

Social Psychology

## Social representations regarding firearms

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### Abstract

Discussions about firearms have become usual in the Brazilian context, implying a wide range of arguments and positions among individuals. In view of this wide array of opinions and the concrete episodes involving firearms, the present study aimed to analyze firearms' social representations. The sample consisted of 100 participants, ranging from 19 to 66 years old ( $M = 34.31$ ;  $SD = 12.12$ ). Participants responded to a word evocation questionnaire, an open-ended question on firearm carrying permit, and reported demographic data. The openEvoc and Iramuteq software were used for data analysis. At their core, social representations concerning firearms were characterized by the perception of death, succeeded by the following elements: violence, security, danger, defense, and protection, simultaneously encompassing an ambiguity between risk and protection.

**Keywords:** social representations; structural approach; firearm; firearm permit; violence.

## REPRESENTAÇÕES SOCIAIS SOBRE ARMAS DE FOGO

### Resumo

A discussão sobre armas de fogo tem se tornado usual no contexto brasileiro, acarretando uma variabilidade de argumentos e posicionamentos entre as pessoas. Tendo em vista essa multiplicidade de opiniões e os episódios concretos envolvendo arma de fogo, o presente trabalho teve como objetivo analisar as representações sociais sobre armas de fogo. Para isso, a amostra foi composta por 100 participantes, com idades variando entre 19 e 66 anos ( $M = 34,31$ ;  $DP = 12,12$ ). Os participantes responderam a um questionário de evocações de palavras, uma questão aberta sobre o porte de armas e informaram dados demográficos. Para a análise dos dados, foram utilizados os programas openEvoc e Iramuteq. Verificou-se que as representações sociais sobre armas de fogo foram caracterizadas em sua centralidade pela percepção da morte, seguida dos elementos: violência, segurança, perigo, defesa e proteção, abrangendo, concomitantemente, uma ambiguidade de risco e proteção.

**Palavras-chave:** representações sociais; abordagem estrutural; arma de fogo; porte de arma; violência.

# REPRESENTACIONES SOCIALES ACERCA DE LAS ARMAS DE FUEGO

## Resumen

La discusión acerca de las armas de fuego se ha vuelto habitual en Brasil, trayendo en consecuencia una variabilidad de argumentos y posicionamientos entre las personas. Teniendo en vista esta multiplicidad de opiniones y los episodios concretos envolviendo armas de fuego, el presente trabajo tuvo como objetivo analizar las representaciones sociales acerca de las armas de fuego. La muestra fue compuesta por 100 participantes, con edades que varían entre 19 y 66 años ( $M = 34,31$ ;  $DP = 12,12$ ). Los participantes han respondido un cuestionario de evocaciones de palabras, una pregunta abierta acerca del porte de armas y reportaron datos demográficos. Para análisis de los datos, fueron utilizados los programas openEvoc y Iramuteq. Se ha comprobado que las representaciones sociales sobre las armas de fuego fueron caracterizadas en su centralidad por la percepción de la muerte, seguida de los elementos: violencia, seguridad, peligro, defensa, protección; que abarca, concomitantemente, una ambigüedad de riesgo y protección.

**Palabras clave:** representaciones sociales; enfoque estructural; armas de fuego; permiso de armas de fuego; violencia.

## 1. Introduction

Violence is a complex, multifaceted social phenomenon that can manifest in different ways, such as physical, psychological, and sexual violence (Dahlberg & Krug, 2006). In Brazil, the reality of violence (notably the physical dimension) is strongly related to access to firearms (Nascimento, Pimentel, & Adaid-Castro, 2016). Despite that, Brazil is considering the relaxation of rules on access to firearms. An example is Decree no. 9.847/2019 (2019) that facilitates the registration, access, and sale of firearms and ammunition, among other changes. In this context, it is worthy analyzing what people at large think about firearms. Therefore, the objective of this study is to analyze social representations regarding firearms.

