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AN EXPLORATORY STUDY OF THE PERCEPTION OF INGROUP COMMUNICATION RELATIVE TO SOCIAL REPRESENTATION OBJECTS

Although social representations theory often assumes that communication is a condition for the existence of social representations, research rarely assesses related properties. The study aims at characterizing the perception of ingroup communication relative to topics that are potential social representation objects for a sample of Brazilian undergraduates. The participants completed single-item Likert scales assessing twelve social objects in three communication dimensions: perception of frequency of ingroup communication, perceived importance of ingroup opinion and estimated agreement with ingroup opinion. One-sample t-tests and repeated measures ANOVAs were carried out to compare the score of each topic with the dimension means and among themselves. The results showed that objects such as university course and friendship had high scores in all three dimensions and are suitable objects for basic research when communication assumptions are considered. The discussion addresses the need for preliminary characterization to assess the group-object relationship in social representations research.

Key words: social representations, ingroup communication, social objects, group-object relationship

Social representations are common sense theories elaborated and shared by groups about issues related to everyday life. There are many basic and applied studies about a variety of social representations, but a basic assumption is seldom verified empirically: do group members actually communicate about such issues? Group communication about a topic is an essential condition for the existence of a social representation about it. If there are no communication exchanges, then to deal with a social representation about something that is not talked about would only result in research artifacts with no actual correspondence in social reality. This paper proposes to measure some dimensions related to communication about social

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issues to verify if such issues qualify as potential social representation objects. For that purpose, we shall first define the basic concepts of social representations and objects and their characteristics.

Representing is an activity by means of which a person recreates an object that is external to him/her, converting that portion of reality into information situated in his/her own cognitive universe. As a consequence, that object can be included in other information manipulation processes and actions directed toward the environment. To represent is thus a cognitive process that necessarily links a subject to an object; there is no representation without a subject or without an object (Moscovici, 1976; Jodelet, 1989).

When it comes to social psychological phenomena such as social representations, there is an additional peculiarity in the representational process: the subject does not have direct access to the object. Such access passes through a social instance, a meta-system that exerts influence over the configurations of individual cognitive processes (Moscovici, 1984; Doise, 1989). In social psychology, this is provided by group affiliations – and the processes associated with them – in the structuring of knowledge and behavior. We understand groups in the terms proposed by Wagner (1994): reflexive groups whose members are conscious of their affiliation and of the particularity that gathers them and differentiates them from other groups.

As their name conveys, social representations refer to a specific kind of object: social objects. A social object is a social issue, a topic that is important in the everyday lives of group members. Not every object can be considered a social object; it has to be an issue that bears relevance for a group. Some criteria to assess the relevance of an object for a group would be: 1) its salience in social communication – group members talk about the object; 2) the differentiation of knowledge about that object at the intergroup level – different groups have different opinions or positions regarding the object; and 3) the existence of reasonable consensus within the group – group members mostly agree in terms of what to think about the object (Moliner, 1993, 2001a; Rouquette & Rateau, 1998; Flament & Rouquette, 2003). As an example, "democracy" is certainly a social object for groups of a political nature; "pop music" is most likely not, in usual circumstances. But it would probably be a social object for groups related to arts or culture.

If those definitions are taken into account, then communication is essential for group members to share a representation (Rouquette, 1996). If a group does not communicate about an object, then group members cannot share a social representation about the object or assess any kind of agreement relative to it, when group belonging is considered. Sure, one could conduct a survey and observe that the representations of group members on a given object converge, but in the absence of group communication, such coincidence cannot be due to group activity. For instance, group members might, in such a case, only represent the object as members of other groups, or construct personal representations about that object in the case of individual personal experiences.

The study of the structuring processes of knowledge linked to social representation usually aims at identifying invariance, common mechanisms of representation functioning regardless of specific objects and groups, or at least involving taxonomies of contexts linking groups and types of objects (Abric, 1994; Rouquette & Rateau, 1998; Flament & Rouquette, 2003). It is an approach directed toward experimental and quasi-experimental studies with the goal of producing theoretical advances concerning socio-cognitive processes related to social representations.

