowledges that a child born out of artificial insemination through donor sperm is a legitimate child of the husband and wife. This implies that the Family Code recognizes third-party artificial insemination despite its prohibition by professional regulation in the country. Such a guideline is discriminatory to marginalized members of Philippine society, such as single persons, LGBTQI aspiring parents/couples, and unmarried couples. One study that reviewed the implications of specific policies on lesbian single parents, for instance, claims that the Philippine medical ethics boards prevent single LGBTQIs from undergoing advanced fertility treatments (Biana and Domingo, 2021). Such policies may be traced to the Catholic Church's historical exclusion of non-heteronormative individuals and "those who do not conform to conservative gender constructs" (Biana et al., 2022).

The same prohibition for particular ART treatments applies to unmarried couples. Filipino single women will have to settle with freezing their eggs for future use if and when they decide to tie the knot with their male partners. A case study by Shirai (2021) even divulged that some Philippine Catholic hospitals have banned IVF and gamete and embryo freezing. Additionally, unmarried couples cannot undergo certain ART or IVF procedures that involve the meeting of gametes. In the Philippines, only *homologous* IVF is permitted. This means that the gametes used must come from legal spouses. This guideline is primarily and obviously motivated by religious convictions. Not being married and having children is, after all, anti-family, according to the Catholic Church. Conservative culture dictates that only married couples should have children. This guideline seems to go against the RH Law, particularly the refusal to "extend quality health care services and information on account of the person's marital status, gender, age, religious convictions, personal circumstances, or nature of work." Then again, the RH Law has no mention of ART.

The lack of support for women

Aside from the lack of access of marginalized individuals and non-traditional couples to several ART services, there is also a dearth of laws that support women undergoing fertility treatments. First off, there are no leaves provided for women who are undergoing ART treatments. One could argue that since infertility is a disease, perhaps sick leaves may be used for such a purpose. In the Philippines, however, employers are not legally required to offer sick leave days to their employees. While some provide around 12–15 sick days, workers must provide medical certificates to justify absences. While there is a 105-Day Expanded Maternity Leave Law in the country, such leave is prenatal and postnatal, meaning a woman should already be or have been pregnant before she can avail of it.

Some institutions in more developed nations, such as the University of Oxford, provide fertility treatment leaves on top of medical appointment leaves, sickness leaves (which can be used for physically recovering from treatment procedures or illnesses from fertility treatment or pregnancy), and pregnancy leaves (The People Department, 2023). Such benefits are also available to staff going through a surrogacy arrangement. While there are no specific statutory rights to attend IVF treatment in the United Kingdom, the additional leave addresses the discrimination and struggle suffered by women undergoing fertility treatment (Murray-Nevill, 2023). Women's rights activists argue that an inclusive workplace culture should provide infertility support to women (Skinner and Clark, 2021).

In the Philippines, the absence of workplace support for women undergoing fertility treatments, coupled with the lack of coverage from local health insurance providers, may lead to women discontinuing their treatment for various reasons beyond financial constraints. A study done in Belgium (Van den Broeck et al., 2009) shows that women discontinued their fertility treatments primarily due to their psychological and physical burdens. A lot of women even refused to be involved in the study because of the refusal to relieve the history of their infertility. When fertility treatments fail, women are vulnerable, helpless, and anxious, and they need acceptance and social support. Such burdens are attributed to emotional distress, stress, depression, the physical pain of injections, and other side effects (Gameiro et al., 2012). Mental health professionals recommend counseling for women who have failed or discontinued their ART treatments (Ebrahimzadeh et al., 2019).

The psychological and emotional support of women would have been supplemented by the Republic Act No. 11036: An Act Establishing a National Mental Health Policy for the Purpose of Enhancing the Delivery of Integrated Mental Health Services, Promoting and Protecting the Rights of Persons Utilizing Psychosocial Health Services, Appropriating Funds Therefor and Other Purposes. However, since there is no specific ART laws integrated into the RH law and infertility treatment is not considered an essential health service, the national mental health care system is not mandated to include specific mental health care stipulations for women undergoing infertility or fertility treatments in their essential mental health services and community-based facilities. While the act mentions the terms "gender-sensitive" and "responsive to gender," it does not mention any gender-specific advocacies, treatments, or protocols concerning the type of psychosocial support for women or women undergoing ART at that.

Implications

Aside from the reproductive healthcare providers' potential lack of accountability and government or community-specific support, the problem with the absence of regulatory laws on ART and IVF is that women's bodies and their reproductive health choices may be "regulated" by the moral or religious inclinations of medical specialists and professional societies. They may argue that they are objective experts in their field and that their ART regulations are altruistic and in line with Philippine socio-cultural values and norms. We should ask, however, whether the ART guidelines are liberal enough to accommodate women with several intersectional factors and particular reproductive and psycho-social needs. Kaplan (2024, p. 197), for instance, claims that women who experience infertility and pursue ART methods "require additional psychoeducation and support" since their decision may go against religious beliefs and teachings. Kaplan (2024, p. 197) further states that they would need critical sources of support and "aid in coping."