There is evidence of a consistent and sharp increase, from 1980 to 2003, in firearm-related homicides in Brazil, at a rate of 8.1% a year. In 2003, more than 35 thousand firearm-related deaths were identified among 51 thousand homicides (Waiselfisz, 2016). After that increase, in 2004 growth fell until 2008. From 2009 to 2011, the number of firearm-related deaths resumed numbers close to those for 2003. From 2012 to 2017, the number of firearms-related homicides exceeded 40

thousand, peaking in 2017 when firearms killed 47,510 individuals among little more than 65 thousand homicides (Cerqueira et al., 2019). Hence, based on the data presented, it can be observed that deaths from firearms account for a high percentage of homicides in Brazil.

It is worth mentioning that the decrease in the number of cases from 2004 to 2008 may be related to the establishment and passing of the Disarmament Statute (2003), Federal Law no. 10.826/2003, that provides the control of registration, sales, circulation, ammunition, possession, and carrying of firearms in Brazil. In addition, it defines the crimes and establishes the Brazilian System of Arms (*Sistema Nacional de Armas*, SINARM). By intensifying the control, the law aimed at reducing the high and increasing indexes of firearm-related violence and deaths in Brazil.

The firearm possession (corresponding to the permit to possess gun and ammunition at the workplace, or home, by the business' owner) and the firearms carrying permits (which refer to the authorization for individuals to carry a gun out of their businesses) became even stricter with Law no. 10.826/2003. This evidenced that, according to the gross data reviewed, the policies on disarmament and control were efficacious for a given time. Nonetheless, as of 2012, the firearm-related homicide rates resumed growth. Despite that growth, in 2019, Decree no. 9.847/2019 amended the Brazilian laws and softened the access to firearms and ammunition.

It should be mentioned that the high index of firearms-related deaths was somewhat neglected when people took a position in the matter about access to firearms. A study on the development of a motivational scale to the carrying of firearms found that the group in favor of the carrying perceives firearms as a source of security and an individual's right. This perception prevailed among the male participants. On the other hand, some perceive firearms as a factor of risk and exposure. This view prevailed among women (Caneda & Teodoro, 2010). Another study also found gendered differences. It showed that men perceive firearms as a means of protection and right, while women perceive them as a way of encouraging crimes (Nascimento et al., 2016).

Still concerning the perception and attitude towards firearms possession and carrying, there is evidence that the stronger the feeling of insecurity in face of increasing violence and criminality, the higher the indexes of firearms carrying by

civilians (Szwarcwald & Castilho, 1998). This data indicates the perception of firearms as a factor of protection against insecurity and criminality.

The aforementioned justifies the theoretical and applied relevance of investigating what “firearms” represent to people in the Brazilian context and under a psychosocial light. Therefore, this study is expected to deepen the understanding of the collective imaginary concerning the phenomenon, based on the Theory of Social Representations. It is also expected to shed light on whether people perceive firearms as a risk or protection factor.

The Theory of Social Representations came into being to supersede the classic divide between subject and object, understanding that both are part of a complementary and even intrinsic system (Moscovici, 2012). The subject (individual or group) plays an active role in the constitution, creation, and renewal of the object based on the subject’s experiences and values and on the context surrounding the subject.

In this light, no reality would be defined *a priori*, i.e., every reality perceived is rebuilt in each individual’s cognitive system, based on their social and ideological context (Abric, 1998). In this sense, representations should be understood as a collective process built by people that share common systems of rules, values, and contexts.

Hence, social representations can be defined as a “set of concepts, propositions, and explanations originated in everyday life along with interpersonal communications” (free translation, Moscovici, 2012, p. 181). Social aspects are shared, and, therefore, representations contribute both in the way of conduct and communication (Moscovici, 1978). In a broader definition of the many perspectives of social thinking, social representations are understood as “a way of knowledge socially designed and shared, holding a practical objective, and that contributes to building a reality common to a social system” (free translation, Jodelet, 1989, p. 36).

Regarding the building of social representations, two dialectically related sociocognitive processes participate in the genesis of representations: objectivation and anchoring (Moscovici, 1978). Objectivation is the process of turning an idea, information, or concept into something concrete. Containing a plethora of meanings, it organizes, arranges, and materializes elements of representation to express an image of the object, passing by process of naturalization, acquiring materiality, and being part of the reality of those who build it. In this sense,

objectivation is a structuring process that shapes the conceptual schemes (Jodelet, 1990). Anchoring, in turn, is characterized by the process of ranking, labeling, and categorizing that places the object in a web of meanings, relating it to practices, rules, and values that are socially shared (Moscovici, 2003). Thus, one should bear in mind that the relationship between objectivation and anchoring results in familiarization, materialization, and the expression of ideas or concepts. It enables building meanings to the object that will be shaped according to the reality in which it is represented. Therefore, the structure of representations has two inherent aspects: the figurative and the symbolic. In other words, each figure designates a sense, and each sense conveys a figure in the representative operation.

