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ORGANIZATIONAL IDENTIFICATION:
THEORETICAL AND EMPIRICAL ANALYSES OF
COMPETING CONCEPTUALIZATIONS

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ABSTRACT

The objective of this paper is to offer a clear view on the different conceptualizations of organizational identification and propose valid measurement solutions adapted to these conceptualizations. The theoretical analysis tries to unravel in which respects the different conceptualizations of organizational identification are distinct or similar, and which contradictions are insolvable or just apparent. The empirical part of this paper focuses on the analysis of the instruments built according to each of the presented theoretical model. Several modalities to test the content, convergent and discriminant validity of these instruments are employed to assess the fit of these instruments. Finally, measurements proposals that address the theoretical and methodological issues raised in the analyses are advanced.

KEYWORDS: organizational identification, self-categorization, affective identification, organizational commitment.

Organizational identification (OI) is a term populating the organizational studies literature ever since the 60’s (March & Simon, 1958; Kelman, 1961). Yet, it was only the last two decades that have witnessed a surge in interest in the organizational identification research. In between this period, organizational identification has been one of the Cinderellas of organizational studies, kept in the shadow of Organizational Commitment. In fact, since Mowday, Steer and Porter’s (1979) conceptualization of identification as a component of affective organizational commitment, these two concepts have been treated as synonyms, or the difference between them has only been of rhetorical nature rather than of true conceptual and measurement differentiation (see, for an example, Cheney’s [1983] scale of Organizational Identification).

How is organizational identification defined in the field literature? A review of definitions points to the fact that by the same word are designated very different realities. The most obvious fact is its superposition with the concept of
organizational commitment. For instance, Meyer and Allen (1997) define organizational commitment as an attitude or an orientation that “links the identity of the person to the organization”, a process whereby the goals of the organization and those of the individual become congruent (Meyer & Allen, 1997). O’Reilly and Chatman (1986) define commitment as a psychological bond between the employee and the organization, but differentiate between three forms this bond can take: compliance, identification and internalization. They define identification as the process of “an individual accepting influence from a group (organization) in order to establish and maintain a relationship”. Hence, an individual may respect a group’s values without adopting them, as opposed to internalization (when influence is accepted because the induced attitudes/values are congruent with one’s own) or compliance (when the are declaratively accepted in order to win a certain benefit) (O’Reilly & Chatman, 1986).

A second problem is the heterogeneity of conceptualizations and measurement instruments of OI. For example, several studies have shown that different subtypes of identification (e.g., affective vs. cognitive) relate differentially to work outcomes (see Bergami & Bagozzi, 2000; van Dick, Wagner, Stellmacher, & Christ, 2004; also Ellemers, Kortekaas, & Ouwerkerk, 1999). Thus, for specific purposes, more differentiated conceptualizations of OI may prove useful.

The aim of the present paper is two-folded. On the one hand, we head for a theoretical analysis of competing organizational identification conceptualizations. The first of them (Ashforth & Mael, 1989) portrays identification as a solely cognitive process of self-categorization, and commitment as a possible consequence. The other (Ellemers, Kortekaas, & Ouwerkerk, 1999) envisions identification as a three-faceted process, comprising an affective component named commitment. We shall first present and then try to disentangle the apparent contradictions between these two perspectives. On the other hand, we shall analyze the correspondence between the theoretical models and the emerging instruments intended to measure this concept.

FUNDAMENTALS IN THE STUDY OF OI

For over two decades now, the most prominent theory in the study of organizational identification has been the social identity theory (SIT). According to SIT’s core assumptions, organizational identification is a form of social identification, whereby a person comes to view him- or herself as a member of a particular social entity - the organization. This happens through cognitive processes of categorization, where one forms self-categories of organizational membership. These are based on one’s similarities with others in the organization, as well as on the dissimilarities with individuals from different organizations (Turner, 1985; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Indeed, as one increasingly identifies with an organization, the individual self-perceptions of the members tend to become depersonalized such that members see themselves as interchangeable representatives of the social category that is the organization (e.g., Turner, 1985).
It is Ashforth and Mael (1989) that introduce the perspective of SIT in the study of organizational identification. In the most cited article in the field, they refine the concept of identification, differentiating among its cognitive, behavioural and emotional aspects, and discriminate between identification itself and its antecedents or consequences. Starting from the social identification theory, they define organizational identification as the perception of unity with or belonging to a social aggregate (in this case, an organization). In other words, they define identification as a form of self-categorization. They also postulate four principles of group identification, which clear much of the previous confusions. These principles are (Ashforth & Mael, 1989):

1. Identification is a perceptual-cognitive concept, not necessarily associated with specific behaviours or emotional states.
2. Group identification means experiencing at personal level the group’s successes or failures.
3. Identification is different from internalization. Identification means referring to self in terms of a social category, while internalization means incorporating the group’s attitudes or values as guiding principles of one’s own behaviour. Accepting a social category as a definition of self does not imply also accepting the group’s values and attitudes. Moreover, identification is specific to each organization; internalization and commitment might not be, because several organizations may share common goals and values. Commitment might arise because that particular organization is a vehicle for one’s own career goals. This leads to the fact that leaving that organization for another one, where these goals can better be fulfilled, is a possibility at all times. Identification with an organization, however, means one cannot leave it without some kind of “psychic loss” (Levinson, 1970, apud Ashforth & Mael, 1989).
4. Group identification is similar to identification with an individual, in the sense that one defines oneself in terms of that social referent.

Based on these assumptions, Mael and Ashforth (1992) built the Organizational Identification Scale (OIS), the most prevalent instrument for the assessment of OI in the extant literature (Riketta, 2005). In a recent meta-analysis of the organizational correlates of organizational identification, Riketta (2005) analyzes the results obtained using the Mael scale in comparison with other instruments measuring organizational identification.

The author observes that results from studies using this scale were close to those from studies using other measures, as well as for the results that aggregate in a common index all measures. The only significant difference emerged in the category ‘work-related intentions and behaviour’, where the Mael scale correlated significantly less strongly with ‘intent to leave’ than did the other OI measures. Another important finding pointed to is that the correlations involving the Mael scale showed much less variation than the correlations involving all OI measures. For example, for several correlates (such as age and organizational satisfaction), the correlations from all OI studies were strongly and significantly heterogeneous (p < .001), whereas the correlations from studies using the Mael scale were not. He
concludes that studies using the Mael scale constitute a relatively homogenous subgroup within OI research with regard to their findings, and that the Mael scale seems to be the most representative OI measure with regard to its empirical outcomes.

