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e-ISSN: 3073-1143

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www.revistaaciencia.org



Centro de Estudios Científicos
y Desarrollo Académico

Recibido: 30/01/2025
Aceptado: 03/02/2025
Publicado: 27/05/2025





Feminization of Socio-Environmental Care and Women's Mental Burden.

Feminización de los cuidados socioambientales: la carga mental de las mujeres.

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Narave, A. E., & Rodríguez, A. (2025). Feminización de los cuidados socioambientales: la carga mental de las mujeres. *Eciencia*, 2(13), 180-193. <https://doi.org/10.71022/d9zpxo14>

Abstract

This study examines the mental burden related to care work experienced by ten female volunteers from a city in southeastern Mexico. Given that the municipality faces various socio-environmental challenges that threaten all forms of life, a new dimension has been added to the historically feminized care work. Women's work is now directed not only toward social care but also toward preserving the environment and biodiversity, which further exacerbates their mental load. Therefore, this study analyzes the mental burden experienced by women as a result of this care work. To achieve this, a comprehensive-interpretive qualitative research approach with a phenomenological design, focused on understanding the experiences of the participants from their own perspective, was conducted using interviews and discourse analysis techniques, involving a process of labelling, disaggregation and reaggregation of the shared information. Consequently, the presence of cognitive dissociation, unpleasant emotions and intrusive/ruminative thoughts.

Keywords: biodiversity, feminized care work, urban context.

Resumen

Este estudio examina la carga mental relacionada con las labores de cuidados experimentada por diez mujeres de una ciudad del sureste mexicano. Debido a que el municipio atraviesa diversas problemáticas socioambientales, al trabajo de cuidados históricamente feminizado se ha añadido una nueva dimensión de actividades dirigidas a la preservación no solo de la sociedad, sino de toda la biodiversidad, lo que genera mayor carga mental para ellas. Por ello, el objetivo del presente estudio fue analizar la carga mental que experimentan las mujeres derivado de estos cuidados. Para lo que se realizó una investigación cualitativa comprensiva-interpretativa con diseño fenomenológico, enfocado en comprender la experiencia vivida por las protagonistas desde su propia perspectiva, operado mediante entrevistas y analizado mediante la técnica de análisis de discurso, un proceso de etiquetamiento, desagregación y reagregación de la información compartida. Como resultado, se identificó la presencia de disociación cognitiva, emociones y sensaciones displacenteras e pensamientos intrusivos/rumiantes.

Palabras clave: biodiversidad, contexto ciudadano, trabajo feminizado.

Introduction

Currently, the city of Xalapa, Veracruz, Mexico, like many urban settings, faces a range of social and environmental issues that threaten and/or affect this territory and all forms of life that inhabit it, especially those considered non-dominant. In order to cope with this situation, it is a priority to have a series of measures that aim to preserve life and, in turn, reduce or address these problems.

Owing to the feminization of these activities and the sexual division of labor, care work has historically been assigned to women at the global, national, state and local levels. Based on the premise that it is not possible to care for people without caring for the environment, also vice versa, and that both dimensions are deeply and complexly complicated, women not only direct their care towards the population, but also towards the environment in which they live and which must be preserved. Therefore, when caring, women not only devote their physical strength, but also a constant and/or permanent attention to the planning, organization and execution of these activities, commonly referred to as mental burden.

This article focuses on the analysis of the mental burden related to the socio-environmental care of women living in the city of Xalapa, using a comprehensive-interpretative qualitative approach and a semi-structured interview as the main data collection technique to recover the experiences of ten women in this situation.

Recibido: 30/01/2025

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Publicado: 27/05/2025

As main results, the protagonists of this study highlight the presence of hypervigilance states, cognitive dissociation and unpleasant emotions, among other issues related to mental burden that add to the oppressions interweaving that cross them and, as a result, affect their health, well-being and quality of life.

Socio-Environmental issues in Xalapa

The capital of the state of Veracruz, Xalapa-Enríquez, is a city located in the eastern forks of the Cofre de Perote National Park (Secretaría de Turismo y Cultura, SECTUR, 2013). Characterized as a multicultural region due to its diverse academic and cultural opportunities the municipality has a population amounting to 488,531 inhabitants, of which 46.4% are men and 53.6% are women (H. Ayuntamiento de Xalapa, 2022).

Currently, it is possible to identify several socio-environmental problems in the Xalapa territory, defined as the wear and tear caused to natural resources and the repercussions this has for the population (Moreno-Crespo et al., 2022) For the purposes of this section, are differentiated into two dimensions: environmental and social.

