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Abstract

Social identity and self-categorization theory are the predominant theories in the literature on identity and identification in organizational contexts. Both theories were originally built on the motive of positive self-esteem, but some authors treat uncertainty reduction about the self as a second key motive. In this article, we analyze, extent, and flesh out the relationship between both motives for self-categorization processes. We develop the theory that the pursuit of self-esteem is at least related to, but often even contingent on, self-certainty, and that both motives differ substantially in terms of their conditions for activation and motivational consequences. We also show that this theory helps to reconcile recent opposing findings on relations- and task-oriented team diversity.

Keywords: social identity; uncertainty reduction hypothesis; self-esteem hypothesis; team diversity

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1. Introduction

Social identity and self-categorization theory are the predominant theories in the literature on identity and identification in organizational contexts (Sluss and Ashforth, 2007). Both theories focus on an individual's need for positive self-esteem to explain social behavior in intra- and intergroup contexts (Tajfel, 1978; Turner et al. 1987). Studies on this so-called self-esteem hypothesis, however, have largely produced inconsistent and unreliable empirical evidence (e.g., Abrams and Hogg, 1988; Hogg and Abrams, 1990, 1993; Rubin and Hewstone, 1998). This led Hogg and colleagues (Hogg and Abrams, 1993; Hogg and Terry, 2000) to propose social identity processes to be influenced by a second fundamental motive for self-categorization, namely the individual's need for uncertainty reduction about the self. This uncertainty relates to "one's perceptions, attitudes, feelings, and behaviors and, ultimately, one's self-concept and place within the social world" (p. 124; Hogg and Terry, 2000).

Unfortunately, most organizational researchers seem to have ignored this promising approach.¹ To date, there is no scientific consensus on the relation between both motives. Instead, recent research has rather shifted its focus on a multi-level concept of identification, combining collective, relational, and individual identity components (Sluss and Ashforth, 2007; Johnson, Chang and Yang, 2010). Beyond doubt, this development in identity formation theory adds to the theory's explanatory power for observable behavioral patterns in organizations. It seems to us, though, that this extended view is inherently very problematic. In particular, we are concerned that it might eventually shift researchers' attention away from necessary individual improvements of the theory's three level components towards a noncritical adoption of the extended theory. The more the latter becomes axiomatic practice, the harder it becomes to clarify the underlying relation between motives for identity formation

¹ A keyword search on "self-categorization" in EBSCOhost on July 30, 2010 produced four and two hits in AMR, and AMJ, respectively, since the appearance of Hogg and Terry's work in 2000. Among these, two mention (one merely in a footnote) the motive for uncertainty reduction for self-categorization processes, but do not pursue it further.

on each level. Certainly, a lack of clarity on any level cannot be resolved by mere aggregation. Therefore, we contend that much remains to be gained from an improved understanding of identity theories in general, and social identity and self-categorization theory in particular. The need for further theoretical assessments of phenomena associated with the latter two was only recently emphasized by Joshi and Roh (2009) who performed a meta-analysis of team-diversity related studies and pointed out that as explanation of their findings “current applications of social identity or social categorization theory in diversity research are insufficient” (p.620). In this paper, we address this need by offering the theory that the pursuit of self-esteem in most socially structured environments is contingent on self-certainty, and that both motives differ substantially in terms of their conditions for activation and motivational consequences.

Our theory provides further development of Hogg and Terry’s (2000) theory, which remains inconclusive about the relationship between the motives of self-esteem and uncertainty reduction. On the one hand, they consider both to be “probably independent motivations for social identity processes”, while on the other hand they acknowledge that “uncertainty reduction may be more fundamentally adaptive because it constructs a self-concept that defines who we are and prescribes what we should perceive, think, feel, and do” (p. 124). We extend extant theory by incorporating significant theoretical developments from predominately psychological research on the need to reduce uncertainty about one’s social identity. Specifically, and in contrast to scholars with a compliant notion, we are the first to provide a substantiated and comprehensive discussion on the relationship between both motives and derive testable implications for organizational contexts on individual, team, and organizational level. Thereby, we also address John’s (2006) call for more contextualized forms of organizational research.