Along with the small number of ART centers in the country, the expensive cost of treatment, and the lack of support mechanisms, only a few women may avail of such. According to a study, financial constraints are the first reason couples do not seek treatment (Flores, 2016). This may shock those in developed countries, but to reiterate, no public or private health insurance covers the costs of IVF treatments (Having a Baby in the Philippines? Hospital, Midwife, Delivery and IVF Costs, 2018). The Philippine Health Insurance Corporation or Philhealth, the government-owned corporation that provides insurance, so far, only covers "supervision of pregnancy with history of infertility" as a maternal comorbidities condition, with a total coverage of around $150. It is pretty telling that only wealthy Filipino celebrities have mostly benefited from more specialized ART services such as IVF and surrogacy (abroad) (Cabbuag, 2023; Tan, 2023). Notwithstanding the limits of ART services, the provider referral feature (possibly due to conscientious objection) that should supposedly be available to women is futile if they do not have the means.

Some might argue that there are some guidelines in the country. However, the Philippines has lagged in ART regulation compared to other developing nations. For instance, 20 years ago, Malaysia and Jordan had no guidelines concerning gamete donation (Chapter 8: Donation, 2007). At present, however, there have been developments in these countries. For instance, Jordan has some proposed laws up for discussion, and there have been studies that support the call for IVF regulation in Malaysia. One may also argue that, at least, IVF was not banned in the Philippines like in another predominantly Catholic country, Costa Rica. IVF was banned in Costa Rica from 2000 to 2015. Costa Rica, however, has an advanced healthcare infrastructure, and to catch up with the laws of more developed nations, Executive Decree No. 39210-MP-S was made to implement IVF to ensure the reproductive rights of people with infertility challenges (Valerio et al., 2017).

The lack of ART regulation also poses problems for the implications of such technology, particularly the practice of surrogacy. Since surrogacy is not "allowed" in the Philippines, vulnerable local women are hired to be surrogates for procedures performed abroad. Without clear laws, regulations, or prohibitions for such practices, Filipino women may be exposed to oppressive and exploitative situations. For instance, surrogate recruitment is done in "secret" through social media platforms (Sepe, 2019). Women who may be exploited by their recruiters often have no legal recourse available to them. In 2006, Senator Manny Villar filed Senate Bill No. 2344 Or The Act Prohibiting Surrogate Motherhood Including Infant Selling And Providing Penalties. The bill, however, never prospered. Indeed, many legal issues may arise due to the lack of regulation on surrogacy. The members of the PSRM even agree that having a law will protect all involved parties (Chiong, 2022).

Conclusion

The lack of regulation of ART in the Philippines affects women, especially those who need more sophisticated medical interventions and psycho-social and emotional support. While some guidelines exist in regulating such technologies, relying on personal and moral motivations for the reproductive well being of women goes against their rights to appropriate treatment, reproductive autonomy, and essential medical healthcare. With the development of more advanced technology, Philippine law and policymakers must acknowledge the existence of ART and the lack of its regulation. This would ensure that the health needs of women with fertility issues would be addressed, their rights are protected and upheld, and they have the freedom to make reproductive decisions free from discrimination.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

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The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Work–family conflict, overwork and mental health of female employees in China

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Introduction: The "Green Paper on the Mental Well-being of Chinese Career Women" indicates that around 85% of Career Women face mental health challenges such as anxiety, depression, and anger, with these issues being more common than in their male counterparts in China. Both work and family are identified as two major contributors to these problems. Utilizing Conservation of Resources theory, this paper examines work–family conflict and overwork as significant explanatory variables and develops a moderated mediation model to investigate the mechanisms affecting mental health issues among Chinese career women.

Methods: Data were gathered through a questionnaire survey, with 500 questionnaires distributed and 393 responses received. Hayes' PROCESS macro for SPSS was employed to examine moderated mediation models, with Bootstrap resampling set at 1000.

Results: (1) Work–family conflict (abbreviated as WFC) is significantly associated with emotional exhaustion (abbreviated as EE) and mental health problems in career women, with emotional exhaustion serving as a mediator between work–family conflict and mental health. (2) Overwork is positively linked to emotional exhaustion and influences the relationship between work–family conflict and emotional exhaustion. (3) Overwork also moderates the mediation effect of work–family conflict on mental health via emotional exhaustion, amplifying the mediation effect when career women are overburdened.

Discussion: This study provides fresh insights into the mechanisms underlying mental health issues among career women, offering valuable information for addressing these challenges.

KEYWORDS

work–family conflict, overwork, mental health, career woman, moderated mediation model

1 Introduction

1.1 Background

According to labor market data of World Bank 2023, the female labor force participation rate in China reached 60.54%, meaning nearly two-thirds of eligible Chinese women are engaged in labor and work. This proportion exceeds the average of high-income countries globally (54%) (1). Furthermore, with China's population aging intensifying, there is considerable pressure on social labor resources. Against this dual

backdrop, the health and vitality of Chinese female labor force are particularly crucial for the socio-economic development of China.

