

Semantic representations of bioethics by young university students from the ethics of care

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Abstract

Introduction: At present, gender studies are very important, so research is carried out that will allow us to know the discernment of women about bioethics. **Objective:** To recognize the semantic representations that young university students have in relation to bioethics. **Methodology:** This study was carried out in university students in the area of biological sciences. The technique of natural semantic networks and the posture of ethics of care were used for its examination. **Results:** 191 words were evaluated, representing a richness of 81 statements. The main expressions were "trust", "dialogue", "debate", "duty" and "principles". **Discussion:** College students exercise their practical reason by choosing what is best for others, confirming the assumptions of the ethics of care.

Keywords: ethics; value systems; belief; decision making; reasoning.

Representaciones semánticas de la bioética por jóvenes universitarias desde la ética del cuidado

Resumen

Introducción: en la actualidad los estudios de género cuentan con mucha importancia; por lo cual, esta investigación nos permitirá conocer el discernimiento de las mujeres acerca de la bioética. **Objetivo:** reconocer las representaciones semánticas que jóvenes universitarias tienen en relación con la bioética. **Metodología:** este estudio se realizó en estudiantes universitarias del área de las ciencias biológicas. Se empleó la técnica de redes semánticas naturales y la postura de ética del cuidado para su examinación. **Resultados:** se evaluaron 191 palabras que representan una riqueza de 81 enunciados. Las principales expresiones fueron la "confianza", "diálogo", "debate", "deber" y "principios". **Discusión:** las estudiantes universitarias ejercen su razón práctica eligiendo lo mejor para los otros, confirmando los supuestos de la ética del cuidado.

Palabras clave: ética; sistema de valores; creencias; toma de decisiones; razonamiento

Introduction

Gender studies have been gaining more relevance in the research framework. This research work will examine the semantic representations that a group of young university women have in relation to bioethics, which will be analyzed by means of the ethics of care proposed by Carol Gilligan ([García, 2015](#)),

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in order to understand how this theoretical position is manifested in a specific group of university women. This proposal of moral development arises as a response to the ethics of justice proposed by Lawrence Kohlberg ([Alonso & Fombuena, 2006](#)), which is characterized by the interest in reciprocity and justice. Meanwhile, in the ethics of care, it is internalized in the appreciations emanating from the feminine experience that emphasizes issues related to the attachment and aid of people ([Medina-Vicent, 2016](#)).

On the other hand, representations—according to [Jodelet \(2020\)](#)—frame the link that a person or a group of people have with their environment, thus creating a social imaginary, in which a stream of ideas, beliefs, and somatized positions flow. Semantic representations emerge from the experience and organization of knowledge—of an individual or a social sector—that provides information regarding the semantic structure and internal ordering of meanings, which configure the interpretation of a concept ([Maldonado, et al., 2020](#)).

In a broader vision, it should be understood that the ethics of care affects the action of assisting people with the purpose of providing the greatest possible biopsychosocial well-being, where maternalistic attitudes prevail on the part of women, where empathy, accompaniment, and confidentiality are privileged, elements of which that support a favorable relationship ([García, 2015](#); [Domingo-Moratalla, 2019](#)). These particularities are what allow carrying out a transit of objective and subjective qualities, which make evident the historical structuring of women, particularly in their moral identity context.

On the other hand, this position of the ethics of care, which has been widely developed in recent decades, seeks to recognize the different ways of evaluating and facing decision-making from women's knowledge; that is, from the position assigned to them by society, in which case activities that preferably lean towards compassion and affinity prevail ([Mesa, 2005](#); [Tamanini & Da Costa, 2022](#)). Therefore, the ethics of care has to do with that value that emanates from each woman and that is associated with the content of deliberating and qualifying, as well

as to the will to proceed. From the perspective of [Camps \(1998\)](#):

It is not a matter of postulating a specifically caring or nurturing feminine nature, but of noting the existence of a culture that men have not made their own and, therefore, has not been part of public life, but has been considered rather a hindrance to public behaviors (pp. 74-75).