However, Bergami and Bagozzi (2000) argue that, although Mael and Ashforth’s (1992) scale measures overall organizational identification, it targets more than awareness of one’s membership in the organization, and includes potential causes, effects and correlates of identification. The authors point to the fact that three items in the scale reflect emotional responses that members might have when the organization is attacked or glorified: “When someone criticizes [organization], it feels like a personal insult”, “When someone praises [organization], it feels like a personal compliment”, and “If a story in the media criticized [organization], I would feel embarrassed”. Two other items in the Mael scale appear to measure variables that can shape or impact one’s identification: “I am very interested in what others think about [organization]” and “This [organization’s] successes are my successes”. Only one item in Mael’s scale might be considered a measure of self-categorization: “When I talk about [organization], I usually say ‘we’ rather than ‘they’”. But it might be argued that even this item is as much a reflection or consequence of self-categorization as it is a measure of the central meaning of awareness of one’s membership per se (Bergami & Bagozzi, 2000).

The other fundamental perspective in the study of OI was put forth by Dutton, Dukerich and Harquail (1994). They define organizational identification as the degree to which a member defines himself or herself by the same attributes that he or she believes define the organization. Strong organizational identification occurs when, (1) one’s organizational identification is more salient than alternative identities, and (2) his or her self-concept has many of the same characteristics he or she believes define the organization as a social group. The members of an organization are said to become attached to their organization when they incorporate the characteristics attributed to the organization into their self-concept. In this perspective, the self-concept refers to “the totality of self-descriptions and self-evaluations subjectively available to an individual” (Hogg & Abrams, 1988). This is in line with Social Categorization Theory’s (SCT) fundamental assumptions on the mechanisms underlying social identification, namely depersonalization. Depersonalization is defined as “a process of self-stereotyping, through which the self comes to be perceived as categorically interchangeable with other ingroup members” (Haslam, 2001, p. 44).

Dutton et al. (1994) propose three ways of operationalizing the strength of identification: (1) directly assessing it, through scale-based measures; (2) by asking organizational members to evaluate a set of identities and indicate the relative degree to which these identities accurately describe them as individuals, either by ranking each identity or ranking them in hierarchy; (3) directly assessing the level of overlap between the characteristics by which an individual describes him- or herself and the characteristics that typify the organization.
To summarize, the two most cited definitions of OI, which represent the bases for current developments of the topic, reflect a social-categorization perspective on identification. While Mael’s definition focuses exclusively on the act of categorization, Dutton et al. extend the definition to include the mechanisms of social categorization, namely depersonalization.

PRESENT DEVELOPMENTS OF OI

Further on, we shall focus on the present developments of the conceptualization and operationalization of organizational identification, and their contribution to the study of OI. The conceptual refinement of organizational identification has known an intense, yet quite divergent development in the last decade. We can outline three mainstreams in researchers’ interest: the first one challenges the initial definition of OI in positive terms, as an affirmative relation between the individual and the organization, introducing concepts such as disidentification, ambivalent and neutral identification with the organization (Dukerich et al., 1998; Elsbach & Bhattacharya, 2001; Kreiner & Ashforth, 2004). The second (Ellemers, Kortekaas, & Ouwerkerk, 1999; Bergami & Bagozzi, 2000) stems from fundamental SIT research and opposes the definition of OI as an exclusively cognitive concept (according to Ashforth & Mael, 1989) to Tajfel’s initial definition of social identity, which also comprises an emotional and an evaluative side. Concerned with the accuracy of predicting subsequent behaviour, the third stream (van Knippenberg & van Schie, 2000; Riketta & van Dick, 2005; van Knippenberg & Sleebos, 2006) changes the focus of organizational identification, from this exclusively global level, to a multiple-level analysis, starting from the work-group, moving up to the organization and finally the occupation. Further on, we shall tackle more extensively the first two mentioned streams.

Organizational identification, disidentification, ambivalent and neutral identification

The first-mentioned stream developed from Dutton et al.’s (1994) definition, and inquired on all four dimensions obtained through the high-low superposition of attributes between the self and the organization (Dukerich et al., 1998; Ellemers et al., 2002; Kreiner & Ashforth, 2004). Hence, three new concepts have been introduced: disidentification, ambivalent identification (the simultaneous identification and disidentification with the organization), and neutral identification (the explicit absence of both identification and disidentification with the organization) (Kreiner & Ashforth, 2004).

Organizational disidentification is defined as “a self-perception based on (1) a cognitive separation between one’s identity and one’s perception of the identity of an organization, and (2) a negative relational categorization of oneself and the organization” (Elsbach & Bhattacharya, 2001). By analogy with Dutton, Dukerich, and Harquail’s (1994) definition of organizational identification, organizational
disidentification is indicated by the degree to which a person defines him or herself as not having the same attributes that define the organization.

Unlike “neutral identification” (Kreiner & Ashforth, 2004), “apathetic identification” (Dukerich, Kramer, & McLean Parks, 1998) or “nonexistent or broken identifications” (Pratt, 1998), in which a person neither connects nor separates his or her identity from the organization, or, at the extreme, does not even have an opinion or knowledge about the organization, disidentification is a form of relational categorization (Brewer & Gardner, 1996). However, in the case of disidentification, the definition of self is through counter-positioning to the defining values and attributes of the organization. A disidentified member maintains “a sense of self-distinctiveness through perceptions and feelings of disconnection” (Elsbach & Bhattacharya, 2001).

In other words, disidentification is a self-categorization in the form of cognitive dissociation from the group or organization. Regarding the dynamics of the triggers of social categorization, disidentification is related to the predominance of one’s needs for distinctiveness over one’s needs for inclusiveness. Unlike the processes underlying identification as self-categorization, one seeks to reduce similarities with the group members and stress his or her own distinctiveness. The concept of “optimal distinctiveness” (Brewer, 1991) is this time attained by extreme differentiation from the group.

In their study on the National Rifle Association, Elsbach and Bhattacharya (2001) offer the best developed framework of organizational identification so far. Among the antecedents of disidentification, they postulate: (1) perceptions that one’s personal values conflict with the values of the organization; (2) perceptions that an organization’s reputation might affect one’s social identity; (3) perceptions that the members of the organization are “all the same”; and (4) perceptions of the organization that are based on a lack of personal experience with the organization or its members. Among the consequences of organizational disidentification, they postulate counter-organizational action and organizational criticism.

