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The Subjective Perception of Social Objects: An Exploratory Inquiry Based on the Importance of the Opinions of Reference Groups

La Percepción Subjetiva de los Objetos Sociales: Una Investigación Exploratoria Basada en la Importancia de las Opiniones de Grupos de Referencia

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The study aimed to explore the organization of the perception of social objects associated with everyday life topics and its relationship with the importance ascribed to them by different social groups. The convenience sample was composed by 315 undergraduate university students from 3 universities from the Brazilian states of Minas Gerais, Santa Catarina and Rondônia. The participants completed an online questionnaire evaluating the importance granted by 7 social groups (e.g., family, colleagues) to 9 social objects (e.g., work, marriage). A non-metric multidimensional scaling analysis was performed, based on Euclidean distances calculated using the mean scores associated with each object map. The perceptual map thus produced revealed 2 dimensions: one containing professional and affective objects and another that includes topics connected with the future. The article discusses the pertinence of including some of the reference groups studied in research of social representation and the limitations of the study.

Keywords: social objects, reference groups, perception, social representations

El objetivo del estudio fue explorar la organización de la percepción de objetos sociales vinculados a temas de la vida cotidiana y su relación con la importancia atribuida a estos por parte de distintos grupos sociales. Participaron 315 universitarios de una muestra de conveniencia de 3 universidades brasileñas de Minas Gerais, Santa Catarina e Rondônia, quienes completaron un cuestionario por Internet, en el que debieron evaluar la importancia otorgada por 7 grupos sociales (e.g., familia, compañeros de universidad) a 9 objetos sociales (e.g., trabajo, matrimonio). Se realizó un análisis de escalamiento multidimensional no métrico, basado en distancias euclidianas calculadas a partir de las puntuaciones medias vinculadas a cada mapa objeto. El mapa perceptual obtenido permitió identificar 2 dimensiones: una que contiene objetos de tipo profesional y afectivo y otra que incluye temas relacionados con el futuro. Se discute la pertinencia de la inclusión de algunos de los grupos de referencia estudiados en las investigaciones de las representaciones sociales y las limitaciones del estudio.

Palabras clave: objetos sociales, grupos de referencia, percepción, representaciones sociales

One of the main concerns of social psychology has been the study of attitudes, beliefs, and opinions of people and how they are related to people with whom they interact or groups to which they belong. If people are influenced by their social context, then it is likely that their social class, family, friends, workmates, and fellow countrymen provide sources of ideas and explain personal position takings. But group memberships are many, sometimes contradictory, and different groups' spheres of influence affect different portions of social reality. What group memberships affect the perception of what aspects of social reality? Is there an underlying logic behind the relationship between the influences exerted by some groups in personal ideas related to certain social issues?

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Our study aimed to explore and identify the social dimensions that guide the psychosocial perception of everyday topics. In everyday life some topics or themes organize conversation and communication about events and actions. Such topics can be called social objects. We can define them broadly as the common issues that people talk about, because they concern their lives and the lives of groups that they are involved with. Examples are numerous: politics, health, a special happening, a shared activity, a habit, an interest, a cultural product.

Social objects imply certain ambiguity, a necessary imprecision that makes it possible for people to adopt positions according to their interests and goals (Moscovici, 1976). Some salience in communication or recognized importance is a necessary condition to define a social object: people speak about what matters to them (Flament & Rouquette, 2003). At the same time, it is only through discourse and reflection on those objects that practices and actions can become the focus of communication and sharing, thus acquiring their social status (Rouquette, 1988, 1994).

Each social object comprises a set of related practices and semantic referents and possesses the explanatory power of an abstract general class that subordinates smaller-scale opinions (Flament & Rouquette, 2003; Moliner, 1993). This also means that processes such as strengthening or changing opinions rely on beliefs and conceptions about a social object that organizes or justifies such opinions, at least when socially relevant or salient issues are concerned.

Social objects are important elements of some established social psychological perspectives. In attitude theory the notion of attitude object is a broad one: attitudes refer to any evaluations or judgments regarding physical entities, people, issues, individuals themselves, and so on; i.e., virtually anything that can be evaluated (Petty & Briñol, 2010). Social representations theory proposes the study of belief systems that are collectively constructed and shared by groups about social objects (Jodelet, 1989; Moscovici, 1976). In social representations theory social objects are issues that are salient in social communication and relevant for the everyday lives of group members (Flament & Rouquette, 2003).