Regarding the first dimension, the main environmental problems present in the region are drought, landslides and floods (City Adapt, 2019), as well as mobility and travel problems due to the constant repairs that the city council makes to public roads.

In terms of social issues, one of the main problems in the city is poverty, since 38.28% of the population lives in this condition, while 4.51% in extreme poverty and 15.27% with an income below extreme poverty line, which is related to high rates of marginalization (H. Ayuntamiento de Xalapa, 2022). Additionally, it is possible to identify problems related to environmental vulnerability, insecurity, inequality and violence, as well as violence against women.

Women and inequality in the region

In 2016, a gender violence alert was issued in the city due to femicides, disappearances, and injuries to women, as well as harassment, rape and sexual assaults in public streets (H. Ayuntamiento de Xalapa, 2022). Currently, Veracruz is among the 5 states with the most reported cases of femicide in the Mexican Republic, with Xalapa being the municipality with the highest incidence within the state (Tritón comunicaciones, 2024).

Regarding private space, in 2023 the state hospital network attended 4,114 victims of injuries derived from aggressions within the family nucleus (González, 2024). Unfortunately, there is no specific data recounting on these issues in the locality, since, as the authorities point out, the statistics and indicators of the city lack a gender perspective (H. Ayuntamiento de Xalapa, 2022, pp. 121). However, today the municipal agencies for attention to gender violence have more than 400 gender violence open cases (Instituto Municipal de las Mujeres, 2023).

As can be seen, women are at a disadvantage with respect to men in indicators such as poverty, schooling, vulnerability, abandonment, health, violence, kidnapping, trafficking, domestic violence, social deprivation, educational opportunities, job opportunities, decision-making possibilities, lower salaries, domestic stress, work stress, care work and psychological burden, among others (H. Ayuntamiento de Xalapa, 2022). For the present study particularities, the last two are highlighted.

Care feminization

Care, defined as all actions aimed at preserving and reproducing life (e.g., cooking, cleaning, child-rearing), are feminized and naturalized (and in turn despised and minimized) based on the sexual division of labor and the androcentric socialization process, based on physiological arguments tied to women's reproductive processes and/or justified on the basis of a supposed natural born emotionality (Bárcena, 2020; Federici, 2020, Puleo, 2011; Trevilla and Islas, 2020.). Therefore, caregiving is mainly in the hands of women. According to the National Survey on Time Use (ENUT, 2019) conducted by the National Institute of Statistics and Geography (INEGI) and the National Institute for Women (INMUJERES), in Mexico, women perform 54 hours of care work per week, while men perform 23. To understand the amount of time spent on these tasks, it is important to recognize that they are not single or isolated activities, but involve daily and constant assistance to needs (Verbakel and Glijn, 2023).

This situation generates, and has generated, an inequality scenario in societies throughout history, through a system of oppressions that has systematically placed women in subjugation conditions (Batthyány, 2021; Llivichuzhca and López, 2023). This situation can be identified in the same way in the Veracruz context, as women are the ones who are most responsible for care work in the region, which forces them to reduce their rest time and increase the time dedicated to these activities (Moreno, 2022). Therefore, the unpaid care issue has been defined as an urgent issue of social justice (Cheshire-Allen and Calder in Smyth, 2024).

A new dimension to care work?

Although care work has been studied in terms of the human life preservation and reproduction, it is important to emphasize that, in order to care for people, it is also necessary to care for the environment in which they live, not in an anthropocentric way, but with respect for biodiversity. Based on the premise that people are interdependent beings as much as they are eco-dependent, it is important to put at the discussion center the care of all forms of life and the space in which they develop. Therein lies the importance of carrying out actions that respond to socio-environmental issues, since these complex public problems (Vásquez-Morales et al., 2019), magnify the inequality scenario and are characterized by affecting both the environment/space and those who inhabit it.

To respond to this situation, from environmentalist perspectives, various sustainable care strategies have been created with the aim of preserving and dealing with environmental damage; however, most of these strategies are related to the domestic space or are carried out in it, so that, due to the feminization of this area, they are indirectly delegated to women, increasing their mental burden. Although in the sustainable narrative, pro-environmental activities belong to another sphere, they also require planning and organization at home.

A clear example of the above is the well-known 3R rule: reduce, reuse and recycle; these tasks include, for example, reducing water use in washing food, dishes, and clothes, the cleaning of plastic, glass or metal boxes or jars for reuse (not to mention trendy hygiene products such as diapers, sanitary napkins or cloth napkins), or the collection of paper and cardboard for recycling, to identify that these actions are directly linked to the space in which women mainly carry out the management and execution of care work.