Other consequences of organizational disidentification are set forth by Dukerich, Kramer, and McLean Parks (1998). They assert that, for the organization, the consequences of disidentification are, among others, the fact that disidentified members tend to rebel and resist organizational initiatives and goals, just because they had been proposed by the organization. These members would also generate a presumptive distrust among the other members of the organization. On the other hand, in time they would be perceived as malcontents, and the valid criticisms they may raise would be given little or no attention (Dukerich et al., 1998).

However, besides subscribing to a trend in SIT research that postulates identification and disidentification to be negatively correlated, but not opposite concepts, and that the core difference between the two resides in the fact that the latter involves extreme and simplified perceptions of the relationship between one’s identity and the identity of an organization (Ellemers, Kortekaas, & Ouwerkerk, 1999; Abrams & Hogg, 1999), Elsbach and Bhattacharya (2001) do
not investigate the mechanisms that produce disidentification, but place them in the ‘further studies’ section.

In fact, as Pratt (1998) notices, although disidentification is a concept that has won its place in the SIT literature, strangely enough, there are few empirical studies that investigate it, its mechanisms and correlates. One of these studies (Ellemers et al., 1999) stems from fundamental research and posits that disidentification, understood as cognitive distancing of a social identity from a group identity is due to the perception that one is distant from the group prototype or norm. These authors assume that disidentification with a group might be a defense mechanism used by low-identifiers as a means to pre-empting rejection from the group, or by those who want to ingratiate themselves with a more desirable group.

The other highly cited study that focuses on the mechanisms of disidentification is Pratt’s (2000) case study of the Amway distributors. Basically, what Pratt (2000) postulates, beyond the Amway case, is that disidentification occurs when an organization shatters the meanings related to the self-concept (sensebreaking), creating in the member the need to seek for new meanings and attain them, but failing to provide the context and support for this (the sensegiving practices).

It is Kreiner and Ashforth’s (2004) study that takes a more systematic approach on the matter, and includes in an integrated model of identification all the four dimensions postulated by previous studies (Pratt, 1998; Ellemers, Spears, & Doosje, 2002): identification, disidentification, ambivalent and neutral identification. They test these dimensions against some of the most relevant antecedents provided in the extant literature. Their findings regarding disidentification portray it as negatively associated with organizational reputation (Ashforth & Mael, 1989; Dutton et al., 1994) and the need for organizational identification (Glynn, 1998), and positively associated with negative affectivity, cynicism and psychological contract breach (Rousseau, 1998). It was also positively associated with intrarole conflict and organization identity incongruence. However, although being the most exhaustive model so far, Kreiner and Ashforth’s model was tested only in a correlational study, based on a cross-sectional survey; it does neither investigate underlying mechanisms, nor does it permit any safe conclusion regarding the direction of causality, given the strong potential for feedback loops over time, which would allow consequences to become antecedents and antecedents to be seen as consequences of disidentification (something that Elsbach & Bhattacharya, 2001, indicate as a limit of their own study, which is applicable in this case as well).

**Ambivalent identification** is a dual state of both identification and disidentification to an organization. It can take the form of identifying with certain dimensions or traits of the organization’s identity, or of simultaneous identification and disidentification with the same traits (Kreiner & Ashforth, 2004).

Among the antecedents that can trigger ambivalent identification, the extant literature has focused on the incongruence of the organization’s identity (Kreiner & Ashforth, 2004) and the negative image of the organization (Elsbach &
The predictions of social identity theory impose a refinement over the latter. A number of studies (e.g., Turner, Hogg, Oakes, & Smith, 1984; Branscombe & Wann, 1999; Doosje, Ellemers, & Spears, 1995; Spears, Doosje, & Ellemers, 1997; Ellemers, Spears, & Doosje, 1997) have proved that individuals do not identify with social groups only as an instrument for self-enhancement, only to ditch them as soon as they no longer serve this purpose. Individuals continue to identify with a social group even through the bad times, when the negative image (or the low status) of the group actually affects their need for self-enhancement. This does not only occur as a result of objective conditions, such as low group permeability (translated in the impossibility of leaving the group and hence the need to search for alternative strategies to boost one’s social identity – strategies such as comparisons on different, more advantageous dimensions with the higher-status group), but mainly on subjective premises, such as high initial levels of identification (Doosje, Ellemers, & Spears, 1995). Based on previous studies (Ellemers, Spears, & Doosje, 1997) that have proved the superiority of subjective conditions (i.e., high initial levels of identification) over objective ones (i.e., group permeability), it can be assumed that the emergence of ambivalent identification in situations of affected organizational image or prestige occurs mainly in those who have an increased need for identification. In low identifiers, the same objective situation will induce a subjective reaction of breaking up with the organization, either in the form of disidentification or of neutral identification.

Based on the predictions of cognitive consistency theories (Heider, 1958; Festinger, 1957), ambivalent identification is not a state of mind that one can endure for a long time, which means that one will try to find strategies to come to terms with it. While cognitive dissonance theories predict a change of attitude that might solve the cognitive conflict, self-affirmation theory (Steele, 1988) argues that, if dissonance is aroused by threats to one's general sense of self integrity, then people can effectively respond to these threats in ways not documented by the early dissonance researchers - that is, by affirming some other valued aspect of the self-concept not necessarily related to the threat (e.g., although I smoke, I am a good mother). In other words, they count upon a shift of attention that would reduce the dissonance. Such researches proved that respondents do not focus on the information that flagrantly contradicts the dissonance-arousing behaviour, but instead choose to increase interest in, or identification with, "decision-congruent" aspects of the self.

Recent studies, however, argue that rationalization and self-affirmation are not mutually exclusive protective mechanisms, but can occur simultaneously (Aronson, Blanton, & Cooper, 1995): dissonance can motivate individuals not only to make excuses for their behaviour, but, given certain circumstances, to incorporate these excuses into the self-image. What appears is an interplay between the multiple routes of self-affirmation, in which individuals not only change their attitudes towards the dissonant-arousing object, but also change relevant attitudes towards themselves as well. This interplay can explain why, in time, ambivalent identification can turn into disidentification, and how individuals who initially rejected disidentification get to feel at ease with it, by changing their very need for
identification. In this way, changes will be both in attitude (one decides to change the manner of relating to the organization, by defining oneself through opposite attributes than the ones used to define the organization), and in the self-concept, by a decrease in one’s general need for identification (which would give the final rationalization as to why they disidentify).