Social representations content can be analyzed from three dimensions (Moscovici, 2003), namely: the informational dimension that refers to quality and quantity of information about a given object; the dimension field, corresponding to the organization of contents, also their figurative and qualitative attributes; and the attitude dimension, referring to the positive or negative directions in face of the object's properties.

Regarding the structure of representations, the Central Nucleus Theory (CNT) is one of the theoretical models that allow understanding it. According to the CNT, social representation is ruled by a double internal and interdisciplinary system, i.e., although performing specific duties separately, they are also complementary to one another. As such, the subsystem of the social representation structures is the central core and peripheral system (Abric, 1998). The CNT is proposed anchored in the Structural Approach that conceives Social Representations as a structure of knowledge (Wachelke & Wolter, 2011) that define ways of conduct and communication, and allow building a consensual reality, once they are socially shared (Abric, 1998; Jodelet, 1989; Moscovici, 1978).

The central core is delimited by the nature of the object being represented, passing by the relationship between the group and the object, and by the system of social rules and values part of that group's ideological context (Abric, 1998). Accordingly, the central core depicts social-historical and ideological conditions, as well as the group's systems of rules and values. It is stable, rigid, and resistant to changes, little sensitive to the immediate context in which representation is manifested. This way, it ensures continuity in evolving contexts (Abric, 1998). The central core is also marked by the collective memory and constitutes the common,

consensual basis that is collectively shared. This way, it determines the group's homogeneity (Sá, 1996). In this sense, the central core grants significance and organization to representations.

Therefore, the central core plays two main roles (Abric, 1998): a) generative function: through which it builds or changes the meanings of the constitutive elements of representations; b) organizational function: it determines the nature of connections between the elements of representation, and is considered to stabilize and unify the representation. According to Mazzoti (2002), there is a third role to be considered. It would be called the "stabilizer function" and would be one of the elements most resistant to change.

The centrality of a given element is not determined exclusively by quantitative factors. Qualitative factors, i.e., if a given element provides sense to the representation, also deserve attention. Thus, the central core is a non-negotiable element of representation since any change on the central core means full change on the representation, even if the remaining structures have not been changed.

Another subsystem part of the social representation structures is the peripheral system (Abric, 1998). Peripheral elements serve as a mediator between the objective reality and the central core, updating and adjusting the central core's normative conditions, leading to relaxation and mobility of representations that emerge every day through the peripheral system. It allows integrating individual expressions and experiences into the group's heterogeneity. Therefore, it is context-sensitive and more flexible to be fit into concrete reality (Abric, 1998).

Thus, three functions performed by the peripheral system (Abric, 1998) are highlighted: a) concretization function: it is the interface between the central core and the concrete reality in which representation is active, enabling the elaboration of representation in a concrete, understandable, and communicable way; b) regulation function: adaptation of the representation to the evolving changes in context, absorbing new or modified information; c) defense function: aims to protect the central core, once it defines the meaning of representation and, if changed, can lead to a modification of the representation as a whole. Thus, the peripheral system tries to absorb new information while defending the central core against potential changes. Mazzoti (2002) considers two additional functions, namely: prescription of behaviors, in which representation drives the taking of a stand, and that could ground the reading of a given situation; and the individualized

modulations that allow formulating representations regarding personal experiences, and the subject's history.

Considering those mentioned above, this study aimed to analyze social representations regarding firearms in the Brazilian context. We believe this study can favor a more comprehensive view about how firearms are currently being socially represented, organized, and shared.