The 2019 "Green Paper on the Mental Well-being of Chinese Career Women" revealed numerous health challenges faced by Chinese women in the workplace. Most career women self-assess their health as fair or poor, with anxiety, depression, and social isolation increasingly becoming their major concerns. Approximately 85% of career women experienced mental health problems in the past year, with about one-third feeling anxious or depressed from time to time, and 7% reporting constant anxiety or depression. The Green Paper also indicated that around 90% of career women experienced negative emotions and psychological symptoms in the past 3 months. Nearly half of them reported feeling irritable, anxious, confused, or scared during this time. These issues were more common among women than men in the Chinese workforce (2).

Based on the above discussion, the mental health of Chinese career women is currently in an unfavorable state. However, understanding the origins of these issues is a pressing topic for further research. Existing literature suggests that among the various influencing factors, work and family are the primary contributors to women's mental health issues (3, 4). Despite a clearer understanding of the major precursors affecting mental health, the mechanism how work and family interactions impacts the mental well-being of female employees remain unclear, presenting a significant research gap. Noted above, we conducted interviews with Chinese career women, revealing that WFC and overwork play crucial roles in their mental health. Yet, how these factors lead to mental health issues remains to be explored.

1.2 Literature review and conceptual model

In China, women have traditionally been the primary caregivers within families. However, with a significant increase of females entering the labor market, the traditional male-breadwinner model has undergone fundamental changes. This shift requires women to balance work and home duties, inevitably resulting in work-family and role conflicts (3, 5). WFC can be defined as "An inter-role conflict in which the role pressures from the work domain are, to some extent, incompatible with the family domain" (6). According to the Resource Conservation Theory, the Scarcity Hypothesis posits that work and home duties compete for an individual's limited resources. When individuals attempt to fulfill both roles simultaneously, resource scarcity causes role conflict, exacerbating conflict between work and family domains (7, 8). Existing research indicates that WFC can detrimentally affect the mental issues of the staffs, with a greater impact on women compared to men (9–11).

Furthermore, data from the "China Labor Statistical Yearbook 2021" shows that in 2020, urban employed individuals in China had an average weekly working time of 47.0 h. In comparison, OECD countries averaged 36.7 h per week in 2019. This disparity underscores that Chinese workers have significantly longer work hours compared to the OECD average (12). Some sectors in China even experience the "996" phenomenon, where employed individuals toil from 9 AM to 9 PM, 6 days a week, highlighting prevalent issues of overwork in the country (13, 14). "Overwork" is a state where workers accumulate fatigue due to prolonged and intense work activities. Prior literature has revealed that long working hours could pose health risks to employees, and for women, the mental health issues caused by overwork are particularly pronounced compared to men (15).

Based on the literature review above, both WFC and overwork significantly affect the mental health of women in workplace. However, the specific mechanisms through which these factors deteriorate women's mental health remain unclear. Therefore, this study aims to construct a model to elucidate the mechanisms of WFC and overwork on the mental health of women in workplace, thus addressing gaps in previous research. In accordance with conservation of resources theory, both WFC and overwork exhaust an individual's psychological resources, leading to emotional exhaustion (16). Emotional exhaustion refers to a chronic state of being physically and emotionally overextended, exhausted and drained by excessive job demands and continuous work hassles (17). This exhaustion undermines an individual's self-regulation abilities, triggering a cascade of mental and behavioral responses such as anxiety, depression, anger, avoidance, aggression, and non-cooperation (18). Previous studies have shown that EE is a precursor to mental health. When EE accumulates to a certain extent and is not eliminated, it can arouse people's mental health problems (19).

Throughout this process, due to identity and role cognition reasons, most career women aspire to achieve balance between their home and work duties, making WFC particularly prone to arise (20). When conflicts occur and cannot be resolved, women in the workplace experience chronic stress. Prolonged stress inevitably depletes limited psychological resources, leading to EE and subsequent mental health issues (7, 21, 22).

As previously mentioned, overwork is a common phenomenon in China and can lead to emotional exhaustion in individuals (23). In addition to its main effects, overwork can further exacerbate the emotional exhaustion caused by WFC among working women, thereby acting as a moderating factor. In other words, the strength of the relationship between WFC and emotional exhaustion varies depending on the degree of overwork. When working women have longer working hours, they expend more psychological resources, resulting in fewer resources available to manage WFC, which in turn intensifies emotional exhaustion (24).

Based on this analysis, we have developed a moderated mediation model to investigate the explanatory mechanism linking WFC and overwork to EE and mental health issues in women. This study proposes that WFC leads to EE, which in turn affects the mental health of career women —thus EE mediates the relationship between WFC and mental health. Simultaneously, overwork moderates the relationship between WFC and EE. Combining these factors, overwork not only moderates the relationship between WFC and EE but also exerts a moderating effect on the relationship between WFC mediated by EE and mental health, thereby forming a moderated mediating effect. Figure 1 describes the conceptual model proposed in this research.