Another clear example is when a person becomes ill due to pollution caused by water shortages (a common problem in the city). A woman is expected to organize all the activities related to both social and environmental care, from the taking medication time or the precaution in the preparation of food to be consumed by the sick person, to planning the use of water to make the missing resource yield or the supervision of a clean toilet, in addition to the physical effort that this work requires in itself.

Therefore, this situation, which attacks both social and environmental well-being, confronts women with a new work dimension; this study focuses on understanding this situation in relation to both dimensions of caregiving.

Mental burden

Mental burden refers to the cognitive strain of managing responsibilities in one domain while physically present in another (Dean et al., 2021) that is, having to coexist in two worlds at the same time. This situation, which refers to a simultaneous double presence, requires a multitasking capacity that allows organizing, planning and acting with respect to various tasks related to feminized care work (Schenider, 2018), which implies a deep cognitive and physiological effort, which mostly affects women.

Coexistence or double presence implied by the mental burden is associated with various psychosocial risks, as this is related to the affective and quantitative demands required by the care work performance, and, in turn, to the limited capacities that women have to attend to them in their entirety, as they are expected to do (Leal, 2020). Thus, burden increases according to the particular demands and the imbrication of oppression experienced by each of them (Jenkins, 2023).

This discussion has long been present among feminist theorists from different regions, since authors such as the French Simone de Beauvoir (1949) or the American Betty Friedan (1960) denounced, since the middle

of the last century, the torture implied by the imposition of domestic tasks solely and exclusively on women, asserting that the cognitive/emotional discomforts resulting from this situation (which responds to the capitalist production model) are political, although the system seeks to keep it in the private area (as well as care work), unmasking this phenomenon as unjust, unequal, absurd and destructive (Friedan, 2021).

On the other hand, it is important to highlight that the denunciation of the double presence took off when women entered the labor world, because, although access to education and paid work is considered an advance in the framework of human rights for women, the attention focus was centered on their insertion into the public-remunerated sector, ignoring the work performed by women in their homes, so that this situation has implied the presence of double or even triple workdays for them (Marañón, 2018).

Recently, the author Emma Clit popularized the term mental burden with the launch of the comic book “you could have asked me”, in which she depicts the experience of oversaturation that a working mother experiences when trying to provide care for her children, and, at the same time, being the leader of the planning, coordination and execution of care work, while her partner remains subordinate (Clit, as cited in Zimmermann & Kmita, 2024).

Regarding the differences between women and men in relation to the reconciliation of paid and unpaid work, it is the latter who report less presence of mental burden, so the mere fact of being a woman is considered a risk factor for experiencing this condition, due to the fact that in addition to all the activities that women perform, they are the household project manager (Dean et al., 2021).

In order to recover the protagonists experience in this regard, this research seeks to address the mental burden experienced by women in Xalapa, due to their involvement in socio-environmental care activities. The central research question guiding this study is: What is the mental burden of women in Xalapa derived from socio-environmental care from the perspective of critical ecofeminism? Therefore, the primary objective of this study was to analyze the mental burden of Xalapa’s women resulting from these care practices. By understanding the intersections of gender, care work, and environmental concerns, this article aims to highlight the significant emotional, cognitive, and physical tolls these women endure, shedding light on the broader implications for their health, well-being, and quality of life.

Materials and methods

Qualitative methodology involves research that generates descriptive data through an inductive process, that is, it develops concepts and understandings from the information provided by the protagonists, considering the structures and social dynamics in which it is embedded (Forni, 2022; Padrón et al., 2022).

An important characteristic of this approach is that it takes into account the actors and scenarios as a whole and seeks to recover data within the participants' own frame of reference with a humanistic vision of social life (Taylor and Bodgan, 1987). Similarly, it aims to understand the meaning that people or groups attribute to a social problem, so those who investigate from this approach must be sensitive to the particular experiences and the importance of reporting on the complexity and dynamics of a situation (Creswell and Creswell, 2018). Furthermore, this approach is framed as a way to denounce situations of oppression and injustice, with the aim of overcoming them through processes of social change (Forni, 2022).

The present research is based on the line of comprehensive qualitative research of interpretative character from a philosophical vision of the transformative world, that is, it is based on theoretical principles of a phenomenological design that seek to understand events in heterogeneous human contexts, for which qualitative research techniques are used (in this case, semi-structured interview) and people are considered as social subjects who create reality and give meanings to their experiences (Cubillas et al., 2016).