Our inquiry was aligned with a perspective that conceives that an important part of personal representations, beliefs, and perceptions can be explained by a cultural metasystem of norms, values, and shared meanings that directs cognitive processes (Doise, 1989; Guimelli, 1999). This metasystem can be referred to as social thinking, a specific logic that acts in social situations. Social thinking is social in two senses; first, it is a logic about social life, issues that are relevant for people and groups (i.e., social objects); and second, it assumes that social variables, such as occupying a given position in a society or being affiliated to a group, interfere with thinking processes (Rouquette, 1988). So, preference is given to the formulation of theoretical models that connect sociocultural contexts with psychological processes. The study of the relationships between social and personal thinking implies the articulation of societal and individual levels of explanation, in Doise's (1986) terms. As such, the notion of object that we employed is closer to that of social representations theory that we mentioned above.

Coherently, groups are conceived as important sources of influence for the subjective perception of social objects. People talk about topics relevant to their lives with significant others and other group members; when someone is affiliated to a group, he/she has access to group knowledge, in the form of conventions and shared views on social objects (Wachelke, 2012). The social identity perspective (for an overview, see Hogg, 2006) deals extensively with the impact that belonging to a group or taking a group as a normative reference —hence, such kind of group is called reference group—has on people's beliefs and behavior. There are results that confirm that people who identify with reference groups tend to conform more to the norms of such groups. Terry and Hogg (1996) demonstrated that university students who were highly identified with their groups of peers had a stronger intention to follow group norms regarding sun protection behavior and practice of exercising than students who did not feel connected to such groups. Likewise, Jetten, Spears, and Manstead (1996) conducted a study that showed that university students who are strongly identified with their peer groups follow an intergroup discrimination norm more than low identifiers do.

Certain psychosocial forces are able to explain a person's tendency to value and rely on the opinions of members of reference groups or close communities (e.g., family, friends, colleagues). Normative influence—a person's desire to avoid rejection by a group that is affectively important to him/her (Garcia Marques, 2000)—and group identification—the strength of the connection of an individual with a group (Leach et al., 2008)—are two of them. Arguably, this kind of relationship between the individual and the group strongly actualizes a metasystem with group conventions also at a personal level, concerning objects of social life that carry

importance to that group. So, the opinions, norms, and beliefs of our families might guide our own views on issues such as what career to follow, the views of our friends might be taken into account when it comes to making decisions in our romantic lives, and so on.

Wachelke, Demantova, and Guisso (2012) carried out a study with a sample of 120 undergraduate university students in Brazil to characterize the roles of social objects in communicative exchanges with other students, which verified the assumptions related to the social salience of such objects. The authors observed that objects like university courses, work, and friendship had high scores in measures of frequency of declared communication with the group, perceived importance of group opinion, and estimated agreement with group opinion. Such findings support the characterization of those objects as being relevant to the sample.

However, we all belong to various social groups; some of them are more important to us and we take their opinions into account when reflecting about some social objects, but not others. We probably listen to our family's views when trying to position ourselves in terms of certain issues (e.g., what career to choose). In other cases, perhaps friends or peers are the group of choice when we look for criteria to decide what to look for in a good romantic relationship. Likewise, we can devise networks of connections involving the spheres of influence of social groups and specific kinds of social objects. Is it possible to identify structural relationships in terms of the types of groups that are taken as references to guide our opinions on classes of social objects? An investigation of the classification criteria of social objects provided by the different profiles of the reference groups that support our opinions regarding such objects might afford an important contribution to the study of social logic. In this paper we report a study that aimed to explore social dimensions in the organization of the subjective perception of social objects. The rationale for the inquiry involves asking research participants to rate the importance that they give to the opinion of some groups concerning certain social objects. Based on the profiles of importance of group opinion, we tried to sketch a perceptual map differentiating those objects, identifying psychosocial dimensions that help explain those differences and supply evidence of a social logic associated with the group-object relationship.