The set of theoretical propositions we develop contributes to our understanding of social identity and self-categorization processes that social identity theory in general is incapable of. For the relationship between team diversity and performance, for example, the propositions are able to reconcile opposing findings on relations- and task-oriented team diversity (Joshi and Roh, 2009). Finally, our extension to social identity and self-categorization theory is fundamental in scope, which broadens its relevance to both identity formation theory and management practice.

The remainder of this paper is structured as follows. In the next section, we discuss the classical concepts of social identity theory as well as the self-esteem and uncertainty reduction hypotheses as underlying motives for social identity processes. Section 3 provides an in-depth discussion on the relation between both motives and establishes that they need to be conceptualized as sequentially related. A comprehensive set of empirically testable theoretical predications is presented. Section 4 links the sequential nature of the motives to previous work in the area of team diversity management. Section 5 concludes with a general discussion of our approach.

2. Social Identity and Self-Categorization Theory

According to social identity theory, the core human need for self-esteem motivates individuals to affiliate with groups that are distinctive and positively valued (Tajfel, 1978). Tajfel assumed that it is through social comparison between the in-group and contextually salient out-groups that individuals achieve an understanding of the relative status and value of their in-group. The characteristics of a group achieve most of their significance in relation to perceived differences from the out-group and the corresponding value connotations (Tajfel, 1978). Thus, social comparison depicts the means, which allows for an assessment of the in-group's social position and status. Given the notion that identities are relational and

comparative, perceived group distinctiveness can change with the comparison situation. For example, when psychology students were asked to compare themselves to art students, they viewed intelligence-related attributes as characteristic of their group, but in comparison to physics students, they considered creativity-related attributes as more characteristic of their group (Spears, Doosje, and Ellemers, 1997; Haslam and Ellemers, 2005).

In the process of social identification individuals relate a group membership to their self-conception (Turner, 1982). They perceive representative group characteristics as self-descriptive and vicariously partake in the success and status of the group. The degree of identification may vary across different social groups and situations.

Self-categorization theory, which constitutes a powerful elaboration of social identity theory, specifies more thoroughly how social categorization depersonalizes the perception of self and other individuals (Turner, 1985, Turner et al., 1987). In the process of depersonalization the individual cognitively abstracts from idiosyncrasies and assimilates self to the contextually relevant in-group prototype. Depersonalization, the basic process underlying group phenomena, does not have the negative connotations of “deindividuation” or “dehumanization”. The adaption to prototypical beliefs, attitudes, feelings, and behavior aligns the in-group members’ self-concepts, eventually producing, for instance, shared norms, cohesion, cooperation, and stereotyping. It is important to note that social identity theory and self-categorization theory are, in fact, different (Turner, 1999). Social identity theory was developed to explain a range of problems in intergroup relations whereas self-categorization theory shows how uniform behavior can result from the internalization of consensual categorical attributes by in-group members (Turner et al., 1987). Self-categorization theory clearly complements the early ideas of social identity theory because it details the cognitive processes that generate social identity phenomena. Social categorization of self refers to a transformation in self-concept and the basis of perception of others. In the process of

depersonalization the individual cognitively abstracts from idiosyncrasies and assimilates self to the contextually relevant in-group prototype.

Generally, the principle of social categorization can be explained by the limited information processing capability of the human cognitive system. Social categories reduce the informational complexity of the social environment and provide a systematic means for defining and classifying individuals based on a polar distinction between the in-group and the contextually salient out-group. In a cognitive segmentation and ordering process perceived similarities of the target group members are accentuated and abstracted from the members' noisy individual characteristics (Turner, 1985). It is interesting to note that, while social categories are defined by a distinctive set of group characteristics, cognitive representations of social groups are often based on "representative" members who best embody the group or on abstract ideal type (Hogg and Terry, 2000). The benefits of social categorization, such as saved cognitive resources and an increased information processing speed, typically overcompensate the costs of such assignments' reduced reliability (Hamilton, 1981). This is particularly true if the longevity of group memberships is high and the group boundary permeability is low, which makes the application of self-categories more likely (Ellemers, 1993).