Yet, there is evidence that this state of ambivalence can be maintained over long periods of time (Thompson & Holmes, 1996). This can lead to the assumption that ambivalent identification (AI) is a transient state for group members only when it is associated with a low need for identification, as in the mechanism described above. In this case, in time, AI will turn into disidentification. For people who preserve a high need for identification, ambivalent identification will persist over time, provided the external conditions remain stable, but its consequences will alter. SIT predictions state that in the case of a high need for identification, threat to the group will be met in terms of collective behaviour responses and group affirmation strategies (Ellemers et al., 2002). Hence, instead of disidentifying, these group members might try to act in order to improve the group status.

Cognitive, affective and evaluative sides of social identity

According to the primary definition proposed by Tajfel, social identity is “that part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership” (1978, p. 63).

Starting from Tajfel’s (1978) classic definition of social identity, Ellemers, Kortekaas, and Ouwerkerk (1999) proposed that three components contribute to one’s social identity: “a cognitive component (a cognitive awareness of one’s membership in a social group – self-categorization), an evaluative component (a positive or negative value connotation attached to this group membership – group self-esteem), and an emotional component (a sense of emotional involvement with the group – affective commitment)”.

These authors first distinguished cognitive awareness of one's group membership per se (self-categorisation) from the extent to which one feels emotionally involved with the group in question (affective commitment). This distinction is based on empirical evidence proving that people who belong to the same social group may show differential responses, depending on the extent to which they feel affectively committed to that group (cf. Branscombe & Wann, 1994; Doosje, Ellemers, & Spears, 1995; Ellemers & Van Rijswijk, 1997).

While Ellemers et al. (1999) maintained the term ‘group commitment’ to refer to the emotional attachment towards a social group and used their own measure of this construct, other researchers (Bergami & Bagozzi, 2000) preferred the term ‘affective commitment’ to describe emotional attachment to the organization. These authors used affective commitment in Meyer and Allen’s (1996) terms (i.e., as identification with, involvement in, and emotional attachment to the organization) and used the Affective Commitment Scale to assess the emotional side of organizational identification (Bergami & Bagozzi, 2000).
Second, Ellemers et al. (1999) differentiated between the extent to which people feel emotionally involved with their group (affective commitment) from the value connotation of that particular group membership (group self-esteem). Pierce, Garner, Cummings, and Dunham (1989, p. 625) defined organization-based self-esteem as “the degree to which organizational members believe that they can satisfy their needs by participating in roles within the context of an organization”. Ellemers et al. (1999) underlined that these two dimensions do not necessarily go together, nor can they be used interchangeably. They support their position with empirical evidence revealing that, provided their identity as members of a distinct social group is sufficiently important, people may show signs of strong emotional involvement while simultaneously acknowledging or even emphasizing the negative characteristics of their group (see Mlicki & Ellemers, 1996).

In brief, Ellemers et al.’s conceptual analysis implies that self-categorization (the cognitive component) as well as affective commitment to a specific group (the emotional component) can be distinguished from group self-esteem derived from the value connotation of that particular group membership (the evaluative component). In addition to arguing for conceptual distinctions among the components of social identification, Ellemers et al. demonstrated that the components are empirically distinct and differentially affected by relative status and size of the group and the basis of group formation: relative group status affects mainly the evaluative component of social identity (group self-esteem), while relative ingroup size affects mainly the cognitive component or self-categorization aspect of ingroup identification. A consequence of these differential effects is that, if it is assumed that low group status negatively affects only the evaluative component of identification, while the level of affective commitment (the emotional component) can remain unchanged, it becomes clear that it is the combination of a threat to group self-esteem and strong affective commitment which should elicit attempts to depict the ingroup in a positive way.

Furthermore, the affective component of identification is the main determinant of in-group favouritism. Ellemers et al.’s study proves that it is a sense of emotional involvement with the group (affective commitment), rather than the cognitive (self-categorisation) or evaluative (group self-esteem) component of ingroup identification which predisposes people to show ingroup favouritism. Their argument is that self-categorization provides a cognitive basis for performance of citizenship behaviours (pictured as a measure of ingroup favouritism), but that affective commitment and group self-esteem supply the motivational force. Hence, affective commitment and group self-esteem are hypothesized to be the direct determinants of citizenship behaviours, and cognitive organizational identification is expected to indirectly affect citizenship behaviours through affective commitment and group self-esteem.

In an attempt to shed more light on the concept of organizational identity, Ellemers, Spears, and Doosje (2000) warn about the importance of keeping separate the notion of identification as a cognitive state of self-categorization from the process of comparing personal attributes with organizational attributes (in other
words, differentiating the process of identification from its product – organizational identity).

A recent theoretical review (Ellemers, De Gilder, & Haslam, 2004) advances the three psychological processes that ultimately lead to the three dimensions of organizational identity, as defined by Ellemers et al. (1999). They build on the work of Tajfel (1978) and Tajfel and Turner (1979), who specified three intra-psychological processes that underlie these group-based interactions: social categorization, social comparison and social identification. Social categorization refers to the fact that people organize social information by categorizing individuals into groups, which enables them to focus on the collective properties that are relevant for that particular situation. Social comparison is the process by which a social categorization is invested with meaning. By this process, people determine which features or behavioural norms help to define the group in a particular situation, so as to distinguish it as much as possible from other relevant comparison groups. Consequently, what defines members of the group may vary from one situation to the next, depending on the comparative context and the ways in which group members are distinct from others in that context. Social identification is the process by which information about social groups is related to the self. It refers to the inclination of a particular individual to perceive him- or herself as representative of a particular group, which makes the individual perceive characteristic group features as self-descriptive and leads him or her to adopt distinctive group norms as guidelines for his or her own behaviour. Social identification is primarily used to refer to a feeling of affective commitment to the group (i.e., the emotional component), rather than the possibility to distinguish between members of different social categories (the cognitive component) (Ellemers et al., 1999). According to Ellemers et al. (2004), the cognitive tool of social categorization and the evaluative implications of social comparison processes can elicit a person’s involvement with a particular social group (Ellemers et al., 1999): their sense of social identification.