According to [León-Correa \(2008\)](#), an ethics of care is required to proceed from the scrutiny of all perspectives, transcending differences and carefully seeking not to return to existing paternalistic theses, thus emphasizing the principle of complementarity. Therefore, this research will allow us to know women's perception of what bioethics is. Thus, it becomes extremely valuable since female scholarship has also nourished the history and construction of society, providing new ways of solving conflicts between people and different ways of satisfying their needs, as [Comins \(2003\)](#) has pointed out. Hence, an approach to the semantic representation of bioethics and its relationship with the content of the ethics of care that simultaneously underlies the gender perspective will be made below. The position and approach of this research is carried out from phenomenology, whose intervention allows the study of an event, contemplating the point of view of those who participate in it ([Lambert, 2006](#)).

Conceptual Framework

With the development of the ethics of care carried out by Carol Gilligan—in 1982—the prevailing concepts proposed by Lawrence Kohlberg are overturned in such a way that a different paradigm is sketched out, allowing the contextualization of ethics to be broadened. In fact, [Camps \(2013\)](#) comments in this regard:

Through the study and direct analysis of girls' feelings and reasoning, Gilligan discovered the value of care, a value [...] that should be as important as justice but was not because it was developed only in the private and domestic life of women (p. 7).

Gilligan was able to contrast the universal assumptions that delineated the existing differences between male and female roles, where she recounts the different stages of the life cycle of people, observing that the development of personalities—between men and women—is perceived differently; while in women the construction is through attachment to the mother; on the other hand, men carry it out through detachment from the mother; therefore, the experiences of construction as persons is totally different ([Santacruz, 2006](#)).

In this sense, [Faerman \(2015\)](#) argues that Carol Gilligan refutes the position in which Kohlberg says in her theory of morality for only considering the male vertex as a guideline and contemplating that the female gender's way of reasoning was inferior only because of the condition of being a woman. This is how the ethics of care arises through the work developed by Gilligan, in which she finds—quite relevant—that women have a moral reasoning different from that of men. Thus, the ethics of care is constructed as a disjunctive to the ethics of justice proposed by Kohlberg. One of the pillars that support Gilligan's theory is that she argues that:

These differences are attributed not to questions of anatomy but to the fact that women, universally, are largely responsible for the care of newborns. As a result, in any society with these characteristics, the female personality comes to be defined in relationship and connection to other people more than the male personality usually is (Faerman, 2015, p. 125).

This process of subjective character evidenced by Gilligan was not considered by the existing reality of patriarchal order—where both women and men were erected mainly by the stereotypes wielded by sex— which brought about the fact that women did not have their own pronouncement.

On the other hand, Gilligan's position opens a new way of discussing moral eventualities, essentially in a reasoned way and promoting that no position of moral order—masculine—can be considered as universal. In any case, it constitutes, together with the others, the completeness of

the evaluation of an indicated context, making it palpable that the course and development of women's morality is different from that of men, but equally appreciable.

According to [Alvarado \(2004\)](#), the ethics of care considers that between two people there is interaction and moral contact, in which there is still care and which, in addition, links individuals as part of the prevailing human bond. In view of this last argument, Gilligan makes it possible to approach the assessment of dilemmas with an attitude of observing the human relations of the individuals involved, taking care of the good of others; that is, understanding the link between the person and otherness, through commitment, in such a way that the good is constituted by care and interest in others.

All the above leads to carry out this investigation with the purpose of approaching the semantic configuration of the concept of bioethics by a group of female university students and its correspondence with the ethics of care postulated by Carol Gilligan.

Method

Design

This is a cross-sectional and descriptive research, addressing the semantic representations that arise from the concept of bioethics by a group of university women. This research is carried out within the framework of the line of research and application of knowledge *Sustainable Human Development* which is registered in the Academic Body of Exact Sciences and Human Development UANL-CA-181 with *Consolidated Level*, as part of the Biological Sciences Faculty of the Universidad Autónoma de Nuevo León.