Empirical evidence has shown that social categorization can lead to strong in-group favoritism (Brewer, 2000; Hewstone, Rubin, and Willis, 2002). Group members are prone to consider their own group as superior to other groups, even when there are few or no obvious extrinsic causes for this bias. Some studies show that the mere perception of belonging to two distinct groups is sufficient to elicit discriminatory responses against the out-group. Such biased intergroup evaluations can be understood as a result of the theory's hypothesized need for self-esteem via positive distinctiveness (Brown, 2000).

The Uncertainty Reduction Hypothesis

The assumed core motivation for self-esteem implies that low self-esteem motivates social identity processes like social identification and intergroup behavior, which are most promising to be self-esteem enhancing (Abrams and Hogg, 1988). However, research on the self-esteem hypothesis reveals inconsistent and unreliable findings, indicating some need for conceptual improvements (e.g., Abrams and Hogg, 1988; Hogg and Abrams, 1990, 1993; Rubin and Hewstone, 1998). The more recent focus on social categorization processes, in particular, has initiated a discussion on another core human motivation for social identity beside the desire for self-esteem. This elaboration can be subsumed under the term *uncertainty reduction hypothesis*. The basic assumption is that individuals attempt to gain certainty about their place within the social world (Hogg and Abrams, 1993; Hogg and Mullin, 1999; Hogg and Terry, 2000), and implicitly revisits Festinger's (1954) original belief that there is a "motivation to know that one's opinions are correct and to know precisely what one is and is not capable of doing" (p. 217). Stable and predictable social relations provide the means to mitigate the perceived uncertainty, which is inherent in human existence.²

Uncertainty about self must be distinguished from environmental uncertainty as a contextual variable. However, it seems reasonable to assume that environmental uncertainty has an impact on uncertainty about self. When there is a high degree of environmental uncertainty, a variety of meanings can be attached to social stimuli and interpretations become more discretionary. Moreover, uncertainty about self may vary in terms of its impact, ranging from largely inconsequential questions, such as "Do my colleagues like my tie?" to deeply troubling, existential questions, such as "What happens if I lose my job?".³

² Uncertainty should be distinguished from the related but distinct concept of ambiguity. Whereas ambiguity implies that the alternatives are known, uncertainty is somewhat more encompassing and implies that the alternatives are potentially unknown or even unknowable (Clampitt, DeKoch, and Cashman, 1999).

³ In the psychological literature, there seems to be a consensus that individual tolerance for uncertainty is no stable personality trait but more of a cognitive and/or emotional orientation, which is responsive to and

Self-conceptually important uncertainties can hardly be reduced by the acquisition of knowledge but rather by self-conceptual reorientation and the self-categorization process is ideally suited to this. Building on our earlier discussion, self-categorization reduces the subjectively perceived uncertainty because it provides consensual alignment and mutual confirmation of in-group members' self-conceptually relevant beliefs, attitudes, and behavior. Simultaneously, the purported distinction from salient out-groups helps in-group members to define a clear prototype, which describes and prescribes how to behave and what to expect from the social environment (Hogg, 2000). Thus, the uncertainty reduction hypothesis generally predicts that uncertainty motivates self-categorization and psychological group formation (Hogg and Abrams, 1993; Hogg and Mullin, 1999). Specifically, individuals will be more likely to identify with an available self-inclusive social category as their subjectively perceived uncertainty increases.⁴

3. The Relationship Between the Need for Self-Esteem and the Need for Uncertainty Reduction

If it is safe to say that people do not only like to be certain about their place in the social environment but also to feel good about themselves, the question emerges how both motives are related in social identity contexts. So far, there is no scientific consensus. While a number of commentaries imply that uncertainty reduction and the maintenance of stability may, under

shaped by past experiences and social contexts (Furnham, 1995). Independent of individual differences in tolerance, uncertainty is generally perceived as cognitively and emotionally challenging because it creates a feeling of discomfort and weakness. Besides, researchers have consistently reported that tolerance for uncertainty does not vary systematically on the basis of gender, age, or education level (Furnham, 1995).