## 2. Method

### 2.1 Participants

The sample was assembled based on the criterion of convenience. Therefore, the subject was approached and invited to participate in the survey, as they were in Brasilia's public space. The only criterion of participation was to be 18 years or older. One hundred participants were selected, of which 51 stated to be "female," 48 to be "male," and one did not answer this item. Ages ranged from 19 to 66 years ( $M = 34.31$ ;  $SD = 12.12$ ), and education from incomplete high school to Doctoral degree. The complete undergraduate level was the most frequent (39%).

### 2.2 Instruments

A pencil-and-paper questionnaire was used. The first part of the questionnaire measured free evocations, having "firearms" as inducing stimulus. Therefore, participants were asked to write down the first five words that came into their minds when they thought about "firearms."

The second part of the questionnaire was an open-end question. Participants were asked their opinions about "the permission for the Brazilian civilians to carry firearms." By the end, participants were asked to identify their data referring to age, gender, and education.

### 2.3 Procedures

Data were collected from September to October 2018 at different Brasilia sites, where people were approached and invited to participate in the survey. When they accepted to take part, they were given an Informed Consent Form (ICF) to learn about the survey and their contributions. The survey was applied individually, with no limit of time for completing it.

Measures were taken to minimize potential risks. Participation was voluntary, and participants could withdraw at any moment, with no damage to them. Moreover, privacy and confidentiality were granted regarding the participants and their personal information. It is worth mentioning that the survey was approved by the Research Ethics Committee, under the approval protocol no. 95440918.4.0000.0023 (CAAE).

Regarding the data analysis procedures, free evocations were analyzed using the *openEvoc* software (Sant'Anna, 2012). This software enables accessing the contents and structures of the Social Representations. To the open-end question, the *Iramuteq* (Ratinaud, 2009) was used to perform text analysis, following the technique named Descending Hierarchical Classification.

### 3. Results

A prototypical analysis (Vergès, 1992) was performed to review the central core components and the participants' social representations' peripheral elements. This technique is applied to free evocations to characterize the representation's structure, characterizing its composition based on the calculation and analysis of evocation frequencies and orders (Wachelke & Wolter, 2011). Data analysis was performed using the *openEvoc* software (Sant'Anna, 2012). Altogether, 500 evocations were received, of which 123 were different words, making up the scope of representations. Answers were pooled by characterizing equivalent terms. Then, the median number of answers was calculated to the cutoff point, referring to the order of evocation (Wachelke & Wolter, 2011). Therefore, the cutoff point was 3, containing 5 answers. Moreover, the average general frequency was 1.23.

The value considered as the minimum frequency to incorporate words in the quadrants was 2 (Wachelke & Wolter, 2011). Thus, the proportion of data disregarded by the minimum frequency, i.e., for being below 2 and not relevant to the analysis of representations, is 20.2%. The analysis retained and used 79.80% of the data, which were worked on, and submitted to analysis. As a cutoff point for frequency, the calculation of mean frequency of response was used, counting on the exclusion of evocations below the minimum frequency established, resulting in 3.24.

The prototypical analysis was carried out based on these criteria. As shown in Figure 3.1, the first quadrant presents the elements that make up Social Representations' central core regarding firearms. Thus, the elements presented are

generally recognized as strong in the scope of sharing and in the configuration of representation on the theme.

Figure 3.1. Four quadrants containing the frequency and order of evocation.

<b>++</b>	<b>Frequency ≥ 3.24 /</b>	<b>Evocation order &lt; 3</b>	<b>+ -</b>	<b>Frequency ≥ 3.24</b>	<b>Evocation order ≥ 3</b>
10.8%	death	2.06	4.6%	police	3
7.8%	violence	2.59	3.6%	fear	3.39
5.6%	security	2.25			
4.6%	danger	2.74			
4.4%	defense	2.82			
4%	protection	2.95			
<b>- +</b>	<b>Frequency &lt; 3.24</b>	<b>Evocation order &lt; 3</b>	<b>--</b>	<b>Frequency &lt; 3.24</b>	<b>Evocation order ≥ 3</b>
2.4%	crime	2.42	2.4%	power	3.75
2.2%	type of firearm	2.55	2.4%	insecurity	3.83
2.2%	war	2.91			