To summarize, the correspondence between the three processes and their identity dimensions are: social categorization – group categorization, social comparison – group self-esteem, and social identification – group commitment. Furthermore, this correspondence can be related to the underlined stages of these processes, as reflected by the occurrence of the three dimensions of identity. Bergami and Bagozzi (2000) demonstrated through structural equation modelling that the primary dimension of organizational identification is the cognitive one (group self-categorization), the other two dimensions being subsequent.

This added chronological dimension in the analysis of the cognitive, emotional and evaluative sides of OI reconciles Ellemers’ and Ashforth’s positions. In this light, the difference between the two perspectives resides in the fact that Ashforth’s definition of OI stops at the primary process of self-categorization (and portrays the evaluative and emotional dimensions as consequences), while Ellemers encompasses in the same construct all three sides of identification, regardless of their chronological occurrence. In other words, while Ashforth is more preoccupied with the decantation of the basic process (like the search of a
primary number), Ellemers focuses on conceptual integration, not on artificially breaking concepts that are ecologically unitary.

METHOD

After having reviewed some of the most important theoretical advances in the study of organizational identification, we need to ask ourselves about their added value in empirical studies. Several questions need to be addressed at this point: is a one-dimensional conceptualization of OI preferable to a multi-dimensional one, for the sake of parsimony, or is it too poor? Which one of the theoretical stances presented above is more relevant for research and has a better predictive validity? Which operationalizations of OI are preferable in what kind of researches and designs? In order to offer a base-line answer to these questions, we shall proceed to an exploratory inquiry (focused mainly on the validity and fidelity) of the most widely used OI scales which are based on the theoretical perspectives presented in the theoretical section.

Respondents and procedure

Our sample comprised 142 men and 308 women, with a mean age of 37.07 years (ranging from 19 to 65). Out of these, 34.8% were single, 60.5% were married or living with someone, and 4.7% were divorced or widows. A percentage of 1% graduated only 8 classes, 48.5% were high-school graduates, 9.4% were college graduates, and 41.2% had at least a B.A. degree. The respondents came from different work fields and organizations, most of them from Transylvania. A proportion of 39.2% worked in organizations with less than 50 employees, 23.2% in organizations with 50-100 employees, 15.4% in ones with 100-200 employees, 9.6% in ones with 200-500 employees, and 12.7% in organizations with more than 500 employees. Out of these organizations, 1.1% had less than a year of existence, 14.3% had 1-5 years, 10.9% had 5-10 years, and 73.8% had more than 10 years. The respondents were in their profession for an average of 12.08 years (median = 10 years) and, on average, worked for their current employer for 9.34 years (median = 7 years).

In the following studies, we used operationalizations for two of the theoretical perspectives advanced in this paper: that of organizational identification, disidentification, ambivalent and neutral identification (cf. Kreiner), and that of the cognitive, affective and evaluative sides of social identity (cf. Ellemers). For the first one, we adapted the corresponding four scales from Mael and Ashforth (1992), and Kreiner and Ashforth’s (2004) study. Organizational identification was measured with Mael’s (unpublished, 1988; Mael & Ashforth, 1992) six-item scale (e.g., “When I talk about this organization, I usually say ‘we’ rather than ‘they’”). Disidentification, ambivalent identification, and neutral identification were measured with three corresponding scales developed by Kreiner (Kreiner, 2002; Kreiner & Ashforth, 2004). Each of these scales comprised six items. Organizational disidentification was operationalized such as to express self-
definition via a cognitive and affective separation from the employing organization – when a person distances him- or herself from it, while nonetheless remaining a member of it. A sample item is “I have tried to keep the organization I work for a secret from people I meet”. Ambivalent identification was operationalized with items measuring mixed feelings about one’s association with the organization (e.g., “I find myself being both proud and embarrassed to be a part of this organization”). Neutral identification was operationalized with items measuring one’s lack of identification and disidentification with the employing organization (e.g., “I’m pretty neutral toward the success or failure of this organization”).

For the second perspective, we employed Ellemers et al.’s (1999) Social Identification Scale, comprising of three subscales: self-categorization (e.g., “I identify with my organization”), group commitment (e.g., “I dislike being a member of this organization” – reverted item) and group self-esteem (e.g., “I think this organization has little to be proud of”).

Ellemers et al. (1999) constructed their Social Identification Scale starting from 15 items assessing the three proposed theoretical dimensions. Out of these 15 social identity items, principal component analysis revealed three interpretable factors defined by ten items, while five items either loaded on more than one factor, or did not load on any of these three factors. Therefore, only 10 items were retained for the final analyses. This revealed three factors with an Eigenvalue greater than 1, which together accounted for 65 per cent of the variance in the separate questions. The loadings of the separate questions on these three factors (after varimax rotation) clearly indicated that three subsets of questions constitute three different components (Ellemers et al., 1999).

The first factor, defined by four items reflecting the evaluative consequences of group membership, was referred to as ‘group self-esteem’. The second factor comprised three questions referring to the inclusion of the self in the group, or self-definition as a group member. Hence, it was termed ‘self-categorization’. The three questions with the highest loadings on the third factor were related to the group members' desire to continue acting as group members, and were therefore referred to as ‘commitment to the group’ (Ellemers et al., 1999).

In addition to these instruments, we also used the Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979) and the Affective, Normative and Continuance Commitment Scale (Meyer & Allen, 1991) to test the discriminant validity of the OI scales.

Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979). Mowday, Steers and Porter (1979) developed OCQ as a 15-item instrument that would tap the three aspects of their definition of commitment as: "(1) a strong belief in and acceptance of the organization's goals and values; (2) a willingness to exert considerable effort on behalf of the organization; and (3) a strong desire to maintain membership in the organization" (Mowday et al., 1979, p. 226). The response format employed a seven-point Likert scale (from ‘strongly agree’ to ‘strongly disagree’). Results are then to be summed and divided by 15 to arrive at a summary indicator of employee commitment.