Method

Participants

A convenience sample was formed by 315 undergraduate university students from three universities of Brazilian states: Minas Gerais, in the southeast region (n = 182), Santa Catarina, in the south (n = 103) and Rondônia, in the north (n = 30). Most participants were women (n = 212, 67.3%) and the mean age was 22.1 years (SD = 6.28). The participants were enrolled in a broad spectrum of university fields and we recruited them in lectures of courses related to human, health, social, exact, applied, and basic sciences.

Instruments

We employed a questionnaire in Portuguese for data collection. We presented it as an online form to be completed in a Web browser environment, created with the aid of an internet platform. Each instrument had sets of items organized by social objects, in which participants rated the importance that they gave to the opinions of members of various reference social groups regarding the object in question.

The social objects that we included in the questionnaire were (in order): work, study, marriage, leisure, success, sex, dating, having children, and music. We based our choice of words on previous lists of social objects found in the social representations literature (e.g., Wachelke et al., 2012) and also discussions between the authors concerning topics that might interest young adults enrolled in undergraduate university careers. The goal was to obtain a list including professional topics (work, study, success), personal preferences (music, leisure), and interpersonal matters (dating, sex, having children, marriage), thus covering different everyday spheres. We assessed their perceived importance relative to the opinion of the following groups: the participant's friends, neighbors, people of the same sex, his/her family members, people belonging to the same age group, university colleagues, people living in the same city, and Brazilians in general. For each group, research participants should choose one of three response options: "I give little importance to what they think about it", "I give some importance to what they think about it" or "I give much importance to what they think about it". The responses were coded 1 (*little perceived importance*) to 3 (*high perceived importance*).

Procedure

Participants were recruited in person during lectures of their undergraduate courses. Research assistants briefed them about the general nature of a project aimed at characterizing opinions about topics of social life, and invited the attending students who were interested in taking part of the study by completing an online questionnaire to write down their email accounts in a list. The students also signed a consent form agreeing to participate in the study. An email invitation with a link to the online questionnaire was later sent to them. The final response rate, after two reminder messages sent 12 and 22 days after the first invitation, was 32.5%. Only complete questionnaires were considered for analysis.

Data Analysis

The main data analysis procedure was non-metric multidimensional scaling (MDS), a technique that generates a perceptual map based on subjective dimensions of objects using the Euclidean distances of their similarity judgments or attributes. MDS is useful for identifying the key subjective dimensions regarding individual assessments of objects. The analysis can be conducted with similarity data (i.e., ratings of pairs of objects concerning higher or lower perceived similarity between them) or independent evaluations of preferences. In the second case, the main interest lies in the ranking of the distances of the Euclidean distances of the involved objects; such variety is thus called non-metric, because the absolute values involved are not greatly important. The main goal is to project the results of distances that have a higher number of dimensions into fewer ones, keeping the distances between the points as similar as possible. The goal sought by the technique is the generation of comparative evaluations of the objects when their comparison bases are unknown; the interpretation of the relevant subjective dimensions may or may not be related to the objective properties of the objects, which should be carefully assessed by the researcher (Hair, Anderson, Tatham, & Black, 1998). An interesting feature of MDS is that the number of axes is chosen prior to the analysis; there are no hidden axes. Each solution is evaluated and its quality assessed by looking at the smaller values of stress, a measure of the proportion of variance left unexplained by the MDS model. Another advantage is that non-metric MDS does not make the assumption of linear relationships (Holland, 2008).

In the present case, we conducted the analysis based on attributes of each social object, i.e., their profiles in terms of the perceived importance of the opinions of groups. Although, admittedly, such a property is not exhaustive in terms of the explanatory power of resulting MDS dimensions, we expected those differences in the organization of the perception of social objects to eventually reflect some meaningful psychosocial dimensions. In other words, the use of MDS in our study is justified by our expectations that the participants would rate the importance acknowledged to each of the investigated reference groups according to a limited number of patterns. We also believed that the interpretation of those patterns would lead us to identify a few dimensions that could shed light into what groups are "listened to" or serve as reference points when it comes to constructing beliefs and opinions about different social objects.