In summary, the main problem explored in this paper is how the intersection of work and family impacts the mental health of career women. We argue that work–family conflict and overwork are significant factors that negatively affect their mental health. These challenges drain their psychological resources, leading to emotional exhaustion and ultimately harming their overall mental well-being.

FIGURE 1
The conceptual model.
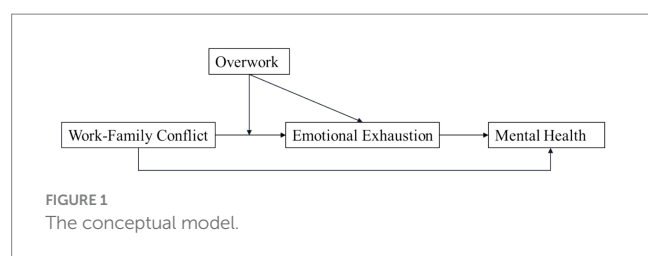
2 Data and methods

2.1 Procedure and subjects

Data in the reperch were collected via questionnaire survey. The questionnaire consisted of three parts: an informed consent form, demographic variables, and measures. All measures were administered using a 7-point Likert scale. To mitigate common method bias, participants' average weekly work hours were obtained from the human resources departments of their respective companies. The work identification numbers of participants were included in the questionnaire design to match respondents' work hours with their responses.

To ensure the scientific and representative nature of the sample, participants were drawn from three industries in Shandong and Anhui province of China. Industry types included service, manufacturing, and IT sectors. These industries account for most female employees in China, thereby ensuring the representativeness of the sample.

Generally, a sample size of 300 or ten times the number of items is required to ensure statistical robustness. A total of 500 questionnaires were distributed, with 393 valid responses collected. Ages of participants range between 18 and 55 years (mean age = 37.37 years). The average weekly work hours were 49.9.

2.2 Constructs and instruments

2.2.1 Work−family conflict

The measurement items of WFC were adopted from Grzywacz and Marks (24). The scale includes 8 items: 4 for WFC and 4 for family–work conflict. Cronbach's α value for WFC was 0.929.

2.2.2 Emotional exhaustion

The scale, comprising six items, was adopted from the Oldenburg Burnout Inventory, which has demonstrated good validity (17, 25). Cronbach's α coefficient for EE was 0.925.

2.2.3 Overwork

Based on prior research, working exceeding 50 h per week is considered overwork (26). In this research, overwork was coded as 0 and 1, where 0 represents weekly work hours less than 50 h, and 1 represents weekly work hours greater than 50 (overwork).

2.2.4 Mental health

Conceptualizations of mental health vary widely, including dimensions such as satisfaction, happiness, and depression (27). To reduce respondent burden and enhance measurement validity globally, single-item indicators have become increasingly popular

(28). In this research, single-item was used to assess mental health: "How do you rate your mental health at the present time?" Responses ranged from 1 (Excellent), 2 (Very Good), 3 (Good), 4 (Fair), 5 (Poor), 6 (Very Poor) to 7 (Extremely poor) (29).

2.2.5 Control variables

Base on the prior studies, we control the age, education level (1. below high school, 2. high school, 3. bachelor, 4. master, 5. doctorate), marital status (1 for married, 0 for unmarried), and workplace type (1 for indoor office, 2 for business premises, 3 for workshop, 4 for outdoor).

2.3 Data analysis

Data analysis employed Hayes' (30) PROCESS to examine moderated mediating models (Module 7, first stage moderation), with Bootstrap resampling set at 1000. Hayes' PROCESS can simultaneously calculate moderation and mediation effects, and provide direct effects, indirect effects, and confidence intervals of Bootstrap, making it a commonly used tool for analyzing moderation mediation models. The analysis proceeded in three steps: first, testing the mediating effects among WFC, EE, and mental health; second, examining the moderating effect of overwork on EE; third, testing the moderated mediation effect of overwork on the WFC via EE to mental health.

3 Results

Before formal data analysis, we conducted descriptive statistics on variables, including mean, SD, and correlations in Table 1. WFC positively correlated with mental health and EE, with correlation coefficients of 0.471 ($p < 0.01$) and 0.217 ($p < 0.01$), respectively. Overwork showed significant positive correlations with mental health and WFC, with coefficients of 0.434 ($p < 0.01$) and 0.349 ($p < 0.01$), respectively. The average age of participants was 37.37 years. The mean of weekly working hours in the past 6 months were 49.9 h, with 214 respondents working over 50 h (classified as overwork) and 179 working fewer than 50 h.

The scale measurements, all based on self-reports from female employees, may raise a common methodology bias problem. The Harman single factor test results showed that the explanation rate of a single factor for all variance was 33.31% among total variance of 70.22%, which did not exceed 40%, and it could be concluded that there was no common method variance problem (CMV).