Probably due to the complexity of some of the methodological techniques that are employed in those studies and to the need for a certain number of participants for empirical studies, most of the basic research studies related to the structural approach have dealt with the population of university undergraduate students. This was the main group taken into account in the research that gave birth to the main theoretical developments of the structural approach, such as central core theory (Abric, 1994), the basic cognitive schemes model (Guimelli & Rouquette, 1992), the two-dimensional model (Moliner, 1995), masking effects (Flament, Guimelli & Abric, 2006) and the implication model (Rouquette, 1996), among others (for a review, see Wachelke, 2012). The objects that inspired basic research were also diverse: the ideal group – a face-to-face group with the best possible characteristics to carry out a task (Moliner, 1989), firm –business company (Abric & Tafani, 1995), work (Milland, 2002), gypsies (Guimelli & Deschamps, 2000) and higher studies (Tafani, 2001).

Although some objects such as higher studies, work and firm are clearly linked to university undergraduates, a group with a goal directed toward learning that is concerned with and worries about professional roles, in other cases such a connection cannot be made straight away. We think mainly of the ideal group, the most popular object for basic studies. It would supposedly be an object that students would relate to due to the need of psychologists to be concerned about effective work groups. Such an object would be pertinent for psychologists or other professionals who deal with teams and groups, e.g. in organizational contexts. A further context of relevance would be the formation of groups for conducting academic tasks. However, those relationships have more validity from the point of view of the researcher than from that of the research participants themselves. Additionally, it must be stressed that almost all basic studies about structural processes of social representations were conducted in France. Students from other cultures would not necessarily have the same degree of involvement with objects that are relevant in a French context.

It is understandable and justifiable that basic research is done with groups of university students. In general psychology this is also true, and even though the external validity of research often suffers as a result, one assumes that that the processes through which student participants manifest psychological phenomena find equivalence outside the university context, ensuring the coherence and internal validity of the studies. But in the case of social representations, the researcher must make sure that the connection between group and social object is valid, so as to be associated with social representational processes.

Therefore, it is important to conduct a characterization of the pertinence of group communication dimensions linked to topics that are supposedly associated with the university undergraduates group in order to identify which of these topics are more likely to constitute social objects – i.e. social representation objects. The aim of the present study was to conduct such a characterization with a Brazilian sample, as a way to map which social objects could be employed with more certainty in future basic research related to social representations with samples of undergraduates.

We propose to take into account three dimensions of communication phenomena linked to social objects. Those three dimensions are not exhaustive and are probably inter-related. Rather, they are an initial proposition that makes it possible to estimate the salience of the object in communication, its pertinence to the group and ingroup variability. The frequency of communication about the object is the dimension that refers to the quantitative salience of a topic in group interactions. A social object must be discussed with a certain intensity to mobilize social debate and the formation of common group positions; in the absence of communicative exchanges focusing on that topic, it is not possible to form a social representation.

The second dimension is the perceived importance of the opinions of group members about the object. If it is considered that the opinion of group members is important, then it is plausible to assume that group members take group culture into account when they think about or deal with the object. If, on the contrary, what the other group members think is not important, then that is probably an indication that the topic in question belongs merely to a personal sphere and is not enforced by norms and clear expectations of others.

Finally, the dimension of estimated agreement with the opinions of group members about the object refers to the existence of a perceived consensus about the knowledge on the object. It is a condition for the identification of a social representation. If it does not hold true, there is space for divergence, which probably is not associated with a common group position.

Method

Participants

A total of 120 undergraduate students enrolled in a public university from the south of Brazil took part in the study. The sample was well balanced for gender (64 participants were women). The mean age was 21.6 years (SD = 3.14), ranging from 17 to 31 years. Participants from 29 different Bachelor courses were included. The ones with the highest number of participants were Civil Engineering (N = 11), Portuguese (N = 10) and Chemistry (N = 10).

Instrument

Each participant completed a short questionnaire in Brazilian Portuguese in which they had to rate twelve social topics concerning the three aforementioned

communication dimensions by means of single-item measures. The twelve topics included in the study were selected through an analysis of the literature on social representations and a preliminary qualitative survey with a sample of 30 Psychology undergraduates: these participants had been asked to write down issues that they considered important for their lives, and their responses were categorized for content. Bringing together the literature review and the small survey, the selected topics were: dating, sports, drugs, ideal group, family, friendship, firm, work, university course, nutrition, politics and sexuality.