As Pérez-Gamboa & Sánchez (2024) indicate, the essence of the phenomenological approach lies in the description of multiple individual’s perspectives on a phenomenon, highlighting its significance for the study of everyday life events; in addition to data collection, “a process of reflection takes place in which the researcher

acts as sort of translator of the shared meanings and senses, to which they add their own imprint based on the research objectives and the interpretative process carried out (pp.78).

From this approach, data collection is typically conducted through semi-structured interviews. This process focuses on two key aspects: the first is understanding how the participant expresses the phenomenon and the circumstances in which it occurs (Pérez-Gamboa & Sánchez, 2024). This allows for the positioning of women as active co-investigators and participants, as well as capturing their narratives while considering the cultural, historical, and institutional context, among others, which proves highly effective for feminist-oriented research (Vásquez, 2019).

Subsequently, data analysis involves complete transcription, highlighting significant portions of the text, and then organizing the meanings, which requires the researcher's interpretation. The presentation of results follows a descriptive and textual structure, culminating in the identification of the meanings and essence of the phenomenon, with the report being adapted to the formal requirements established (such as theses or articles). Finally, in phenomenological research, it is crucial to ensure a safe and uninterrupted environment for data collection, in addition to establishing an ethical and practical framework that addresses aspects such as data protection and access to the results (Pérez-Gamboa & Sánchez, 2024).

Data collection

Given the qualitative approach and the phenomenological design of the research, the research technique used in this study was a semi-structured interview, defined as a face-to-face meeting between the researcher and the informants; meetings aimed at understanding the participants' perspectives on their lives, experiences or situations, as expressed in their own words (Taylor and Bodgan, 1987).

Based on an interview guide, made up of questions that made it possible to respond to the study general objective, this interview was conducted with adult women between 25 and 59 years old living in the city of Xalapa, either in person or virtually, from a diverse sample of volunteer/self-selected women. As inclusion criteria, it was required that participants be mothers, married to a man, and employed full-time in paid work; the exclusion criterion was that they had a house cleaner in their homes.

To convene the participants, an invitation was made in groups of women organized in social networks, such as the group “Pinks Xalapa”, made up of 11 thousand members and created at the end of 2019, or the group “Mujeres mágicas” made up of 18 thousand members, created in 2020. Initially, these groups aimed to achieve solidarity consumption following the perspective of “consume local” in a context of confinement due to SARS COVID-19, however, although this objective is still ongoing, women have formed sorority networks within these groups, in which they contain each other emotionally, motivate each other, advise each other, share “memes” and funny images, transmit reflections and plan altruistic tasks (eg. collections of medicines, food, clothes, uniforms, etc., for people and animals in vulnerable situations, and even funerals), among other activities.

Subsequent to a brief interview that verified the participant's compliance with the pre-established criteria, those who accepted voluntarily were read the informed consent form, which explained what their participation consisted of. This was signed by both parties prior to the semi-structured interview.

Regarding ethical guidelines, all research should be grounded on ethical principles and take these as a reference throughout the study process. There are several fundamental ethical principles that must be considered when conducting research, and which, of course, should be included in the procedures and techniques that comprise it (Osorio, 2000):

In the first instance, there is integrity, which includes the totality of social psychology, ecological, axiological and spiritual aspects, so it should be kept in mind that people are integral beings shaped by their spatial and temporal circumstances in relation to other people and to the ecosystem which they are interdependent with.

Secondly, the principle of respect is identified, which entails attention and appreciation and encompasses the totality of their social, cultural, economic, ethnic and ecological circumstances. It is governed by two

dimensions: a) non-maleficence, i.e., not causing harm, and b) autonomy, which cannot be lost or transferred by any of the research parties.

Thirdly, there's the principle of beneficence, which focuses on the ethical duty to seek the good for the participants, thus seeking the maximum benefits for them and reducing risk to a minimum; and last but not least, there is the principle of justice: the search for positive and effective consequences for all research activities.

In order to have an external and impartial evaluation, the present study was evaluated and authorized by the research ethics committee of the Universidad Autónoma de Ciudad Juárez.

The present study was conducted by 10 female participants residing in the city of Xalapa, Veracruz, Mexico. All of them, aged between 25 and 59 years, mothers of one, two or three children, heterosexual, living in a couple and with full-time paid jobs (about 8 hours a day, 40 hours a week).

It was decided to work with a diverse sample to represent the studied phenomenon complexity and develop diverse perspectives (Creswell et al., 2018), and, likewise, because socio-environmental issues in Xalapa affect vulnerable sectors to a greater extent with respect to those considered dominant, as is the case of adult women, who report sacrificing their leisure and rest times to fulfill all the care tasks delegated to them from the sexual division of labor (García, 2015; Moreno, 2022).