As disclosed in Figure 3.1, the elements “death”, “violence”, “security”, “danger”, “defense”, and “protection” appear as elements of the central core of Social Representations regarding firearms. The word “death” appears as the main element that characterizes the representation, with frequency 54 and evocation order much lower than the cutoff point, accounting for virtually 11% of the total evocations in the study. The word “violence” is quite evident in the representation’s constitution, making up almost 8% of the total number of evocations, with a frequency of 39. Following, we identified the word “security” with 28 evocations, corresponding to 5.6% of the total evocations. The first three words occurred more frequently in the first order of evocation. The other three words in the first quadrant also characterize the central core of the representation. However, “danger,” with 23 evocations, and “protection,” with 20 evocations, occurred more frequently in the second order of evocation. In turn, the word “defense,” got 22 evocations and was more frequent in the third order of evocation.

The other quadrants' elements characterized the peripheral system, built around the central core. Therefore, the elements "police" and "fear," present in the second quadrant, jointly account for 8.2% of the total evocations and, although reporting a high frequency (23 evocations), the term "police" did not get an order of evocation lower than the cutoff point established.

Although presenting lower values in relation to the indicated frequency and order, the third quadrant can offer relevant elements to a small group (Sant'Anna, 2012). Therefore, the terms "crime" with 12 evocations, "type of firearm" (standing for the names and types of firearms evoked), and "war," both with 11 evocations, add up to 6.8% of the total evocations. Although they appear in the first order of evocation, there are similar occurrences in the other evocation orders.

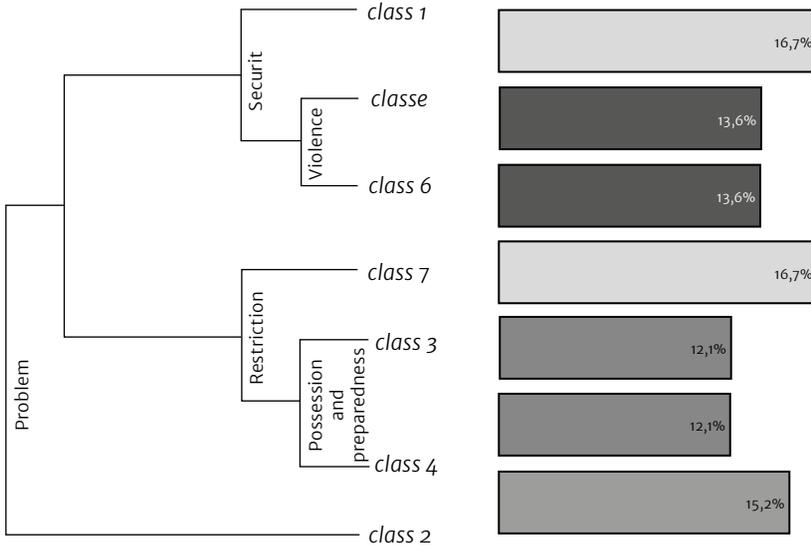
Lastly, the fourth quadrant, made up of "power" and "insecurity," jointly accounting for 4.8% of the total evocations, has no major importance to the representation and can unveil some discrepancy with the central core (Sant'Anna, 2012).

The software *Iramuteq* (Ratinaud, 2009) was elected to analyze the open-end question. It allows a statistical analysis of the text corpus and the subjects/words tables based on the R and Python languages. Therefore, assisted by the *Iramuteq*, the technique named Descending Hierarchical Classification (DHC) was performed. The DHC consists of creating classes based on given words and text segments (TS). These classes offer common contexts shared by each class's segments (Camargo & Justo, 2013).

The technique was applied through the analysis of two databases, divided as follows: the first database is made up of 67 individuals against the firearms carrying by the Brazilian civil population, or who perceive "firearms" as a risk factor that leads to/increases violence and the number of deaths; the second database is made up by 23 individuals in favor of the permit of carrying firearms for the Brazilian civil population, or who perceive "firearms" as a way to ensure protection and security. However, ten respondents presented ambiguous position regarding "firearms" and were disregarded in the analysis.