We conducted the analyses using the R software (R Core Team, 2013). First, we calculated the mean scores concerning the perceived importance of the opinion of each reference group, inserting them in a table with the social objects as rows and reference groups as columns. We computed a matrix with Euclidean distances between the rows which served as input data for non-metric multidimensional scaling through the *isoMDS* algorithm of the MASS R package (Venables & Ripley, 2002). With the aid of the vegan package (Oksanen et al., 2013), we obtained an MDS plot including both the projection of objects and attributes.

Results

In Table 1 we present the means and standard deviations of the perceived importance of the opinion of each reference group, per social object. A glance at the results reveals that friends and family members have high scores regarding most social objects, with the exception of music in the case of family. The latter is probably a topic in which participants hesitate to attribute high influence to social groups, probably preferring to consider the matter as a question of their own personal preference rather than listen to the views of others. University colleagues seem to have an intermediate importance for participants, standing out a little in connection with objects such as study, work, and success, all linked to the professional sphere. Finally, it seems that more generic groups, like neighbors, fellow Brazilians, and people of the same sex, city of residence and age group, are not perceived by the participants as being very influential in their opinions concerning most objects.

Table 1
Mean Scores and Standard Deviations of the Perceived Importance of the Opinions of Reference Groups, per Social Object

Object	Friends	Neighbors	Same sex	Family	Same age	Colleagues	Same city	Brazilians
Work	2.38 (0.7)	1.34 (0.6)	1.62 (0.6)	2.74 (0.5)	1.79 (0.7)	2.19 (0.7)	1.48 (0.6)	1.62 (0.7)
Study	2.42 (0.7)	1.38 (0.6)	1.57 (0.7)	2.73 (0.5)	1.83 (0.8)	2.33 (0.7)	1.53 (0.7)	1.64 (0.8)
Marriage	2.07 (0.8)	1.21 (0.5)	1.50 (0.6)	2.40 (0.8)	1.52 (0.7)	1.41 (0.6)	1.25 (0.5)	1.28 (0.5)
Leisure	2.47 (0.7)	1.30 (0.5)	1.58 (0.6)	2.44 (0.7)	1.85 (0.8)	1.84 (0.8)	1.45 (0.6)	1.44 (0.6)
Success	2.51 (0.7)	1.50 (0.7)	1.62 (0.7)	2.73 (0.5)	1.84 (0.8)	2.19 (0.8)	1.62 (0.7)	1.60 (0.7)
Sex	2.12 (0.7)	1.18 (0.4)	1.66 (0.7)	2.14 (0.8)	1.77 (0.8)	1.53 (0.7)	1.26 (0.5)	1.31 (0.6)
Dating	2.30 (0.7)	1.22 (0.5)	1.55 (0.6)	2.40 (0.7)	1.67 (0.7)	1.54 (0.7)	1.27 (0.5)	1.26 (0.5)
Children	2.04 (0.8)	1.23 (0.5)	1.52 (0.7)	2.45 (0.7)	1.65 (0.7)	1.48 (0.7)	1.27 (0.5)	1.34 (0.6)
Music	2.13 (0.8)	1.31 (0.6)	1.46 (0.7)	1.81 (0.7)	1.68 (0.7)	1.59 (0.7)	1.36 (0.6)	1.38 (0.6)

Note. Standard deviations are in parenthesis.

The non-metric MDS derived from the Euclidean distances of the mean profiles per object that we show in Table 1 had a stress value—a measure of lack of fit, rather than goodness of fit, which is more usual in other statistical procedures—of 5.37 with a single dimension and 0.006 with two of them. This is very low, which is satisfactory, and explained by the relatively small number of social objects. In Figure 1 we present a graphical representation based on the coordinates generated by the extraction of two dimensions.

The first dimension (horizontal axis) puts in opposition objects situated in a professional sphere on the negative pole with objects linked to an affective, private sphere on the positive one. As such, the distances related to the communication profiles differentiate between public objects related to views on occupational life and how to succeed in it (work, study and success) and topics that carry affective importance and involve personal, private choice or taste (marriage, dating, having kids, and sex). Leisure holds an intermediate position, as it is a topic related to the world of work and occupation, as a counterpoint to it, but at the same time it often includes experiences with people and situations that entail affective importance. When we look at the positions of the reference groups in the plot, it is observed that the groups situated closer to the public objects related to the world of work are fellow university students (same university course) and Brazilians. In contrast, the groups closer to the private sphere are the subjects' peers (friends, people of the same sex and age as them). As such, we can draw a clear differentiation: the world of work is influenced by classmates, people who are also related to a professional future, while the private world is guided by the opinions of similar others.