Although previous studies have shown that women experience this situation, the mental burden implications that this generates for the city of Xalapa inhabitants are unknown. Therefore, this study analyzes this problem.

Data analysis

The Discourse Analysis technique used in this study is the process of labeling-disaggregation-reaggregation, which is associated with a qualitative perspective of data construction and processing. From this perspective, it is possible to analyze discursive representations, focusing attention on the categories that emerge from and are related to the content (Sayago, 2014). It is important to emphasize that in order to analyze a particular discourse, one must consider the context in which it occurs. Thus, each discourse will serve as a unit of analysis, within which variations can be recognized, either in comparison with other discourses or within the same discourse. In this way, the analysis begins with a coding process, which involves labeling and disaggregating textual passages according to the category sought. Therefore, labeling refers to identifying a passage as the realization of a particular category, while disaggregation refers to extracting these passages (Sayago, 2014).

It is important to highlight that the same fragment may correspond to more than one category, as well as specify subcategories for each one. This process is a highly reflective interpretative task that requires constant evaluations of the validity of the similarities and differences recognized (...) in order to reconstruct the meaning matrices that articulate the different discursive representations" (Sayago, 2014).

Resultados

In order to analyze the results, a codification process for the protagonists discourse was carried out, obtained from the application and transcription of the semi-structured interviews. It is important to mention that the mental burden category, as well as the subcategories level 1, social care and environmental care (see Table 1), were selected from the creation of the interview guide based on the theory.

Table 1. Definition of categories and subcategories of data analysis.

Categories	Definition
Mental burden	Being aware of everything; having to coexist in two worlds at the same time (Haicault, 1984). The interaction between task demands and people's limited capabilities or resources (Ferrer, 2004).
Subcategories	Definition

Categories	Definition
Social care	Social care refers to “the activities and relationships aimed at meeting the physical and emotional requirements of dependent children and adults, as well as the normative, economic and social frameworks within which these are assigned and carried out” (Daly and Lewis, 2000, pp. 285).
Environmental care	Practices aimed at the conservation of environmental systems, including the attention paid to the appearance and cleanliness of places (...) consists of personal, social and situational demands that lead the individual to conserve the environment (Longhinotti-Felippe and Kuhnen, 2012).

However, the level 2 subcategories (see Table 2) were identified through the women's responses, and then analyzed with theoretical contributions, so it is these, together with the analysis units, which in essence allow us to understand and analyze the experiences of each one of them.

Table 2. Qualitive Data Coding.

Codification	Category	Subcategories level 1	Subcategories level 2
MB.1.1.	Mental Burden (MB)	Social care (1)	Frequency (1)
MB.1.2.			Cognitive dissociation(2)
MB.1.3.			Guilt (3)
MB.1.4.			Emotions (4)
MB.1.5.			Lack of self-care(5)
MB.1.6.			Violence (6)
MB.2.1.	Environmental care (2)		Frequency (1)
MB.2.2.			Stress-tension (2)
MB.2.3.			Emotions (3)
MB.2.4.			Education/learning (4)

Mental burden of social care (MB.1.)

Women experience persistent oversaturation and guilt due to limited time availability, mental and emotional capacities necessary to respond to the extensive social care needs, which, they consider, affects their mental health.

Similarly, they report a feeling of being absent in the here and now, because their thoughts (frequently, and regardless of the space in which they are) are directed to the care of their loved ones.

In addition, to comply with all the activities delegated to them, women constantly postpone their leisure, rest and self-care time, which leads them to experience insomnia and sadness, among other particular situations.

It should be noted that some women report pleasant or pleasurable sensations related to the performance of these tasks, however, these are only present when they complete them in their entirety. On the other hand, on occasion, when these tasks are not completed, a couple of participants reported experiencing violence from their partners.

The level two subcategories identified in this section are: time/frequency (MB.1.1.), cognitive dissociation (MB.1.2.), guilt (MB.1.3.), emotions (MB.1.4.), lack of self-care (MB.1.5.) and violence (MB.1.6.).

Time/frequency (MB.1.1.).

“At all times” (G40).

“From the time I get up until 9 o'clock when I fall exhausted” (M45).

“All day long, every day I am thinking about how to organize myself both with the tasks at home and at work and with the children” (A42).

Cognitive dissociation (MB.1.2.).

“You are not where you are, you wander (...) like you are and you are not and like your mind wants to, but it doesn't, but at the same time it kind of does because you need to force yourself to make things happen” (L25).