Participants

Female university students in biological sciences, who were studying the career of Parasitological Bacteriological Chemist—in their third semester—at the Universidad Autónoma de Nuevo León - San Nicolás de los Garza, N.L., Mexico. The number of participants was 38

students, between 19 and 20 years old. The sampling was non probabilistic and intentional.

Instruments

The natural semantic network technique formulated by Vera-Noriega et al. (2005) was used for its implementation.

Procedures and Data Analysis

Initially, a questionnaire was applied with verbal consent to the participants, collecting information corresponding to their age in order to proceed to the following steps: 1) Starting from the trigger word bioethics, the participants enunciated five words and subsequently they are asked to list them from the most outstanding to the least preponderant. 2) Once the previous action was carried out, the information was reviewed, and the words noted by the university students were normalized. 3) Next, the information obtained was examined in order to obtain the J value that makes up the semantic capital, the M value that expresses the semantic weight of each of the expressions registered by the participants as defining words, the SAM Group that makes up the set of utterances with the highest specific weights. For this, it was convenient to resort to the value of the third quartile, and to determine the most outstanding locutions, and then to identify the first five natural semantic fields in order to immediately agender the FMG indicator, which represents the

distance in percentage between the words (Cantú Martínez, 2019).

Results

After the trigger word bioethics, the university students expressed their semantic representations, where they wielded 190 words. After the normalization of the statements, a J-value of 81 utterances linked to the semantic field of bioethics trigger was found. In addition, it was found that the first five positions of this inventory were formed—with the greatest semantic weight—by *trust* and *dialogue* with a weight of 19 each, followed by *debate* with a weight of 18, *duty* with a weight of 17 and finally *principles* with a value of 16 (see Table 1).

The SAM Group, which integrates the notions that the female university students have pronounced to define the social representations of what bioethics means, is explained in Table 1. The most relevant for their position—which can be considered as core—are *trust* and *dialogue*, followed by the word *debate* at 94.7%, followed by *duty* with an average of 89.5% and then the word *principles* with a value of 84.2%.

It was also observed that, in the SAM Group, the most frequent semantic fields—FMG—were *trust* and *dialogue*, both with a weight of 19, and were stated by 26.3% of the participants; while the

Table 1

SAM Group, J-Value, Mentions, M-Value, and FMG Indicator of the Construct Bioethics, as Reported by the Participants.

SAM Group	Mentions	M-value	Indicator FMG (%)
Trust	5	19	100
Dialogue	5	19	100
Debate	6	18	94.7
Duty	4	17	89.5
Principles	5	16	84.2

Note: SAM group (set of statements): J-value (semantic capital): 81; M-value (semantic weight); FMG indicator (distance between statements).

five most relevant terms constituted 15.1% of all the mentions made by the students. Regarding the correlation between the number of mentions and the M value, which represents the semantic weight, it was found that most of the statements are ordered in a very similar way, which was proved by a Spearman correlation value of 0.864 with a p value <0.01.

Discussion

As it has been observed in the results section, the participating university students have expressed their semantic imaginaries in relation to the trigger term bioethics with the purpose of articulating the feminine vision of the context of the reality that these students recreated through their pronouncements, which undoubtedly reflect their own experiences, customs, values, and understanding of what surrounds them.

The ethics of care, which was proposed by Carol Gilligan, holds among its main arguments that moral action has interpersonal relationships and generosity as its central node, where the response of one person to the need of another is palpable (Kittay, 2011). Thus, Botes (2000) also argues that the ethics of care is characterized by harmonious relationships and requirements of otherness, elements that are highly relevant and ultimately lead to action.

Thus, the construction of bioethics by the participating students, based on semantic representations—in a nuclear form—was established primarily in five semantic fields: *trust*, *dialogue*, *debate*, *duty*, and *finally principles*. Therefore, an analysis of these concepts was carried out with the purpose of characterizing them within the framework of the ethics of care, that is, with this gender perspective proposed by Carol Gilligan.