Affective, normative and continuance commitment scale (Meyer & Allen, 1991). Based on their conceptualization of commitment, Meyer and Allen developed the Affective, normative and continuance commitment scale (Meyer & Allen, 1991). Several confirmatory factor analyses (McGee & Ford, 1997; Meyer, Allen, & Gelettly, 1990; Cohen, 1996) showed that the best solution for the scale is a four-factor one, reflected in: (1) the affective commitment subscale – ACS (eight items; e.g., “I would be very happy to spend the rest of my career with this organization”), (2) the normative commitment subscale – NCS (six items; e.g., “I would not leave my organization right now, because I have a sense of obligation to the people in it”), and the continuance commitment subscale – CCS, divided into two, indicating two orthogonal factors, (3) high sacrifice (four items; e.g., “Too much in my life would be disrupted if I decided I wanted to leave my organization now”), and (4) lack of alternatives (four items; e.g., “I feel that I have too few options to consider leaving this organization”).

In adapting the instruments, we proceeded in the classical manner of translation and retroversion. The translation of instruments was performed by two psychologists with linguistic competence certificates. The two of them translated independently, and a third one chose and adapted the drafts. The final version was then submitted to retroversion by a fourth person and was afterwards compared to the original scales. A preliminary pilot study was then conducted on five respondents, to ensure the full and accurate understanding of the items. The choice of words was then changed accordingly, in order to be easily understood by a broad range of respondents. The scales were then applied to the respondents in the final sample, in a questionnaire that comprised all the mentioned scales, the outcome variables and the identification scales.

RESULTS AND DISCUSSIONS

Construct validity. In order to investigate the adequacy of our data for a factor analysis, we tested the sample homogeneity using the Kaiser-Meyer-Olkin measure for sampling adequacy, the multicolinearity of the manifest variables using the determinant of the correlation matrix, and Bartlett’s test of sphericity. The results are presented in Table 1. All the aforementioned indices proved that factor analysis is adequate for our data and sample.

Table 1
Descriptive statistics for EFA for OI scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>KMO</th>
<th>Determin. of correl. matrix</th>
<th>Bartlett test of sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational identification</td>
<td>3.33</td>
<td>1.09</td>
<td>.87</td>
<td>5.409 E-02</td>
<td>1205.24 (p&lt;0.0001)</td>
</tr>
<tr>
<td>Organizational disidentification</td>
<td>1.63</td>
<td>0.94</td>
<td>.89</td>
<td>2.406 E-02</td>
<td>1663.02 (p&lt;0.0001)</td>
</tr>
<tr>
<td>Ambivalent identification</td>
<td>2.00</td>
<td>1.00</td>
<td>.88</td>
<td>2.685 E-02</td>
<td>1606.82 (p&lt;0.0001)</td>
</tr>
<tr>
<td>Group identification (Ellemers)</td>
<td>5.10</td>
<td>1.24</td>
<td>.85</td>
<td>.10</td>
<td>1943.92 (p&lt;0.0001)</td>
</tr>
</tbody>
</table>
We used the PCA extraction method for all the questionnaires. We opted for Quartimax rotation for the one-dimensional scales, and Direct oblimin rotation for the multidimensional ones (since their factors are supposedly intercorrelated).

Table 2

<table>
<thead>
<tr>
<th>EFA and psychometric indices for OI scales</th>
<th>No. of factors</th>
<th>Items loading on factors</th>
<th>Alpha Cronbach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational identification (OIS)</td>
<td>1 (60.64)</td>
<td>.59-.88</td>
<td>.85</td>
</tr>
<tr>
<td>Organizational disidentification (OD)</td>
<td>1 (68.34%)</td>
<td>.74-.90</td>
<td>.90</td>
</tr>
<tr>
<td>Ambivalent identification (AI)</td>
<td>1 (67.63%)</td>
<td>.77-.88</td>
<td>.90</td>
</tr>
<tr>
<td>Group identification (Ellemers)</td>
<td>2 F (62.29)</td>
<td>.57-.87</td>
<td>.85</td>
</tr>
</tbody>
</table>

As presented in Table 2, Mael and Ashforth’s organizational identification scale, as well as the three scales proposed by Kreiner and Ashforth to assess disidentification, neutral and ambivalent identification, offered satisfactory indices for the expected one-factorial solutions, with no problematic items. This was not the case, though, for Ellemers three-faceted scale of Social Identification. Our factor analysis did not reveal the same clarity of item loadings on the three theoretical dimensions proposed by the authors. Principal component analysis led to a two-factor solution, explaining 62.29\% of the variation. The first scale (social categorization) indeed received consistent empirical support, although item 4 loaded on this factor as well, in spite of its representing a commitment facet. As predicted, items 7, 9, and 10 loaded on the same factor, on a different scale (possibly representing group self-esteem, but also clustering all reversed items). Items 5, 6, and 8 did not clearly represent either factor (neither in the two-factor solution, nor in a forced three-factor one), loading on both (respectively all three) factors (see Table 4, Appendix).

Based on this preliminary analysis, we suggest that the Self-Categorization and the Group Self-Esteem scales can be kept for further analysis, while the Group Commitment scale should be replaced by a more accurate measure of this dimension. Our suggestion is backed by Bergami and Bagozzi (2000), who, starting as well from Ellemers et al.’s (1999) three-faceted conceptualization, only kept the Self-Categorization scale in their research, using different instruments for the other two dimensions (namely, the ACS for group commitment, and an adapted self-esteem measure for group self-esteem). We suggest, however, keeping the group self-esteem scale as well, instead of adapting yet another instrument, for the sake of keeping as close as possible to the original researches we base ours on. Nevertheless, we shall analyze more in depth this scale and see, on the one hand, if it is fit for our purpose, and on the other, whether we can use it in its original form (given the loading of item 8). Our first option would be to keep it unchanged, given the fact that all other three items are reverted ones.
Convergent and discriminant validity of OI scales. In order to further test the operationalization of organizational identification, we performed an exploratory factor analysis on the items of Mael’s Organizational Identification Scale and Ellemers’ Social Identification Scale, taken together. Considering the satisfactory descriptive indices (Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .900, Bartlett's test of sphericity = 3158.187, p.000), a PCA extraction with oblimin rotation was performed. Both the Scree Plot and the Eigenvalues analysis revealed an optimal three-factor solution (see Table 5, Appendix), covering 61.52% of the variance.