“Even when engaging in a potentially relaxing activity, you never stop thinking that when you get home you to make food or clean and that you are missing things to do (...) if I am at church I am thinking, if I am exercising I am thinking, if I am driving I am thinking” (A59).

“You will see me very happy in the interview, but inside I am thinking about how he will be, if he will be in pain, if I will take him to ISSSTE¹, what am I going to do, I feel that this is my responsibility” (M45). Guilt (MB.1.3.).

“I feel guilty thinking that sometimes I don't ask them how was their day, but there are days when you don't even want them to talk to you” (C37).

“When they were younger if I felt very guilty, like a bad mother, for having to leave them to go to work and I felt that I missed out on a lot of things with them” (A42).

Emotions (MB.1.4.).

“I start to manifest nervousness, anguish and so on” (N38). “I feel super rushed or frustrated” (G50). Lack of self-care (MB.1.5.).

“I feel that I have neglected myself, I feel that I am like on the side, at the very last of everything” (L25).

“Many times, the priority for one is the family and the last one is you. You worry that if they get sick you have to take care of them, if I get sick, I take a cup of tea and that's it, but you are always thinking about them” (M45).

Violence (MB.1.6.)

“I take care of everything, and also my husband's needs. If I don't do them, he gets very angry and then it is a problem in the house” (A59).

“My husband arrives at 2 o'clock to eat and not a minute more or a minute less I have to have the plate and the food ready” (M45).

Mental burden due to environmental care (MB.2.)

The frequency of thoughts related to the mental burden due to environmental care is more diverse than that due to social care, as differences were found in the amount of time women spend planning, organizing and thinking about this care. Some women point out that, even though it is something they are interested in and consider important, they do not have the cognitive or temporal resources to attend to these needs; Nevertheless, there are women who have established strategies to comply with some environmental care activities, which they define as habits or even self-care time. Similarly, certain women highlight the presence of a constant internal struggle when making decisions, since in many cases the care of one aspect requires discarding the other; in most cases, women opt for social care, however, some of them report guilt related to this, pointing out that

¹ ISSSTE is the acronym for Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado, which in English translates as Institute of Security and Social Services of State Workers.

they would like to comply with everything but that it is merely impossible. On other occasions, some women mention that the impediment to carrying out environmental care is not their decision, but rather the conditions of activities overload, as well as the public space design, the consequences of climate change, among other environmental problems that require care and in turn are the same that prevent them from carrying it out.

The level two subcategories identified in this section are: frequency (MB.2.1.), stress-tension (MB.2.2.), emotions (MB.2.3.), education/learning (MB.2.4). Frequency/relevance (MB.2.1)

“Well, maybe not on a daily basis, but yes, let's say, I have it in mind when I go to the supermarket or with activities that are carried out on a daily basis” (N38).

“Oh no, how can I be thinking about environmental care! (she laughs) I would like to, but I definitely can't, my husband tells me “we have to get worms to make compost” and I think it's fine, but when this idea came up in my house he told me “well, you have to separate the garbage, you have to chop it, not all of it, without paper or cans or plastic” then I thought: “I'm not going to do that! Do you understand? Apart from going to work, arriving, making food, attending chores, cleaning, mending clothes, sewing buttons, buying supplies for homework, for my son's workshop, and you still want me to chop garbage?” (A59).

“Sometimes, sometimes not so much, but a lot if I think about it” (G50).

Stress-tension (MB.2.3).

“If I wait until the amount of clothing is bigger I also have more clothes pending and I know that I have more clothes and if I want to wear it or I want A to wear it (her daughter) something that is still dirty, it generates annoyance, it generates anger because I cannot move forward because I cannot wash the dirty clothes, but at the same time I do not want to waste so much water” (L25).

Emotions (MB.2.4)

“It stresses me out, it is tiring for the same reason that I already have my day structured and it is difficult for me, for example, when there is rationing and I have to make time to do laundry and so on” (A42).

“Even if you want not to care, you do care, and that worries you, then you worry about everything and that causes mental exhaustion” (A59).

“To not take the car, if I walk to save money and suddenly it rains, it also generates guilt, and I think why didn't I take the car if I know that it could rain... but I didn't want to move it to avoid contamination, then the fact of not taking my thermos with me, but I am very thirsty, I have to buy water, there is no other tea, but if I don't, I will die due to thirst, and if I don't hydrate myself... I am in a constant, um, I don't know how to say it, it is not a fight, I am in a constant, mmm, ahhh, how to say it, well, friction” (L25).