To design the DHC, the overall corpus of the first database comprised 67 texts, split into 77 text segments (TS), of which 66 TS (85.71%) were used. Altogether, 2,146 occurrences of words (forms or words) were found, of which 676 were different words, and 436 had one single occurrence. As shown in Figure 3.2, the content reviewed was categorized in 7 classes: Class 1, with 11 TS (16.67%);

Class 2, with 10 TS (15.15%); Class 3, with 8 TS (12.12%); Class 4, with 8 TS (12.12%); Class 5, with 9 TS (13.64%); Class 6, with 9 TS (13.64%); and, Class 7, with 11 TS (16.67%).



**Figure 3.2. Dendrogram of the Descending Hierarchical Classification of the first database.**

The seven classes are divided into six branches (A, B, C, D, and E) of the total corpus being analyzed, as shown in Figure 3.2. Sub-corpus A, “Problem,” made up by Class 2, refers to “firearms” not as a solution to the society’s issues, but as their cause, being a danger to people’s integrity and lives. Class 2 is composed of words such as “Opinion” ( $x^2 = 30.3$ ); “Remove” ( $x^2 = 17.6$ ); “Problem” ( $x^2 = 17.6$ ); “Solve” ( $x^2 = 13.62$ ); and “Life” ( $x^2 = 11.86$ ). It can be observed in the statement: “I’m against firearms carrying; in my view, when you point a gun at somebody, that person’s life is in your hands, you have no right to take another’s life even if that person did something against you” (participant # 81).

Sub-corpus B, “Security,” is made up by Class 1 and approaches the lack of security that should be promoted by the State and how firearms can bring about a false sense of security. Class 1 is composed of words such as “Armament” ( $x^2 = 21.19$ ); “Solution” ( $x^2 = 15.71$ ); “Security” ( $x^2 = 13.77$ ); and “Country” ( $x^2 = 11.73$ ). It

is shown in the following example: “Theoretically, firearm carrying can represent a false sense of security in the current context; I don’t believe the permit would entail any solution to reduce violence in our country, many would be armed, with no conditions to carry guns” (participant # 49).

Next, sub-corpus C, “Violence,” comprises Classes 5 and 6 and approaches the fact that the Brazilian population lives in an environment of violence and that firearms would foster both violence and deaths from guns. Class 5 is composed of words such as “Generate” ( $x^2 = 20.23$ ); “Death” ( $x^2 = 15.76$ ); and “Violence” ( $x^2 = 14.75$ ). Class 6, in turn, is made up of words like “Live” ( $x^2 = 26.97$ ); and “Increase” ( $x^2 = 12.59$ ), as can be observed in the following: “I believe the Brazilian population is not ready to be armed; our culture strongly fosters violence, and generates emotionally unbalanced individuals; arming population is not an option to me” (participant # 4). Another example can be found in the following statement:

“Permitting firearms carrying will increase even more violence in the country, with innocent victims; if it is hard these days, just imagine if firearms are legalized; fear will be part of our lives, including in moments with the family, at home, of leisure and others; there will be no safe place” (participant # 85).

Sub-corpus D, named “Restriction,” is established by Class 7 and mentions that firearms’ access to and use must be restricted. Otherwise, people would use them in an unfair or undue way for improper purposes. Class 7 is composed of words such as “Way” ( $x^2 = 21.12$ ); “Restrict” ( $x^2 = 15.71$ ); “Duty” ( $x^2 = 13.64$ ); and “Think” ( $x^2 = 10.43$ ). Following is an example: “I’m against; the use of guns should be as restricted as possible, as it ultimately serves to kill” (participant # 73).

Finally, we have sub-corpus E, “Possession and preparedness.” It comprises Classes 3 and 4, which encompass speeches against the firearms carrying permit, but in favor of possession, mainly for competent authorities, and comprise the practical and psychological unpreparedness of the population regarding firearms. Class 3 counts on words such as “Possession” ( $x^2 = 90.87$ ), and “Preparedness” ( $x^2 = 5.74$ ), while Class 4 comprises words such as “Training” ( $x^2 = 23.4$ ). The following excerpts illustrate this sub-corpus: “I’m not in favor; I believe that possession of firearms should be restricted to the competent authorities; I believe that allowing the civilian population to carry guns will bring about generalized insecurity”

(participant # 89); “The legalization of guns’ possession by civilians is a great irresponsibility, the population at large has no wisdom or psychological preparedness to handle with firearms; the indexes of violence and suicide would significantly increase” (participant # 10). Some excerpts show that some participants cannot clearly differentiate possession and carrying of firearms.