After the descriptive statistics and common methodology bias test, we proceeded with model testing. Specifically, we employed Baron and Kenny's procedure to conduct the mediating effects (31). The steps included: (1) testing whether WFC significantly predicts EE, (2) examining whether WFC significantly predicts mental health, (3) assessing whether EE significantly predicts mental health, and (4) testing the combined effects of WFC and EE on mental health if the previous equations hold. The details are shown in Table 2.

According to the results from Models 2, 4, and 5 in Table 2, it was found that WFC positively predicts EE ($\beta = 0.198$, $p < 0.01$) and mental health ($\beta = 0.472$, $p < 0.01$). When EE was included in the regression predicting mental health, the direct effect of WFC on mental health was not weakened or disappeared ($\beta = 0.497$, $p < 0.01$), indicating partial mediation. In addition, bootstrap was conducted to

TABLE 1 Descriptive statistics.

	1	2	3	4	5	6	7	8	Mean	SD
Mental health (1)	1								5.62	1.07
Emotional exhaustion (2)	0.012	1							5.42	1.35
Work–family conflict (3)	0.471**	0.217**	1						5.93	0.94
Overwork (4)	0.434**	0.076	0.349**	1					0.54	0.49
Marriage status (5)	0.006	0.149**	0.016	−0.067	1				0.71	0.45
Age (6)	−0.022	−0.067	−0.002	0.053	0.448**	1			37.37	7.48
Education (7)	0.064	0.096	−0.078	0.047	−0.004	−0.110*	1		1.85	1.05
Workplace (8)	−0.106*	−0.150**	−0.102*	−0.035	−0.081	−0.001	0.072	1	1.85	0.73

**$p < 0.01$ *$p < 0.05$.

TABLE 2 Mediating effect test.

Dependent variables	Emotional exhaustion		Mental health		
Model	M1	M2	M3	M4	M5
Work–family conflict		0.198**		0.472**	0.497**
Emotional exhaustion					0.125**
Marital status	0.141*	0.138*	−0.004	0.003	0.014
Age	0.006	0.003	−0.016	0.008	0.008
Education	0.086	0.072	−0.070	−0.105*	−0.096*
Workplace	−0.133**	−0.114*	−0.111*	0.066	0.080
R^2	0.049	0.087	0.017	0.236	0.25
Adjusted R^2	0.039	0.076	0.007	0.226	0.239
F Value	4.972**	7.4**	1.65	23.913**	21.46**

**$p<0.01$，*$p<0.05$.

TABLE 3 Moderating effect test.

Model	M1	M2	M3	M4
Work–family conflict		0.198**	0.255**	0.349**
Overwork			0.160**	0.145**
Overwork × Work family conflict				0.163**
Marital status	0.141*	0.138*	0.117*	0.117*
Age	0.006	0.003	0.017	0.017
Education	0.086	0.072	0.058	0.058
Workplace	−0.133**	−0.114*	−0.116*	−0.116*
R^2	0.049	0.087	0.109	0.125
Adjusted R^2	0.039	0.076	0.095	0.109
F Value	4.972**	7.4**	7.881**	7.882**

**$p<0.01$，*$p<0.05$.

calculate the mediating effect value. The indirect effect value of WFC on mental health is 0.024 with BootLLCI and BootULCI [0.0447, 0.058], which indicates mediating effect of EE.

Next, we tested whether overwork moderates the relationship between WFC and EE. After standardizing all variables, a