“I do it to de-stress, because I talk to them, I feel that it relaxes me, sometimes I see them sad and I tell them that they are just like me, but they do not have to worry, and that we are going to be happy. There was one, I am going to tell you (she laughs) that was ugly and I told her that if she was sad and I was sad we were both going to die, so it had to root soon otherwise I was going to throw it in the garbage then my plant flowered. They say that plants listen to us, who knows, but I start talking to her” (M45).

Education/learning (MB.2.5).

“It is something I have had since I was a child, at least my parents are like that, so it is a habit” (A42).

“I was raised by my grandmother too, she influenced a lot in my childhood upbringing and she is super like that, very much, the truth too much. So, I think that education part stayed with me” (L25).

“To take care of them my mom taught me, and I love my plants. I may not drink water, but my plants do” (M45).

Discussion

To fulfill the objective of this study, is important to recognize that, according to the data provided by the participants, the consequences of the sexual division of care labor are deep and complex, given that brings negative consequences for women mental health.

In order to discuss the obtained results, it's imperative to highlight the contributions of critical ecofeminism; Puleo (2011) argues that environmental degradation intensifies the care work performed by women the demands of daily tasks, already onerous, further multiply ((Puleo, 2011).

Among the primary care work activities undertaken by women, including cleaning spaces, tending to infants, maintaining hygiene for both depending individuals and pets, preparing food, purchasing groceries or supplies, reusing water, separating waste, reducing the light usage, managing alternatives to the use of disposables, and caring for plants, within other activities carried out in home, which confirms findings in studies such as that of Leal (2019), who reports that women dedicate themselves to a greater extent to social care tasks unlike their partners and the rest of the family.

The protagonists state that they are the main caregivers, a role influenced by their educational background, which align with the traditional roles and canons of the sexual division of labor. This is often inherited from their mothers or grandmothers, who were taught the importance of safeguarding property, space, and biodiversity, recognizing it as a reciprocal issue. This perspective aligns with Puleo's contributions (2011), who mentions that women's interest in ecological matters is statistically significant due to various factors related to roles and identities within the sex-gender system. These include the connection between care and the natural world, which is often associated with the feminine dimension, and the participants' acknowledgment of having acquired this knowledge through generational transmission.

From the above, it is possible to identify that both formal and informal education (though they indicate only the informal) influences the dynamics of socialization between men and women, thereby, differentiating of work between them, based on gender classifications such as male or female, which reproduces models of inequality and increases the consequences of extensive care work in women's livesm (Ozturk, 2020). This situation generates, between other things, mental burden, which implies the presence of cognitive dissociation, unpleasant emotions and stress-tension on a constant and/or permanent basis, as well as lack of self-care and violent experiences carried out by women's partners.

In addition, the women participating in this study reported experiencing either continuous or permanent (frequency) mental load, regardless of the location, time and task they are performing (cognitive dissociation), as they recognize that they can't meet all care demands (stress-tension binomial). This situation also implies feelings of sadness, anger, among others (unpleasurable emotions), guilt representing one of the principal ones, which usually intensifies when women don't meet their own or others' expectations, and also when they recognize that the care they perform is, constantly, exclusively directed towards others (lack of self-care), as well as states of hypervigilance related to meeting the specific demands of the romantic partner (violence). The above coincides with what was found in research of Fernández et al. (2015), who report that, due to the pace and variability of care work based on its sexual division, being a woman is a risk factor for experiencing time scarcity and therefore mental workload.

Regarding the presence of cognitive dissociation, the women reported thinking about or being aware of the care of their loved ones irrespective of the spatial-temporal context, whether at work or during the limited leisure they mention having access to. This corroborates the assertions of Haicault (2003) and Walzer (1996), who argue that mental load entails the intersections of two coexisting and overlapping universes, meaning the simultaneous mental engagement in one domain while physically situated in another. Consequently, mental load does not manifest in an isolated or direct manner during care-related activities, but rather persists as a continuous presence that precludes mental repose or relaxation for women.

In relation to the stress-tension binomial, this refers to the limitations between the capacities and resources that women must mobilize to meet the complex care demands that socio-environmental problems imply.

Regarding capabilities, mental fatigue often prevents women from accomplishing all the tasks they desire, as highlighted by Clit (2018), who emphasizes the impossibility for women to attend to all care demands even when they exert maximum effort. Although some participants report high levels of interest in addressing both the social and environmental dimensions of care, limited cognitive resources and mental fatigue often force them to prioritize one over the other, as there are times when care of one implies compromising the realization of the other. There are instances when synergies occur, allowing simultaneous care for people and the planet, but at other times, this dual focus can lead to health conflicts for caregivers (ECLAC, 2022).