The overall corpus comprised 23 texts about the second database, split into 28 text segments (TS), of which 23 TS (82.14%) were used. Altogether, 856 occurrences of words (forms or words) were found, of which 372 were different words, and 261 had one single occurrence. Figure 3.3 shows that the content reviewed was ranked in four classes: Class 1, with 6 TS (26.09%); Class 2, with 5 TS (21.74%); Class 3, with 6 TS (26.09%); and Class 4, with 6 TS (26.09%).

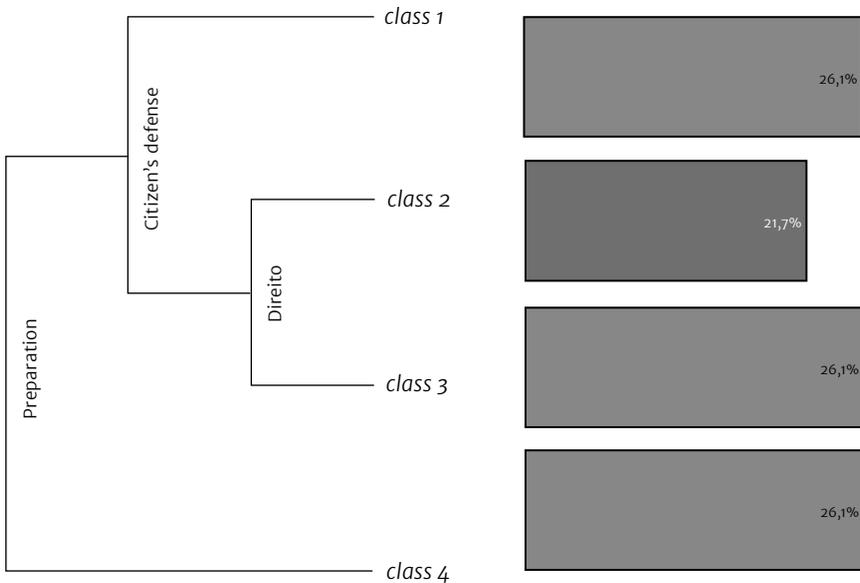


Figure 3.3. Dendrogram of the Descending Hierarchical Classification of the second database.

Figure 3.3 shows that the four classes are divided into three branches (A, B, and C) of the analysis’s total corpus. Sub-corpus A, “Preparation,” comprises Class 4 that discloses reports in favor of the permit to carry, upon an investigation of the applicant’s early life and a psychological assessment, psychotechnical tests, and

hands-on shooting courses. This class is composed of words such as “Shooting” ( $x^2 = 9.78$ ); and “Course” ( $x^2 = 9.78$ ). This sub-corpus can be found in the following excerpt: “In my view, permitting the population to carry firearms is valid, but it should be very thorough, with shooting courses, psychotechnical exams, no criminal record” (participant # 70).

Sub-corpus B, “Citizen’s defense,” made up by Class 1, mentions that the population is vulnerable to violence and criminality and assumes that firearms would be a way of defense, providing security to the citizen. Class 1 is composed of words such as “Citizen” ( $x^2 = 10.73$ ); “Time” ( $x^2 = 9.78$ ); “Good” ( $x^2 = 8.44$ ); and “Defense” ( $x^2 = 6.01$ ). On this sub-corpus, the following excerpt is worthy of notice: “With carrying, citizens will be more protected to walk on the streets, or even at home; with carrying, evil people will think twice before trying anything against good citizens” (participant # 6).

In sub-corpus C, “Right,” comprising Classes 2 and 3, references are made to the perception of easy access to firearms by criminals and the right of individuals to protection and security that are not duly ensured by the State, thus justifying the possibility of allowing the population to be armed for defense purposes. Class 2 consists of words such as “Population” ( $x^2 = 8.31$ ), and “Right” ( $x^2 = 4.09$ ), while Class 3 comprises words such as “Favor” ( $x^2 = 6.01$ ). The following examples illustrate this sub-corpus: “In the current situation of the Brazilian state, where it is extremely easy for those spreading evil to access firearms, and the neglect by regulatory, administrative bodies and corruption are to be blamed” (participant # 80); “There is a criminalization about the tool, and crime is romanticized; protection is a right of the human being, ruled by this constitution, and the state cannot offer it, so the population should establish it to the extent possible” (participant # 38).