⁴ Additional support for this view comes from Hofstede's work on cultural differences (1980, 1983, 1984). He argues that cultures differ in terms of their influence on uncertainty avoidance in people. For instance, socio-cultural rules, rituals, customs, educational standards, religious orientations, and technologies are cultural forces, which shape individual's responses to uncertainty. He finds individuals' tendency to reduce uncertainty by focusing on planning and the creation of stability to be significantly correlated with the tendency to self-define by the depersonalized characteristics of the in-group rather than in terms of personal attributes and achievements. Speculating on the causality, he also reasons that uncertainty promotes collectivism as it "drives" people to join groups.

some circumstances, be a stronger group motive than self-enhancement (e.g., Brown, Collins, and Schmidt, 1988; Baumgardner, 1990; Campbell, 1990; Banaji and Prentice, 1994; Jost and Banaji, 1994), others contend that self-esteem is pursued only when a certain self-concept is secured (e.g., Sedikides and Strube, 1995; Taylor, Neter, and Wayment, 1995). Yet, a third group of researchers argues that the desire for uncertainty reduction and the desire for self-esteem are unrelated and that it depends on the social context which motive determines social identity processes (e.g., Hogg and Terry, 2000). In contrast to these scholars, empirical researchers in organizational contexts largely content themselves with an exclusive focus on the self-esteem hypothesis (e.g., Chattopadhyay, Tluchowska, and George, 2004).

Intergroup comparison, reflecting a group's relative position on some evaluative dimension, can reduce uncertainty but not necessarily in a positive way. Only if a group's subjective position in relation to relevant comparison groups is high, it positively contributes to the self-esteem. In this case both core needs are satisfied simultaneously. Not less often, however, the evaluative outcome is negative. Tajfel and Turner (1979) describe different coping strategies, which might be applied by members of socially devalued groups to maintain self-esteem. These include the individual's disidentification and subsequent attempt to affiliate with groups that are associated with more favorable expectations, various "socially creative" ways of modifying comparative dimensions or referential out-groups, and the more collective approach of challenging the out-group's legitimization to its superior position. Doosje et al. (1995) add that individuals may mitigate the effects of perceived inferiority by intragroup comparisons with in-group members, who are less well off. Blanz (1999) suggests that group members may resort to absolute standards or comparisons over time if these options provide more positivity. The author also proposes re-categorization as a means to restore the positivity of a social identity. In-group members can either give up their social identity and self-categorize as belonging to a superior out-group or they split their group into smaller,

hierarchically differentiated subgroups in order to self-categorize into one, which is comparatively superior. Noteworthy, there is empirical evidence for the psychological reality of all these self-esteem maintenance strategies (see, Blanz, 1999; Brown and Haeger, 1999, Brown and Middendorf, 1996; Doosje et al., 1999; Ellemers, 1993; Mummendey et al. 1999).

While these findings certainly have their merits, they neglect the importance of the social context as an integral feature of social identity phenomena. In organizational settings the social context is largely determined by a formalized social structure, which constrains not only the opportunities for socially creative re-evaluation processes but also influences organizational behavior in general (Johns, 2006). Kelley et al. (2003) argue that these more interpersonal aspects of social context are grounded in the degree of interdependence of outcomes, degree of information sharing, and the sequential ordering of interaction episodes. The capacity of a specific context to constrain human agency is contingent on its so-called situational strength. As defined by Meyer, Dalal, and Hermida (2010), situational strength refers to “implicit or explicit cues provided by external entities regarding the desirability of potential behaviors” (p. 122). Thus, it can be considered antagonistic to the degree of autonomy given in a certain social situation. Strong situations with obvious norms, rigid roles, and a narrowly defined distribution of competences tend to restrict the expression of individual differences. Bureaucracies, for instance, deliberately uphold a high situational strength. They emphasize the importance of predictable behavior and individual accountability to control the activities of their organizational members (March and Simon, 1958). In terms of the motives for social identity processes, it seems reasonable that individuals face a trade-off in strong situations: on the one hand, situational strength restricts the opportunities to collectively increase the in-group’s positivity as well as to individually dissociate from the present group and to associate with a socially more attractive group. On

the other hand, situational strength may reduce perceived uncertainty as it dictates both intra- and inter-group relations and provides behavioural guidance. This implies that situational strength constrains the pursuit of self-esteem to a substantially larger extent than the need for uncertainty reduction. In the following, we dwell on the underlying mechanisms in more detail.