moderation term (overwork × Work–Family Conflict) was created. Sequential regression analyses were conducted: first controlling for all variables predicting EE, then adding WFC, followed by both WFC and overwork, and finally adding the interaction term. The results from Model 4 in Table 3 (β = 0.163,
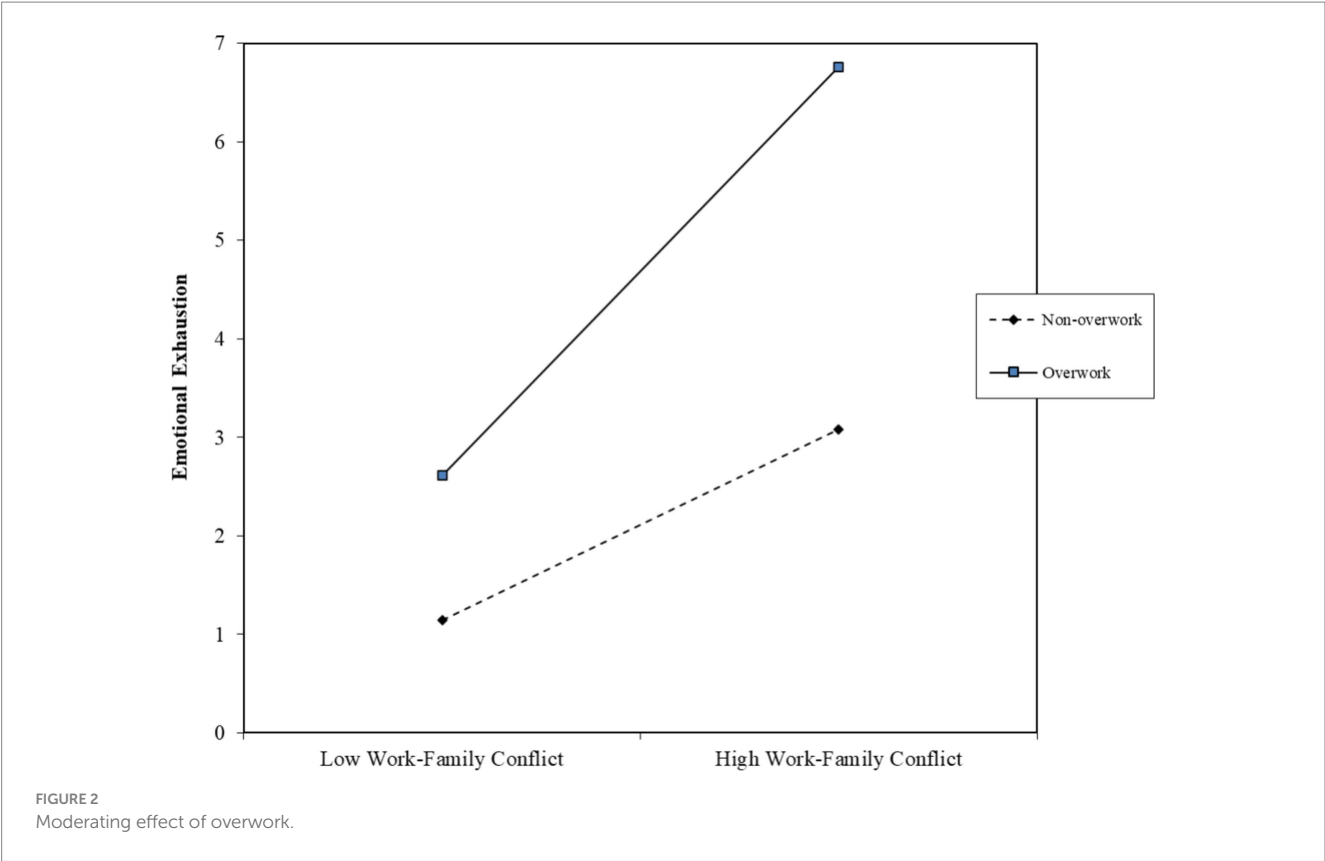
FIGURE 2
Moderating effect of overwork.

TABLE 4 Moderated mediation effect test.

Direct effect					
Effect	SE	T	p	LLCI	ULCI
0.4967	0.0454	10.9523	0.0000	0.5859	0.4075
Indirect effect					
Overwork	Effect	BootSE	BootLLCI	BootULCI	
0	0.0067	0.0128	0.0172	0.0351	
1	0.0435	0.0177	0.0132	0.0821	
Index of moderated mediation					
	Index	BootSE	BootLLCI	BootULCI	
Overwork	0.0368	0.0201	0.0057	0.0832	

$p < 0.01$) confirmed that overwork indeed moderates the effects of WFC on EE.

To visually depict the moderating role of overwork, a moderation effects plot was generated using PROCESS v3.5. As shown in Figure 2, regardless of whether overwork is at 0 or 1, there is a significant positive effect. However, the slope when overwork equals 1 (average weekly working hours over 50 h) is notably steeper compared to when it equals 0 (average weekly working hours less than 50 h), indicating that the positive relationship between WFC and EE is more pronounced in the presence of overwork.

Finally, we employed Hayes' PROCESS to test the overall model's moderated mediation effects, with Bootstrap resampling set at 1000. Table 4 presents the results of overwork moderating the indirect effects of WFC on mental health via EE. The BootLLCI to BootULCI values (0.0057 to.0832) did not include zero, confirming the presence of moderated mediation effects in the overall model.

Finally, in order to comprehensively present the impact of WFC and Overwork on mental health, we calculated the frequency distribution of WFC and average weekly working hours among career women. The specific values are shown in Figures 3, 4.