As one can notice from the inspection of Table 5 (Appendix) and Figure 1, all OIS items and Social Categorization items load on the same factor. This is in line with the argument we have stated earlier, that the core difference between Ashforth and Mael’s and Ellemers et al.’s conceptualization of organizational identification is not as radical as several authors pointed out, but relies mainly on the moment of analysis. As we have specified, based on the work of Bergami and Bagozzi (2000) and of Ellemers et al. (2004), social categorization is the identification process that occurs first. Hence, the conclusion that we can draw at theoretical level from this first study is that Ashforth and Mael’s conceptualization of OI as mainly self-categorization does not exclude the other dimensions of OI proposed by Ellemers et al., but merely stops at the primary dimension of a more complex process.
As one can notice in Table 6 in the Appendix, the patterns of correlations between OI and OC scales are the expected ones. Both Mael’s (OIS) and Ellemers’ scales have medium to high correlations with all commitment scales (averaging around .60). Still, these correlations are not high enough to justify concept overlap. Scales that measure the same concept (such as OCQ and ACS) indicate much higher correlations ($r = .76$). The negative aspects of identification (i.e., disidentification, ambivalent and neutral identification) have significant negative correlations with all the other included scales, except those for continuance commitment. Albeit still negative, the correlations between them are not significant. In fact, considering their definitions and sources, we might have expected a positive correlation between these constructs. Out of all commitment forms, continuance commitment seems to be the least related to identification, regardless of its form or dimension. This is in line with the theory behind the construct, which states it to be a form of link to the organization, stemming from other sources than a real attachment towards it. Nevertheless, out of the general pattern of correlations (most of them significant), we can assume a global construct behind these disparate concepts, construct that we may call psychological attachment towards the organization (cf. Van Dick & Wagner, 2002).

The affective side of identification vs. affective commitment. Our last analysis revolves around a particularly debated facet of identification: the affective one. Although some authors differentiate between the emotional side of identification and affective commitment (e.g., Johnson & Morgeson, 2005; Harris & Cameron, 2005), it seems sensible to assume a close relationship between affective commitment, as used in the organizational literature, and the affective component of identification as proposed by SIT (Van Dick & Wagner, 2002). Yet, in practice, an item analysis of the instruments that assess these two constructs does not reflect this distinction. For instance, Ellemers’ scale of group commitment (which supposedly assesses the emotional side of identification) comprises three items that are very similar to the ones in the ACS. Table 3 presents Ellemers’ group commitment scale and the corresponding items in the ACS. Furthermore, the rest of the items in the ACS target aspects that are incorporated in the definitions of emotional/affective identification, as proposed by authors that distinguish among this type of identification and commitment. We shall illustrate this with Johnson and Morgeson’s definition of affective identification (2005), since we found it to be the most detailed one, and we shall present in parentheses the corresponding ACS items. Johnson and Morgeson define affective identification as “the feelings individuals experience about themselves in relation to the social referent and the value they place on that social identity (ACS 6. I do not feel ‘emotionally attached’ to this organization; ACS 7. This organization has a great deal of personal meaning for me’). They also state that “affective identification is associated with positive feelings about one’s membership, including pride (ACS 2. I enjoy discussing my organization with people outside it), enthusiasm, and a sense of affiliation or “belongingness” with others (ACS 5. I do not feel like ‘part of the

family’ at my organization; ACS 8. I do not feel a strong sense of belonging to my organization)” (Johnson & Morgenson, 2005, p.2).

Table 3

<table>
<thead>
<tr>
<th>Correspondence of Group Commitment Scale - Affective Commitment Scale items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I would like to continue working with this organization.</td>
</tr>
<tr>
<td>2. I dislike being a member of this organization.</td>
</tr>
<tr>
<td>3. I would rather belong to another organization.</td>
</tr>
<tr>
<td>4. I think that I could easily become as attached to another organization as I am to this one.</td>
</tr>
<tr>
<td>5. I do not feel emotionally attached to this organization.</td>
</tr>
</tbody>
</table>

Furthermore, a confirmatory factor analysis of the Group Commitment Scale and the Affective Commitment Scale reveals almost the same results for a one- or for a two-factorial solution. For the unidimensional model, the obtained coefficients are: Chi-square = 346.981 (0.000); NFI: 0.971, CFI: 0.975; RMSEA: 0.123; PNFI: 0.648, PCFI: 0.650. For the two-factorial one, the coefficients are: Chi-square = 303.443 (0.000); NFI: 0.975, CFI: 0.978; RMSEA: 0.115; PNFI: 0.635, PCFI: 0.637.

Based on these content and quantitative analyses, it is not unreasonably to propose the use of ACS in testing Ellemers’ model of identification, instead of her original scale. Also, we shall further on use Mael’s OI scale instead of the self-categorization component, the factor analysis presented. Supporting this replacement as well.

To test these instrument proposals, we performed a confirmatory factor analysis for a one- and a three-dimensional model of identification. The unidimensional model assumed that self-categorization (measured with the Mael scale), affective identification/group commitment (measured with Meyer & Allen’s Affective Commitment Scale) and the evaluative side of identification/group self-esteem (measured with Ellemers’ Group Self-Esteem Scale) are better represented by a single factor – similar to Van Dick and Wagner’s proposed psychological attachment construct. The three-dimensional model differentiates even at instrument-level between the three sides of identification, as proposed by several authors (Bergami & Bagozzi, 2000; Ellemers et al., 1999; Harris & Cameron, 2005), based on Tajfel’s primary definitions of social identity.

The three-factor model presented far better fit indices (Chi-square = 495.445 (0.000); NFI: 0.860, CFI: 0.875; RMSEA: 0.078; GFI: 0.882, AGFI: 0.848, PNFI: 0.742, PCFI: 0.770) than the unidimensional one (Chi-square = 1090.338 (0.000); NFI: 0.691, CFI: 0.717; RMSEA: 0.125; GFI: 0.739, AGFI: 0.669, PNFI: 0.610, PCFI: 0.633). As one can also notice from the visual inspection of the component plots resulted in an exploratory factor analysis (Figure 2), the items of the three scales are grouped on clearly differentiated dimensions.
Our results are in line with previous conceptualizations and measurements proposed in the organizational identification literature (Bergami & Bagozzi, 2000; Ellemers et al., 2004). Therefore, these results offer solid ground to proceed with the testing of Ellemers’ model on the one hand, and to operationalize it through Mael’s scale for cognitive identification, ACS for affective identification, and Group Self-Esteem for evaluative identification, on the other hand.