First, the extent to which a group membership can help reduce subjective uncertainty about the place in the social environment depends on the perception of the group as a coherent entity - a property that social psychologists refer to as entitativity (Campbell, 1958).

Entitativity increases the predictability of self-conceptually relevant interaction processes within the group. However, when in-group entitativity is high, it is *ceteris paribus* more difficult for individuals to move from one social group into a more favourable one. Similarly, the opportunity to affiliate with an individually more favourable out-group is contingent on the target group's degree of entitativity. Members of socially attractive groups are inclined to actively obstruct the entry of interested out-group members. In order to keep their in-group exclusive and to prevent distinct group characteristics from diffusion, required criteria to gain entry into the superior group may be either objectively immutable (e.g. race, gender, nationality) or difficult to accomplish by means of own effort (e.g., educational attainment, professional experience). The emotional value attached to a group membership may stem to a large extent from its perceived exclusiveness. In organizational contexts, status, and power differentials are usually preserved by officially assigned competences and obligations. Sometimes the size of particular organizational groups is also formally defined (e.g., the board of directors, a soccer team). Whereas a low degree of group permeability reduces uncertainty that stems from both intra- and inter-group relationships, stable, and clearly delineated intergroup relations in organizations typically reduce the opportunities for upward social mobility.

Proposition 1: Group entitativity reduces perceived uncertainty but constrains the opportunities to enhance self-esteem for members of socially less valued groups.

Second, the process of self-categorization is based on perceived similarities. Organisations typically accentuate and publicly display similarities of their hierarchically differentiated social groups by a variety of signals (e.g., dress codes and uniforms, the assignment of particularly located offices and parking lots). These mechanisms reduce uncertainty by implicitly communicating the characteristics of different intergroup relations and the consequential behavioural expectations. In most cases individuals cannot arbitrarily feign these signals in order to gain entry into a more attractive group. Even if similarities could be feigned, they would be self-deceptive and eventually pointless to boost self-esteem.⁵

Generally, the opportunity to affiliate with an individually more favourable social group is contingent on the degree to which the individual's and target group members' consistently perceive critical characteristics as similar.

Proposition 2: The intentional use of signals to accentuate and publicly display group belongingness within an organization reduces uncertainty but constrains the opportunities to enhance self-esteem.

A third limitation to the individual choice of attractive groups refers to peer pressure and its underlying value system (Kandel and Lazear, 1992). Informal intragroup sanctions for any

⁵ Taylor and Brown (1988) have shown that certain illusions, such as unrealistically positive self-evaluations, exaggerated perceptions of control or mastery, and unrealistic optimism can be beneficial to mental health. We emphasize that self-deception in our context is conceptually very different. Instead of focusing on the individual, we refer to generalized social motives that extend to embrace the group, its prototype, and its members, because self and group are psychologically fused and because the group and its members validate each others cognitions and behaviors (Hogg and Abrams, 1993). Therefore, it feigned similarity is less likely to be sustainable as a means to improve self-esteem.

attempt to move into another group may be so powerful, that individuals feel impotent to leave their unfavorable group. The threat of being considered a “traitor” tends to prevent the creation of cognitive alternatives to the current group membership in order to preserve the status quo. To do so, groups are even willing to bear a cost. Tajfel and Turner (1986), for instance, show that groups forego absolute profit maximization to assert social dominance over and an out-group.

Proposition 3: Social pressure created by fellow in-group members intends to keep uncertainty low but constrains the opportunity to enhance-self esteem.

A fourth limitation to the pursuit of positive self-enhancement that has previously been neglected by researchers resides with the specificity of social identities. Social identities are at least partially group-specific to the extent that interaction is mainly interpersonal, e.g., due to the proximity, similarity, and task interdependence between in-group members. Even if individuals manage to gain entry into their target group, the attainment of a full-value group member status usually requires more than a discrete either-or-choice. In most contexts new members must establish or learn the established policies, general role expectations, behavioral norms, power structures, and so forth (Ashforth, 1985). This learning process is generally termed socialization. Moreover, they must learn to interpret fellow members’ verbal and nonverbal responses in situated social interactions and accumulate experience in synchronizing their individual activities (van Maanen, 1979).⁶ Certain processes even become