In conclusion, these findings highlight the complex interplay among WFC, overwork, EE, and Mental Health, underscoring the importance of considering both direct and indirect pathways in understanding their relationships in organizational contexts.
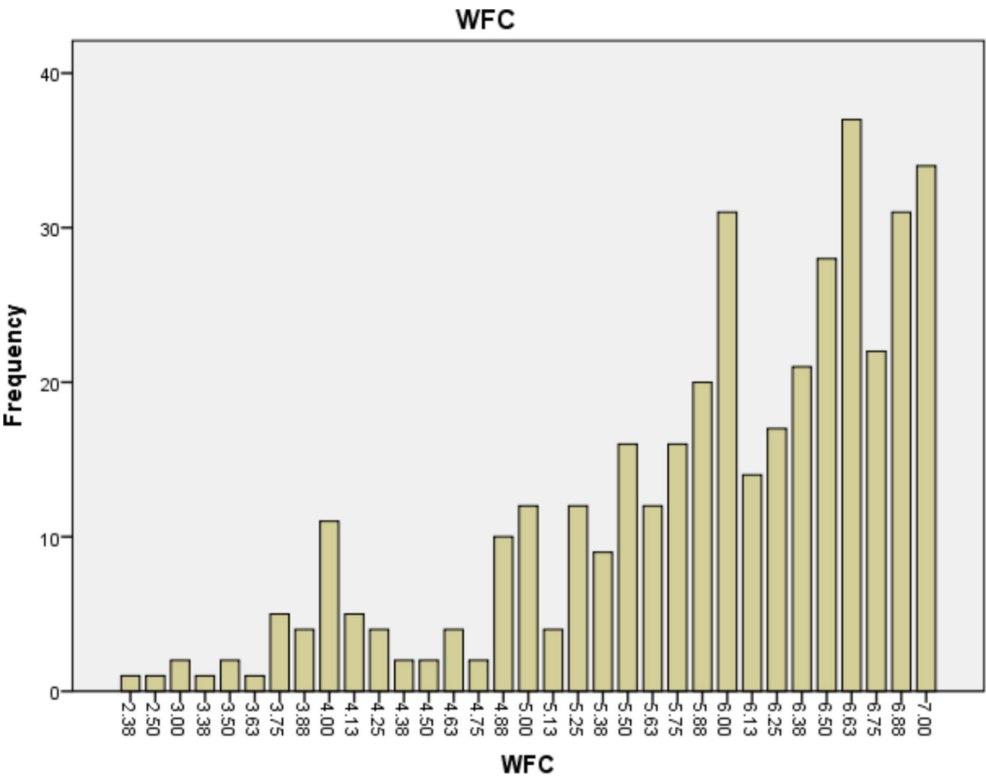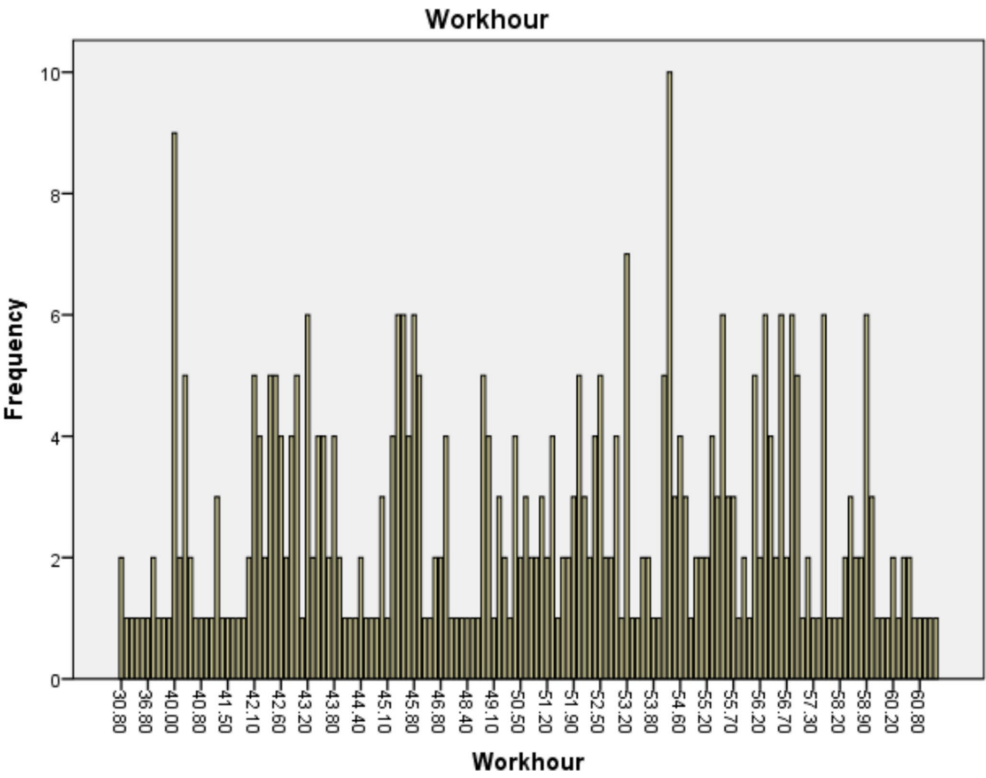
FIGURE 3
Frequency distribution of WFC.

FIGURE 4
Frequency distribution of working hour.

4 Discussion

In traditional Chinese culture, women are often seen as the caregivers while men are seen as the earners. Females tend to bear greater responsibilities in the family, particularly in nurturing and educating the next generation. Upon entering the workforce, due to gender role expectations, WFC becomes inevitable (32). Based on our data collection, the mean of WFC among career women is 5.93 (on a scale from 1 to 7), with over 80% experiencing levels above 5, indicating a significantly high prevalence of WFC.