Initially, the term *trust* from the perspective of Lozano (2003) establishes that the locution is linked to knowledge, which is primordial in every relationship where people interact, whose scenario occurs in circumstances with qualities of positive valence for the social actor and under

conditions of uncertainty and not of certainty. In this way, *trust* is a form that expresses interest for the other and is constituted in the reciprocity bond that mediates in a cordial and reasonable way, between the way of providing help and echoing the request about a need, as the participants have expressed (Santacruz, 2006). This finding also reveals that the students consider the other person worthy of granting this *trust*, which represents—in other words—a symbolic configuration of a correspondence between the parties involved, with unconditional support in compromising situations.

The *dialogue*—mentioned by the students—is constituted in a communicative correspondence with a non-authoritarian vision, which allows a better understanding of the agreed and existing relationship of those who participate in it, or it highlights the moral reality of the act in which they are involved (Cabra-Torres, 2010). As Zapata and Mesa (2009) point out that a *dialogue* takes place between two or more people who converse and, alternatively using their interventions, give an account of their purposes, opinions, and desires, while a process of negotiation takes place between the interlocutors. This fact stands out since it agrees with the framework of Gilligan's theory (Domingo-Moratalla, 2019), where a practical reason of a vital reasoning nature stands out, which is placed at the service of life from the perspective of observing vulnerability, fragility, and emotional bonding in otherness, as the women participating in the study revealed.

The *debate*—alluded to by the university students—stands tangibly in the structured form of adducing different reasonings between two or more people in which opinions are examined.

That is, it favors decision making by exposing arguments, benefiting in particular the conception of critical or defensive thinking, and it also generates informed moral judgments in an environment of affable and effective communication. In fact, according to Rangel (2007), debate is a dialectical process, with the purpose of reaching an agreement that is motivated using reason. Also, in recent years, through social debates, women have also been able to overcome the stereotyped roles that

society has imposed on their persons, while they have now demonstrated an evident and marked social participation (Alcaraz & Vázquez, 2020).

On the other hand, *duty* is the conduct of human beings that is sustained in the moral rules that govern a society, and that are made tangible in motives and moral actions of a subjective order that is expressed in various levels of commitment and responsibilities towards other members of society, revealing the moral conscience that is possessed. Therefore, although *duty* has been constituted in a legal order, the altruism present in the university women who participated is embodied in terms of an action of solidarity and subsidiarity with others (Sant'Ana, 2014).

On the other hand, the verbalization of *principles*, the last of this nucleus of terms that symbolizes the natural semantic network of the main representations expressed by the university participants, connotes the dispositions and decisions that a human being makes in a general way and that govern their moral conduct. In addition, it demarcates a path of action—of the human being and in this case of women—that allows her to emphasize that what is relevant is to maintain and sustain the good relations with other people. All this is within the framework of respect for the contents that encompass autonomy, beneficence, non-maleficence, and justice (Siurana, 2010; Beauchamp, 2020). In this context, all human beings—capable of reasoning—have the attribute to behave and act in accordance with the representation of moral character they hold. In this case, women exercise their practical reason in the choice of what they consider best for others—the ethics of care—without considering their own aspirations, thus generating a comprehensive commitment of an intimate order, which stands as an imperative of what they consider to be good for others will also be good for them.

In short, this study has inquired about the semantic representations of bioethics in young university women from the perspective of the ethics of care, noting that the methodology used made it possible to know the semantic adjudication that the women participants gave to the word bioethics. Notwithstanding the level

of reflexivity of the participants, these results are ratified only for the intervened group and phenomenologically approximate the thinking of women, on which it was possible to verify that women tend more to the context of responsibility for others, as asserted by Carol Gilligan.

Likewise, it is recommended to insist on research with methodological approaches that focus on an analysis from the perspective and viewpoint of the actors themselves, that is, discovering the position of otherness. Finally, it can be projected that the results obtained from the participants reveal their lived experience and evoke their rational arguments, as well as their sensitivities, which, when combined, give a descriptive as well as an experiential clarification of their existence.

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