In addition to the lack of self-care reported by women, they emphasize the constant relegation of their own needs to the bottom of their priority list. They report that care activities are predominantly directed towards other people or spaces, leading to the exhaustion of their resources and an inability to direct care towards themselves. This situation can be explained by the theoretical contributions of Puleo (2011), who highlights that women do not achieve the Western model of autonomy in relation to their own needs, as the burdens delegated to them correspond to a masculine time, who are pseudo independent, therefore implying a greater burden that women already have. Therefore, it can be concluded that the capitalist and androcentric production system denies women their rights as subjects because, in addition to being caregivers, they also deserve to be cared for.

In relation to unpleasant emotions, the protagonists reported feeling sadness, anguish, worry, and other similar emotions for not completing all activities or for not achieving them in the way expected by society. Another emotion consistently present in this context is guilt, which aligns with the findings of Gómez-Urrutia et al. (2015). They note that women experience this sensation due to the lack of time and skills to reconcile the productive and reproductive spheres, especially when paid work coincides with childcare. However, it is important to highlight that the women interviewed do not refer to guilt only at the specific moments when these universes coincide. They also experience guilt when carrying out social and environmental care work forces them to postpone, delay, or even give up their personal care moments or activities. It is noteworthy that, although all the women reported these emotions, some indicated that this does not happen on all occasions, since certain environmental care activities provide them with sensations related to happiness, particularly those involving contact or physical proximity with nature (such as plant care).

Finally, some participants reported that unpleasant emotions and states of anguish not only focus on meeting their own expectations or those of third parties but also on avoiding direct punishment from their partners if they fail to do so. To achieve this, women remain extremely vigilant about the details of preparation and the specific times requested, allowing for zero or minimal margin for error. This subcategory of analysis was not found in previous works, however, according to the Center for Social Studies and Public Opinion and the National Human Rights Commission of the government of Mexico, this could be related to emotional violence associated with domestic violence, as it occurs between individuals with an emotional bond and civil relationship, such as marriage (H. Congreso de la Unión, 2020).

Limitations

While this study provides valuable insights into the mental burden associated with socio-environmental caregiving, there are several limitations that must be considered when interpreting the results. First, since the interviews were conducted within a specific period, the mental burden may have varied due to external or contextual factors that occurred during this time. Furthermore, the geographical focus on a specific region may restrict the generalization of the findings to broader populations or different socio-cultural contexts.

Similarly, the methodological design, which was based on qualitative interviews, relies heavily on the self-reporting of participants, thus introducing a limitation related to potential subjective biases in their responses. Additionally, the study did not account for others factors, such as the socio-economic or educational background of the participants, nor did it include other actors involved in caregiving, either as recipients or providers, which could contribute to a more in-depth analysis of the situation.

Finally, one key limitation of this study is that the participants were volunteers or self-selected, indicating a personal interest in the topic, which may have influenced their responses and the way they perceive and report

this burden. While the intention of this study is not to generalize the results, the lack of diversity in the sample limits the possibility. Lastly, it is important to emphasize that this research was conducted from specific theoretical approach, thus excluding contributions from other theoretical frameworks and disciplines.

Conclusions

Despite the diversity of ages and occupations, women share an oversaturation of tasks related to care work, which leads them to experience mental burden at different levels. Although their experiences differ based on their specific circumstances states of cognitive dissociation and unpleasant emotions are constantly and/or permanently present. Therefore, it is possible to identify that inequality in the performance of these activities is inherently violent, as it leads women to experience states that wear them out at deep cognitive and emotional levels.

This problem, which affects the health and quality of life of the participants within this study, is not an isolated situation, but encounters several areas of their lives, from personal and social growth and development, to something as important as the right to leisure and rest. Therefore, the environmental dimension of care requires parity strategies that are committed to equitable and community-based actions, so it would be worthwhile to deepen the analysis of current ecological narratives and reconsider how functional they are, from a feminist perspective and from an analysis regarding differentiated experiences between men and women.

Likewise, it is crucial to heed reports of psychological and verbal violence that, as reported by women attribute to the 'poor' execution of these activities. In other words, the burden lies not only on planning, organizing and executing, but on performing these tasks in a specific manner, adhering to pre-established criteria, where failure or refusal to comply is not an option. It is necessary to commit to an ethics of care centered on the redistribution and reevaluation of these tasks, and, in such a complex context, to ask what happens to the lives of those who care? The commitment to put life and its preservation at the center must include women.

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