The second dimension (vertical axis) contrasts social objects with a high potential future impact (positive pole) with music, probably an instance of objects that have little future impact on people's lives. Here again leisure occupies an intermediate position and sex is situated among the objects with a small impact. It must be observed that having children is included among the topics with a high future impact, so sex is probably conceived as an activity related to pleasure rather than being directly connected to giving birth to children. The plot also suggests that when a topic is relevant to the future of the students, the tendency is to pay attention to the opinion of the family. In contrast, concerning music, a relatively less important issue, a slight influence seems to be exerted by less specific groups (same age, same city, Brazilians, same course).

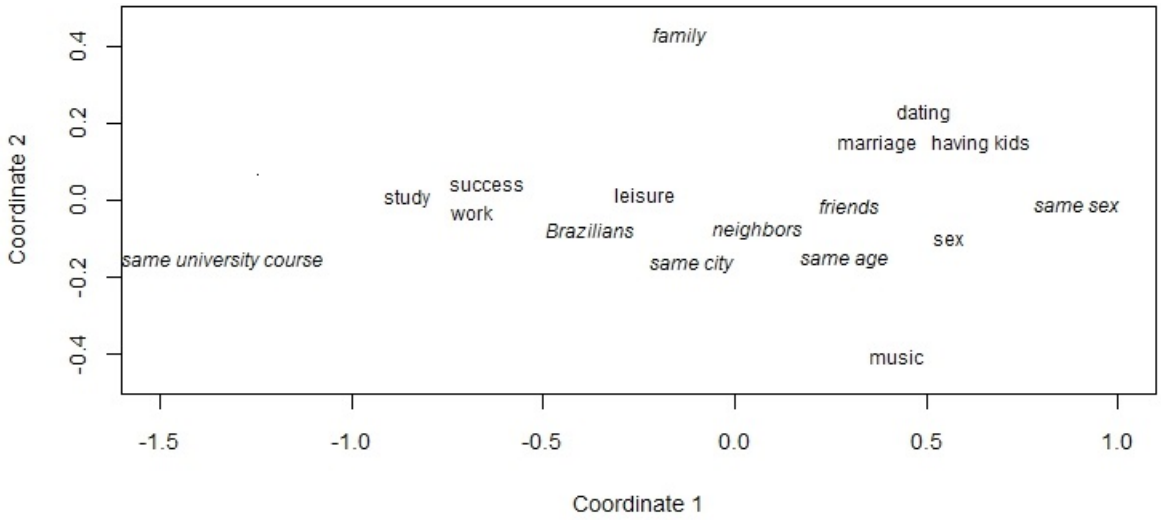

Figure 1. Non metric multidimensional scaling obtained from the profiles of perceived importance of opinions of reference groups per social object. Labels in italics identify reference groups; regular font identifies social objects.

Discussion

The ways in which participants choose reference groups to direct their opinions about various social objects indicate a pattern in terms of the social logic bonding certain kinds of objects to some kinds of groups that are considered relevant to those groups. The results suggest that participants reserve specific spheres of influence for the groups connected with their everyday lives when trying to form and manage their opinions about various issues. Regarding their professional life, they pay special attention to the opinions of their classmates. On the other hand, personal life matters more closely linked to affective activation are under the influence of their friends and peers. A second opposition highlights the special position of family, the group that provides input regarding topics that could have a strong impact in the future; for unimportant matters that have little priority—we interpreted music as being one instance—there does not seem to be special influence by any group.