⁶ At an organizational level this argument is considerably less applicable because the emergence of organizational identities is hardly based on interpersonal interaction. Organizational identities rather stem from those features that make the organization recognizable, legitimate its existence, and distinguish it from contextually salient other organizations (Albert and Whetten, 1985; Deephouse, 1999; Whetten and Mackey 2002; King, Felin, and Whetten, 2010). The emergence of its members’s social identification is rarely contingent on interpersonal interaction but rather on a depersonalized, consensual prototype. This does not mean that all members voluntarily accept the prototype in a similar way. Individual sovereignty is compromised by strict roles and hierarchical control (King, Felin, and Whetten, 2010). When participation in the accomplishment of superordinate organizational goals is not instrumental to the satisfaction of the

so internalized that their successful execution happens unconsciously and cannot be verbally explained (Lippman and Rumelt, 1982). In reference to the implicit character of collectively held expertise, Weick and Roberts (1993) coined the term „collective mind“. The essence of their argument is that any team member only has access to a part of the overall stock of the team-based expertise because it is diffused among the team members. This implies that membership duration tends to increase with group-specificity. An individual, who leaves the group has to bear not only the costs of lost emotional value attached to the respective group (which is likely to be compensated if the new group is socially more attractive), but also the loss or lost applicability of group-specific aspects like individual status and popularity or non-transferable knowledge. Likewise, when the group must fill its vacancy with new personnel the change in the group's composition is likely to impact the existing prototype and increase uncertainty. In-group members may anticipate this consequence and preventively raise the emotional and moral costs for any attempt to leave the group. Generally, group-specific requirements for social identification reduce the group's permeability and, thus, upward social mobility. This suggests that group-specificity is positively correlated with properties of group distinctiveness. The emergence and sustenance of prototype clarity is less problematic, when there is more collectively held expertise, and fewer turnovers. We strongly emphasize that while highly specific social identities do not necessarily enhance self-esteem, they are particularly attractive to those who are motivated to reduce uncertainty.

Proposition 4: Group-specificity reduces uncertainty but constrains the opportunities to enhance self-esteem.

A fifth limitation to the individual choice of attractive groups relates to members' asymmetric

individuals' emotional, cognitive, social, and monetary needs, the individual can only adjust the valuation of the prototype, but not the prototype itself.

information about their current in-group and a potential out-group. Individuals generally possess more reliable information about their in-group than about the contextually salient out-group. In social identity contexts the knowledge about the out-group will usually be confined to stereotypical information. Scholars consistently contend that rationally bounded individuals rely on such heuristics, which may yield subjectively satisfactory but objectively unreasonable judgements (Simon, 1957; Cyert and March, 1963; March and Simon, 1958; Kahneman, Slovic, and Tversky, 1982). Stereotypes work from time to time, but they can also be misleading. Likewise, the representative heuristic (Kahneman et al. 1982) in which judgements are based on the degree to which object X is representative of process Y, may be relevant in intergroup situations. The information deficiency toward the out-group implies that individuals need to take an increased risk into account when they consider moving into another group. In view of the motivation to reduce uncertainty about the self, information asymmetries between the current in-group and a potential out-group may be a reasonable explanation for an individual's tendency to prolong the existing membership. In contrast to the other limitations discussed, information asymmetries do not necessarily refer to a limitation, which cannot be altered by the individual and must thus be accepted. Information asymmetries rather reduce the individual's willingness to take the risk and effort of becoming a member of a more attractive group.

Proposition 5: Information advantages of an in-group membership compared to an out-group membership reduces uncertainty but constrains the opportunity to enhance self-esteem.