The item employed to measure the frequency of communication in the group was: "How often do you speak with your university colleagues about each of the following topics?". The response options were 1 – Almost never, 2 – Rarely, 3 – Sometimes, 4 – Often, 5 – Almost always. The importance of ingroup opinion item was: "How important to you is the opinion of your university colleagues about each of the following topics?". The response options were 1 – Unimportant, 2 – Of little importance, 3 – Neither important nor unimportant, 4 – Important, 5 – Very important. Finally, the item for estimated agreement with the ingroup was "How much do you think that you have opinions that are similar to most of your university colleagues, about each of the following topics?". The response possibilities were 1 – Strongly disagree with colleagues, 2 – Partially disagree with colleagues, 3 – Neither agree nor disagree with colleagues, 4 – Partially agree with colleagues, 5 – Strongly agree with colleagues.

After each item, a rating list for the twelve topics was displayed so that the participant could evaluate each one of them for each dimension. Items were treated as Likert measures.

Procedure

Participants were recruited in the university library, while studying. They were invited to participate by one of the authors and, upon accepting, given a print version of the questionnaire which they completed on the spot.

Results

The mean score for each topic was calculated per item/dimension. The mean scores for the communication items were close to 3, the center of the scale: 3.2 for communication frequency, 3.02 for importance of group opinion and 3.32 for estimated agreement with group members. One-sample t-tests were conducted to compare the mean values for each dimension and identify those that had scores that were superior to the mean. Additionally, taking within-subject data into account, one-way repeated measures ANOVAs were carried out to compare the scores per dimension relative to each assessed object. Table 1 presents the descriptive statistics (means and standard deviations) of the object evaluations, indicating if they are significantly different from the mean score in each dimension, and also pointing out their differences as indicated by pairwise post hoc t-tests with Bonferroni correction.

Table 1. Means and standard deviations of the three communication dimension items, per object.

Frequency of communication with group			Perceived importance of group opinion			Estimated agreement with group opinion		
Object	M	SD	Object	M	SD	Object	M	SD
univ. course	4.41a+	0.77	univ. course	3.95ab+	1.11	univ. course	3.92a+	0.87
work	3.66b+	1.07	friendship	3.84ab+	1.24	friendship	3.76ab+	1.03
dating	3.59b+	1.00	work	3.38bc	1.18	drugs	3.5abc	1.13
friendship	3.57b+	1.06	drugs	3.02cd	1.32	work	3.47bc	0.96
nutrition	3.31bc	1.11	firm	2.99de	1.22	family	3.38cd	0.98
sexuality	3.22bc	1.28	family	2.91de	1.33	sex	3.30cd	1.00
family	3.15cd	1.05	dating	2.85de	1.22	firm	3.19cde	0.96
sports	3.05cde	1.19	politics	2.79e−	1.30	nutrition	3.17cde	1.00
drugs	2.72def−	1.19	nutrition	2.72e−	1.21	ideal group	3.15cde	1.05
firm	2.64efg−	1.28	sexuality	2.70e−	1.35	dating	3.15cde	1.01
politics	2.51fg−	1.22	ideal group	2.69e−	1.19	sports	2.98de−	1.02
ideal group	2.45g−	1.10	sports	2.32e−	1.22	politics	2.88e−	0.99
Overall	3.19	1.24	Overall	3.02	1.32	Overall	3.32	1.04

Note: same letters indicate belonging to the same subset of means indicated by pairwise comparisons with Bonferroni correction. +: higher than overall mean; −: lower than overall mean.

The one-way repeated measures ANOVA revealed differences for all three communication dimensions. Concerning frequency of communication with the group $[F_{8.86, 1054.37} = 38.772$, GG ε= .805, $p < 0.001$, $\eta^2_p = 0.25]$, the pairwise comparisons showed that the university course object had the highest mean of all, followed by a second subset of objects consisting in work, dating, friendship, nutrition and sexuality. In contrast, firm, politics and the ideal group had the lowest evaluation scores. The one-sample t tests indicated that the objects with scores higher than the overall mean were university course $[t(119) = 17.23, p < 0.001, d = 3.15]$, friendship $[t(119) = 3.88, p < 0.001, d = 0.71]$, work $[t(119) = 4.77, p < 0.001, d = 0.87]$ and dating $[t(119) = 4.26, p < 0.001, d = 0.78]$.