**CONCLUSIONS**

Several conclusions can be drawn as a result of our analyses. On the one hand, we rally to the perspective that the debate between the one-dimensional vs. the three-dimensional conceptualization of identification can be solved by a mediational model (Bergami & Bagozzi, 2000; Ellemers et al., 2004). In such a model, the cognitive side of identification is the primary process triggering then affective and self-evaluative subsequent processes. On the other hand, stopping at the cognitive side of identification alone deprives the concept of identification of a large part of its explanatory power. Therefore, the other two sides of identification, as postulated from the first SIT writings, should be taken into account in analyses. Most studies so far (see meta-analyses by Riketta, 2005) support this conclusion by proving that it is the affective side of organizational attachment that has the largest impact on behavioural outcomes.
With respect to the instruments proposed to evaluate the two OI models we discussed, our proposal is that, starting from the mentioned mediational model, one can build a combination of instruments using existing scales. We have tested and found strong evidence for the combination of Mael’s scale for cognitive identification (Organizational Identification Scale-Mael & Ashforth, 1992), Affective Commitment Scale (the corresponding scale from Meyer & Allen’s 1991 Affective, Normative and Continuance Commitment Scale) for affective identification, and Group Self-Esteem (Ellemers et al., 1999) for evaluative identification.

REFERENCES


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APPENDIX

Table 4
Structure Matrix for the Group Identification Scale (Ellemers et al., 1999)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Forced three-factor solution</th>
<th>Initial two-factor solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>7_1</td>
<td>.855</td>
<td>.854</td>
</tr>
<tr>
<td>7_2</td>
<td>.756</td>
<td>.745</td>
</tr>
<tr>
<td>7_3</td>
<td>.879</td>
<td>.876</td>
</tr>
<tr>
<td>7_4</td>
<td>.773</td>
<td>.780</td>
</tr>
<tr>
<td>7_5</td>
<td></td>
<td>.951</td>
</tr>
<tr>
<td>7_6</td>
<td>.637</td>
<td>.651</td>
</tr>
<tr>
<td>7_7</td>
<td>.836</td>
<td>.423</td>
</tr>
<tr>
<td>7_8</td>
<td>.674</td>
<td>.527</td>
</tr>
<tr>
<td>7_9</td>
<td>.781</td>
<td>.767</td>
</tr>
<tr>
<td>7_10</td>
<td>.828</td>
<td>.834</td>
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</table>

Table 5
Structure Matrix for Organizational Identification Scale and Group Identification Scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td>OIS 1</td>
<td>.598</td>
<td>- .376</td>
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</tr>
<tr>
<td>OIS 2</td>
<td>.682</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OIS 3</td>
<td>.825</td>
<td>- .481</td>
<td></td>
</tr>
<tr>
<td>OIS 4</td>
<td>.860</td>
<td>- .521</td>
<td></td>
</tr>
<tr>
<td>OIS 5</td>
<td>.877</td>
<td>- .528</td>
<td></td>
</tr>
<tr>
<td>OIS 6</td>
<td>.777</td>
<td>- .395</td>
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</tr>
<tr>
<td>Scat 1</td>
<td>.567</td>
<td>- .849</td>
<td></td>
</tr>
<tr>
<td>Scat 2</td>
<td>.366</td>
<td>- .803</td>
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</tr>
<tr>
<td>Scat 3</td>
<td>.549</td>
<td>- .876</td>
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<tr>
<td>GrCommit 1</td>
<td>.510</td>
<td>.380</td>
<td>- .740</td>
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<td>GrCommit 2</td>
<td>.520</td>
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<td>GrCommit 3</td>
<td>.438</td>
<td>.692</td>
<td>- .592</td>
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<tr>
<td>GrSE 1</td>
<td>.814</td>
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<tr>
<td>GrSE 2</td>
<td>.504</td>
<td>.533</td>
<td>- .605</td>
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<tr>
<td>GrSE 3</td>
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<tr>
<td>GrSE 4</td>
<td>.832</td>
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</table>

Table 6

*Intercorrelations for the OI – OC scales*

<table>
<thead>
<tr>
<th>M</th>
<th>SD</th>
<th>QCQ</th>
<th>SC</th>
<th>GC</th>
<th>GSE</th>
<th>AMBIVID</th>
<th>NEUTID</th>
<th>DISIFD</th>
<th>IDFORG</th>
<th>ACS</th>
<th>NCS</th>
<th>CCS</th>
<th>CCS_HS</th>
<th>CCS_L</th>
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<tbody>
<tr>
<td>OCQ</td>
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<td></td>
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<tr>
<td></td>
<td>4.79</td>
<td>1.03</td>
<td>1</td>
<td>.573</td>
<td>.606</td>
<td>.492</td>
<td>-.406</td>
<td>-.234</td>
<td>-.214</td>
<td>.547</td>
<td>.766</td>
<td>.635</td>
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<td>.308</td>
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<tr>
<td>Social</td>
<td>4.44</td>
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<td>-.276</td>
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<td>-.162</td>
<td>-.158</td>
<td>.574</td>
<td>.554</td>
<td>.470</td>
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<td>categorization</td>
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<tr>
<td>Group commitment</td>
<td>5.23</td>
<td>1.53</td>
<td>1</td>
<td>.614</td>
<td>-.517</td>
<td>-.260</td>
<td>-.416</td>
<td>.457</td>
<td>.598</td>
<td>.498</td>
<td>.307</td>
<td>.302</td>
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<tr>
<td>Group self-esteem</td>
<td>5.52</td>
<td>1.43</td>
<td>1</td>
<td>-.502</td>
<td>-.437</td>
<td>-.485</td>
<td>.364</td>
<td>.508</td>
<td>.449</td>
<td>.247</td>
<td>.252</td>
<td>.158</td>
<td></td>
<td></td>
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<tr>
<td>Ambivalent identification</td>
<td>2.00</td>
<td>1.00</td>
<td>1</td>
<td>.494</td>
<td>.689</td>
<td>-.313</td>
<td>-.370</td>
<td>-.295</td>
<td>-.103</td>
<td>-.088</td>
<td>-.085</td>
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<td>Neutral identification</td>
<td>2.23</td>
<td>1.09</td>
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<td>.479</td>
<td>-.260</td>
<td>-.270</td>
<td>-.206</td>
<td>-.06</td>
<td>-.136</td>
<td>.023</td>
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<tr>
<td>Disidentification</td>
<td>1.63</td>
<td>0.94</td>
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<td>-.253</td>
<td>-.184</td>
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<td>-.120</td>
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