#### 4. Discussion

As aforementioned, this study aimed at analyzing the Social Representations regarding firearms in the Brazilian context, based on the Structural Approach of Social Representations. Therefore, social representations are understood as a system of knowledge and concepts, made up of structures collectively built by subjects that share a common reality (Abric, 1998; Jodelet, 1989; Moscovici, 1978).

A test of words evocation was performed and analyzed according to the prototypical analysis (Vergès, 1992), used to organize and characterize the structure

of Social Representation (Wachelke & Wolter, 2011). Moreover, was analyzed the participants' opinions about firearms carrying.

Regarding social representations, it found that death, violence, and danger are important components of the central core. In this sense, understanding firearms as a risk factor for security seems, generally speaking, something relevant to the representations' structure, as discussed in previous studies (Caneda & Teodoro, 2010; Nascimento et al., 2016). This understanding is clear in the discourse of individuals against the carrying of firearms, insofar factors of risk, and violence resulting from firearms were recurrently expressed. These participants' representations and statistical data on firearms are in line with those found in the literature (Cerqueira et al., 2019; Waiselfisz, 2016). It is observed that those against the relaxation of carrying believe that Brazilians are not prepared to carry firearms and that permit to carry would represent nothing but a false sense of security. Therefore, firearm carrying should be restricted to professionals and specific groups.

Although some of the central core's components express risk-related factors related to firearms, some terms also resemble protection (i.e., security, defense, and protection). The discourse of individuals favorable to the carrying discloses this idea, based on the understanding that the State fails in ensuring full security to individuals. This finding is in tune with previous studies that also evidenced the presence of these elements in the individuals' assessment of firearms (Caneda & Teodoro, 2010; Nascimento et al., 2016). In other words, those advocating for relaxation seem to have a limited perception of the State's actual role in promoting the population's security. Ultimately, this type of advocacy implies that instead of demanding the State to fulfill its constitutional role, each citizen should deal with the issue of security individually, and carrying a firearm would be a way to cope with violence and ensure security. In this sense, skepticism about public power seems to be an important driver of the advocacy for the relaxation of rules. It is also remarkable that although advocating for relaxation, those respondents understand, to some extent, that carrying firearms demand specific training. Some participants highlighted the need for shooting courses and for undergoing psychological assessment. It means to say that people would not be "ready" to immediately start carrying firearms.

A review of the central core's components shows that the ideas of "protection" and "risk" emerge somewhat amalgamated. In this sense, as one of the central core

functions is to organize the links between the elements of representation, one can infer that perception about firearms is a factor of risk in the face of the reality of violence, which can bring about the need for protection. However, there is a belief that firearms could ensure protection in this scenario (Szwarcwald & Castilho, 1998). Therefore, there is a kind of vicious cycle of violence, with firearms as background.

The peripheral system is another subsystem complementary to the central core, making up the structure of representations. The elements comprised by this system serve as mediators between reality and the central core of representations about firearms, being more fluid, adaptable, and changeable (Abric, 1998). In this subsystem, we identified elements such as crime, type of firearm, war, police, fear, power, and insecurity. These elements bear notions that permeate the central core's components, supplementing it and mediating it and the reality in the everyday relationship. Additionally, these elements can be changed by time and their context due to their nature of flexibilization.

Despite the findings, this study has limitations for having been based only on passers-by in the city of Brasília. There is a restriction regarding the representativeness of the Brazilian reality, thus hindering a broader view on the phenomenon. Therefore, based on the aforementioned, it is suggested that new surveys assess the phenomenon in different cultural contexts, expanding the results of this study. Despite limitations, this study provides theoretical contributions since, as far as we could find in literature, there is no study investigating social representations regarding firearms in Brazil. Moreover, there are also practical contributions, since understanding the social representations regarding firearms allows a review of how people, in their everyday lives and reality, understand a current and largely discussed theme in Brazil.

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