Long-term WFC inevitably leads to role conflicts for women (33). Limited by personal resources such as time and energy, individuals struggle to fulfill incompatible roles and duties from both work and home domains simultaneously. When resources like time and energy are depleted, EE ensues, making it difficult for individuals to effectively cope with various pressures, thereby leading to mental health issues (34, 35). Our empirical research confirms a significant positive correlation between WFC and EE, as well as between EE and mental health, highlighting WFC as a crucial precursor to mental health problems among career women.

Reducing WFC can have positive implications for women's mental health. When WFC arises, women face pressures from both work and family spheres, making it challenging for individuals to proactively mitigate such conflicts. Therefore, organizations play a key role in reducing WFC (36, 37). While some Chinese organizations have begun implementing policies such as flexible working hours, childcare assistance to meet employee needs, these initiatives require substantial human and financial resources and may not be universally feasible. Cultivating a supportive organizational culture that values family and enhancing managerial support may prove more valuable than formal family support policies. When employees receive affirmation of family values and psychological support from their managers, their psychological resources are replenished, potentially reducing perceptions of work-family role conflict (38). This approach may yield effects comparable to formal family support policies. Hence, future efforts could focus on enhancing informal measures for employees to create a family-friendly work environment. Companies should reconsider their relationship with employees. Additionally, there should be a shift away from pressure-oriented practices toward mutually beneficial solutions for both enterprises and employees.

In the Chinese workplace, another major issue facing career women is overwork. According to the data we have collected, the average weekly working hours for our study participants is as high as 49.9 h, nearing the threshold for overwork. Among 393 individuals surveyed, 214 reported working over 50 h per week, accounting for 54.5%.

Past research has yielded conflicting results regarding the relationship between overwork and health. Some scholars argue that overwork negatively affects both the physical and psychological well-being of employees (39). Conversely, others contend that there is no significant correlation between overwork and health (40). Controlling for numerous covariates and individual heterogeneity, a study in China suggests little evidence that long working hours directly affect workers' health (41). The inconsistency in these findings may stem from the possibility that the impact of overwork on health is not direct but interacts with other variables (42). Excessive work demands consume a significant amount of an individual's time, potentially amplifying the negative effects of WFC, leading to increased EE and greater sources of stress for individuals (43, 44). Our research findings indicate that overwork not only correlates positively with EE but also moderates the relationship between WFC and EE, thereby influencing the mental health of female professionals. Through interviews with career women, we identified WFC and overwork as two major concerns they face. Addressing the widespread mental health issues among female professionals requires a comprehensive understanding of how WFC and overwork interact. These issues are inherent to the nature of work and persist as long as women are engaged in the workforce, and cannot be alleviated solely through individual efforts. Based on this analysis, concerted efforts from various sectors of society are needed to prevent the further spread of psychological issues among Chinese career women and to improve their mental health promptly. Organizations and families alike need to focus on mitigating EE through both formal systems and informal psychological support, aiming to reduce chronic stress and thereby enhance the mental well-being of female professionals in the workplace.

Our research findings reveal that Marital Status is positively associated with EE and Mental Health among career women. Married women exhibit higher levels of EE and mental health compared to unmarried women, suggesting that marriage may lead to more WFC, thereby impacting EE and mental health. The workplace shows a negative correlation with EE and mental health among female employees. Females working in workshops and outdoors are more susceptible to EE than those in office or business premises, indicating that job nature significantly influences emotional depletion and consequently impacts mental health.

Furthermore, educational attainment among women in the workforce exhibits a negative correlation with mental health. This may indicate that higher education enhances individuals' psychological resilience, reducing the occurrence of mental health issues. Alternatively, it might indicate that better-educated women often earn higher incomes, facing less financial stress and, therefore, fewer mental health problems. Hence, it is important to focus on married women in low-income and challenging work environments, as they are particularly vulnerable to mental health challenges.

5 Conclusion

This study examines how family and work affect the mental health of career women. While previous literature has established that these factors affect the mental health of career women, the mechanisms through which this occurs have not been fully clarified. We introduce two key variables, WFC and overwork, and employ the moderated mediation model to explain how family and work impact the mental health of females. According to empirical findings, we discovered that WFC significantly depletes psychological resources among career women, leading to EE and ultimately deteriorating mental health. Overwork not only directly contributes to EE but also intensifies the effect of WFC on EE, further exacerbating mental health issues among career women. Within contexts of excessive

workload, the indirect impact of WFC on worsening mental health through EE is further intensified, demonstrating a moderated mediation effect.

In summary, this study provides a fresh perspective on the factors affecting mental health among career women by focusing on WFC and overwork. These insights aim to improve our understanding of the mechanisms at play and offer potential solutions for addressing mental health challenges faced by career women.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Author contributions

JM: Data curation, Formal analysis, Methodology, Writing – original draft. LX: Data curation, Resources, Writing – original draft. XZ: Conceptualization, Funding acquisition, Writing – review & editing.

Conflict of interest

LX was employed by Anhui Kecheng Intelligent Health Co., Ltd.

The remaining authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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