In terms of the importance given to ingroup opinion $[F_{8.34, 992.42} = 26.230$, GG ε = 0.758, $p < 0.001$, $\eta^2_p = 0.18]$, the objects with the highest scores were mainly university course and friendship. The subset with the lowest scores included most of the assessed objects, which indicates that there was a sharper contrast between the objects that were associated with more important group opinions. Also the comparisons with the overall mean had the same objects with scores higher than

Table 2. Pearson correlations of communication dimension items per object.

Object	rfreq, imp	rfreq, agr	rimp, agr
dating	0.48***	0.12	0.36***
drugs	0.34***	0.21*	0.28**
family	0.49***	0.27**	0.34***
firm	0.57***	0.31***	0.43***
friendship	0.41***	0.35***	0.40***
ideal group	0.50***	0.38***	0.46***
nutrition	0.53***	0.40***	0.32***
politics	0.62***	0.24*	0.17
sexuality	0.42***	0.35***	0.43***
sports	0.48***	0.42***	0.35***
university course	0.40***	0.13	0.24*
work	0.33***	0.14	0.30**

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

the average: university course [$t(119)$ = 9.14, $p < 0.001$, d = 1.67] and friendship [$t(119)$ = 7.23, $p < 0.001$, d = 1.32].

The estimated agreement with the opinion of group members had the smallest effect in the repeated measures ANOVA, indicating fewer differences [$F_{8.96, 1066.15}$ = 14.836, GG ε = 0.814, $p < .001$, η^2_p = 0.11]. The objects university course, friendship and drugs formed the subset with the highest mean scores. Concerning the comparisons with the overall mean, again only university course [$t(119)$ = 7.61, $p < 0.001$, d = 1.40] and friendship [$t(119)$ = 4.72, $p < 0.001$, d = 0.87] had higher scores.

On the other hand, three objects were present in the subsets with the lowest means in all three communication dimensions: the ideal group, firm and politics. When it comes to the comparisons with the overall mean, the same three objects had scores that were lower than the mean in at least two communication dimensions. For communication frequency, they were the ideal group [$t(119)$ = 7.34, $p < 0.001$, d = 1.34] and politics [$t(119)$ = 6.09, $p < 0.001$, d = 1.16]. The importance of group opinion dimension had the ideal group [$t(119)$ = 3.01, $p = 0.003$, d = 1.67] and sports [$t(119)$ = 6.22, $p < 0.001$, d = 1.14] with low scores. Finally, sports [$t(119)$ = 3.58, $p < 0.001$, d = .66] and politics [$t(119)$ = 4.80, $p < 0.001$, d = .88] were the objects with low scores concerning the estimated agreement with the group.

Finally, Table 2 presents the correlations between the items relative to each dimension, per object. It can be observed that the three items are fairly correlated for most objects, with the exception of a few weak associations involving communication frequency and the agreement with group opinion, for dating, university

course and work, and the importance of opinion and agreement with the group relationship for the politics object.

Discussion

The present study has tried to characterize the role of social objects in communication exchanges associated with the university students group, hence verifying which ones are more compatible with social representational assumptions related to communication (Moliner, 1993, 2001a; Rouquette, 1996; Rouquette & Rateau, 1998; Flament & Rouquette, 2003). The results indicate that among the objects that were investigated, friendship and university course were the ones with higher scores than the overall mean for the three communication aspects that were taken into account: communication frequency, perceived importance of ingroup opinion, and estimated agreement with ingroup opinion. In addition, when the means were compared among themselves, they were consistently included in the subsets with the highest scores. If the fact that a topic must be present in group communication is taken into account, then those are the objects that are most likely to be social objects associated with social representations. Work and dating also have scores that differentiate them from the other objects and seem to offer substantial evidence that they are relevant for the group of university students.

There is no social representation without a group and an object that it is about (Jodelet, 1989). There has been theoretical debate in terms of what a group is and is not; Moliner (1993) states that a group must be structural and not conjunctural: it must be composed of people who are interdependent and have common goals. Wagner (1994) restricts the existence of social representations to reflexive groups of members who are self-aware, and denies the status of a true group to aggregates of people gathered externally by an observer or researcher.