The first dimension involves the oppositions between two worlds: public and private, occupation and affect. The second dimension is related to a property that Sá (1998) identified in social objects: thickness. According to the author, only objects that have some social importance should be studied according to a social representations perspective, i.e., assuming shared and influential group configurations. This seems to be the case here: our participants do not seem to seek much guidance when thinking about music, but list a variety of pertinent groups regarding the objects located in the pole of potential future impact in their lives. So, music, as probably is the case of many other topics in social life, does not seem to be normatively connected—or is at least not perceived to be so—with group spheres. As a matter of personal taste or opinion, it is probably considered to be a personal knowledge, in contrast with the objects that have perceived impact, which are associated with social positions. In Wagner's (1995) terms, we might say that the former consist in idiosyncratic knowledge, while the latter involve holomorphic knowledge bearing the mark of a group.

Another point that merits attention is the importance given to family and friends as reference groups for most of the social objects, and to colleagues regarding occupational matters. These are group identifications that need to be taken into account in studies focusing on individual adhesion to group beliefs (e.g., social representations research). The connection between social and personal knowledge can be bridged through social identification with reference groups (Breakwell, 1993; Wachelke, 2012), rather than the alternative that is often adopted: the aggregation of participants according to arbitrary social criteria and the likely incorrect assumption of group influence on the organization of knowledge (see Wagner, 1994). The present study suggests that a few abstract groups, like family, friends, and colleagues—of which participants have a concrete understanding because they know their members personally—provide important foundations to structure the opinions of university students. It might be important to conduct research aimed at

understanding the reach and combinations of those normative instances. In social representations research some studies have followed that path: Milland (2001) observed that the beliefs that research participants attributed to their parents' ideals on work and unemployment correlated strongly with their own personal opinions.

It must be made clear that our results cannot be generalized; they correspond to distances that depend on the groups and objects that were assessed, and in the context of a convenience sample of Brazilian undergraduate students. A point to stress, for example, is the composition of our sample: due to the particular university contexts surveyed, there was a majority of women and, because our institutional affiliations involve psychology departments, with more women than men, it was easier in some cases to organize data collection situations in courses with a predominance of women. This might have led to an overrepresentation of women participants. Another issue was that we didn't control response rates by gender, i.e., we don't know if there was a response bias in terms of the gender proportions of respondents in comparison with the proportions of invited participants. Since our aims were exploratory and considering that we did not have theoretical expectations regarding gender differences, we chose not to investigate differences at that level. Future studies will probably have to take that into account in order to achieve more refined results. Another aspect that is worth emphasizing is that the results considered only the students who were willing to participate, with a response rate of 32.5% of the initial invitation. We cannot ignore the possibility that a majority of students, who did not complete the questionnaire, might be associated with response patterns that disagree with the ones that were revealed by our analysis. Moreover, the analytical procedure that we employed has its limits; other communication and social properties certainly play a role in organizing the subjective perception of social objects, and MDS cannot account for it, as its results were derived from attributes assumed to explain the observed variation in data (Hair et al., 1998).

Another point worth mentioning is the evident simplification of group instances in terms of subjective perceptions of isolated group memberships, i.e., to consider the friends group separately from people of the same sex, when such groups often coincide; people belong to several social groups at the same time and their social identity reflects such complexity (see Breakwell, 1993). Yet, our approach is also compatible with the understanding that there might be differences in salience in a given context, and it is that membership which is able to bring about relevant effects (see Hogg, 2006). In addition, if our participants conceived each group membership as a separate entity and were able to relate to them differently, then the consideration of isolated reference groups can be said to have heuristic value. Again, further verification of the combination of group memberships and their effect on the change of the observed trend of results is another logical step to be taken.

Future research should focus on expanding the number of objects studied, in order to confirm the findings obtained with the ones we considered in the study, and add others to refine the interpretation of perceptual dimensions. As an example, the meaning of one pole of the second dimension was determined with a single object—music—; other points of reference are necessary. Other studies concerning participants other than university students should also provide different subjective organizations of social groups-objects patterns and place the results obtained in perspective. Finally, trying to predict cultural patterns or even contextual variations would be premature at this point, since research is at early stages.

Due to its restricted context and reduced size in terms of groups and objects, the reported study could not aim at providing a broad overview or a general classification system of social objects. In this sense, it is better understood as an empirical illustration. Its main contribution, in our view, is the demonstration that it is possible to unveil a social logic explaining the distribution of social objects in the social world and their connection to social positions. That kind of information cannot be ignored in social psychological inquiries interested in the framing of personal and group behavior and knowledge by cultural and societal contexts.

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