In terms of the criteria to differentiate possible social representation objects from the rest, communication has often played a key role from the very first time the concept of social representation was proposed by Moscovici (1976). A considerable part of his work consisted in studying communication systems – diffusion, propagation and propaganda – and their relationships with the content of social representations about psychoanalysis in France. Later theoretical efforts have often underlined that communication is a condition for the existence of a social representation. Moliner (1993) advanced the view that only a structured group maintains communication exchanges about an object, and this is essential for the establishment of a representation. The same author also related the formation and transformation of social representations to communication practices (Moliner, 2001a). Sá (1998) stated that social representation objects must have what he called "social thickness," i.e. they must be included in group practices including conversation and communication. Rouquette (1996) considers communication the means for the elaboration, transmission and transformation of all forms of social thinking,

including social representations. Finally, Flament and Rouquette (2003) state that only objects present in social communication can be social representation objects. Although there is considerable agreement on the part of scholars concerning the important role of communication in the definition of the social representation phenomenon, as such it is rarely taken directly into account (cf. Mugny, Souchet, Quiamzade & Codaccioni, 2009).

While researchers often make sensible decisions regarding what constitutes a relevant connection between a group and an object, and thus a legitimate field for the study of social representations, it cannot be taken for granted that a group maintains a social representation about a topic without some kind of empirical characterization. This problem becomes even more salient if we realize that some social representation perspectives aim at studying structural processes that are supposedly generalizable across objects (e.g. Rouquette & Rateau, 1998; Wachelke, 2012); in such a case, there is a search for invariance between contents. As such, the careful choice of objects to inspire research acquires paramount importance, as they become the reference for discoveries and models. Researchers involved with this kind of basic research should make sure that the chosen objects that constitute the experimental fields for hypothesis testing clearly respect the theoretical assumptions of social representations.

The present research also signaled that some objects might be a little far from a "gold standard" evaluation in terms of communication assumptions: sports, politics and, more alarmingly, the ideal group. This latter object has been employed as the main context for testing many of the theories related to social representations, such as central core theory (Moliner, 1989; Lheureux, Rateau & Guimelli, 2008) with groups of university students. According to the sample of students from the reported study, the ideal group is not a topic often referred to in communication with other students, and the opinion of other students is not considered particularly important. We think one important factor here could be that the study was conducted on a Brazilian sample which can be significantly different from the French samples that were employed in most ideal group studies, and the social atmosphere and pertinent topics in universities may indeed be different in the two contexts. However, the reported results suggest that it is important to assess the characteristics of possible social objects in each context of research, and that it might be desirable to conduct such an assessment also in future studies with the ideal group in France.

At the same time, the research presented here has its share of limitations, which forces us to consider that it is a first approximation of the characterization of ingroup communication perceptions and its relationship with social representations. The first characteristic of the research that might need questioning is the diversity of university curricula present in the sample. One might argue that the inclusion of students enrolled in different courses might affect the results due to a lack of homogeneity; very likely, engineering students might think differently from Portuguese students, for example. However, such diversity was intentional;

we wanted to refer to the wider collective of "university students" and grasp common aspects that might be pertinent across specialties; since a variety of university undergraduates participate in basic research related to social representations, we envisaged a sample that would represent the various parts of the university world at a given institution.

A second aspect to be mentioned is that the employed measures were single items. The existing correlations between the items, as evidenced by Table 2, suggest that the considered dimensions might be linearly associated and perhaps form one or more broad communication perception factors. In addition, constructing a multiple-item scale would certainly add more reliability to the measurement. A point that must also be mentioned is the restriction of the evaluation of communication aspects to individual estimations, and that might be very different from what actually takes place in a group in terms of consensus of opinions, for example (cf. Moliner, 2001b). Still, there is a psychological truth in one's perception of the opinions of others if it serves as a reference for a person, even if it does not correspond to the reality of the group.

According to Moscovici (1984), the specificity of social psychology as a science lies in the fact that the relationships between an individual subject and a social object are mediated by a group that the individual belongs to, forming a semiotic triangle. In social representations research, there are various forms of connection that allow us to evaluate the relationships between those three vertices of the triangle.

The communication sphere is one aspect that permeates both the relationship of the group with the object and the relationship of the individual with the group. The contribution of the present study stresses the relevance of including a preliminary phase in social representation studies to assess the degree in which each group possesses a bond with an object that makes it legitimate to tackle the phenomenon as a social representation. It is a first tentative exploration in that sense, but it does bring to light an important debate that needs to be addressed by future research.

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