We conclude that in an inherently dynamic social environment, where social identity processes must be responsive to intergroup dimensions of immediate comparative contexts, the individual assessment of the current state of social identity requires repeated updating in

order to keep uncertainty reduced. This is consistent with Samson's (1978) proposition that individuals try to manage their lives in order to establish a sense of continuity in their identity (identity mastery). Although there is no final conclusive answer to the question "Who am I and what does this imply?", an awareness of the status quo can be considered prerequisite for answering the logically subsequent question "Who do I want to be and what would that imply?" (i.e. the pursuit of self-esteem). As we have discussed, the latter question should be more realistically adjusted into "Given my perceived opportunities, who do I want to be and what would that imply?". Empirical support for our argumentation comes from Reid and Hogg (2005) who find that self-conceptually uncertain individuals are motivated by uncertainty reduction to identify with a group, regardless of whether the group is of low or high status. Self-conceptually certain individuals, on the contrary, are primarily motivated by the prospect of an enhanced self-esteem to identify with high- than with low-status groups, which we view as strong support for the validity of our reasoning. Wilson, Centerbar, Kermer, and Gilbert (2005) show that people even want to avoid uncertainty when it prolongs pleasurable experiences. Summarizing our previous discussion we formulate

Proposition 6: To reduce subjectively perceived uncertainty individuals identify with available self-inclusive social categories. This identification choice determines the contextual scope for self-enhancement, because chosen group environments differ in their degree of entitativity, member similarity, peer pressure, specificity, and informational asymmetry. Therefore, both motives are best conceptualized as sequentially related with the need for uncertainty reduction being the more fundamental motive.

Figure 1 provides a graphical illustration of our model for the relationship between the need for uncertainty and the need for self-esteem.

--- Insert Figure 1 about here ---

Motivational Consequences

So far we have focused on how the external structure of social groups limits the pursuit of self-esteem as a motive for group affiliation. According to our argumentation the need for uncertainty reduction and the need for self-esteem are sequentially interrelated. It is important to note that our approach differs from Maslow's (1943) pyramidal conceptualization of individual needs. We refer to generalized social motives that extend to embrace the group, its prototype, and its members, because self and group are psychologically fused and because the group and its members validate each others cognitions and behaviors (Hogg and Abrams, 1993).

Comparisons between current and possible, future-oriented social identities may have important motivational consequences, that operate with differing urgency depending on the specific nature of the intergroup relation.

If a group primarily feels that its distinctiveness is threatened, this perception will likely arouse the motivation to reduce uncertainty. In seeking uncertainty reduction, people probably pay as much attention to clarity of social structural differentiation among groups as to ingroup prototype clarity itself; although the latter is the most direct source of self-definitional information. According to the principle of meta-contrast, prototype clarity is contingent on both intragroup homogenization and intergroup differentiation. Potential consequences are increased in-group favoritism, depersonalized social attraction for fellow in-group members, and satisfaction with stable social structural relations among groups. In an attempt to sustain or restore a distinct prototype within a homogenous and consensual group, prototypically central and, thus, more influential in-group members will be inclined to reject prototypically

marginal in-group members. “Negative” deviants, who are inclined toward the referential out-group prototype will be evaluatively downgraded, much like “positive” deviants, who are aprototypical in terms of their surpassing contribution to the group’s positivity. Both are equally dysfunctional as they jeopardize the in-group’s prototype clarity.

Proposition 7: If group distinctiveness is threatened, the need for uncertainty reduction becomes more salient. In-group members will protect or strive for prototype clarity.

When the group’s distinctiveness is perceived as stable but the evaluative positivity is under threat, the motivation to enhance self-esteem is likely to be aroused. In such cases “negative” deviants will be similarly rejected but “positive” deviants will be very welcome in-group members. The partial prototype diffusion will be accepted because it is situational beneficial. In the long run, however, individual overachievement must be attributable to the group, reflecting relatively more positively on the valence of the in-group prototype and thus ultimately on self-esteem. The prospect of collectively increasing the in-groups positivity or of becoming a member of a superior group, respectively, may energize substantial effort. Likewise, it may promote patience with presently unfavourable conditions by directing the perception on potential progress and improvement.

Proposition 8: If group distinctiveness is perceived to be stable, the need for positive self-esteem becomes more salient. In-group members will tolerate situational beneficial prototype diffusion.

4. Contextual Factors in Team Performance

Organizations increasingly tend to reduce hierarchical structures and to rely on (self-

managed) teams to sustain business success (Parker, 1993; Smith, 1997; Rock and Pratt, 2002). While some researchers have argued that individual employees can hardly be seen as independent entities because their motivation is largely derived from and adapted to the needs, goals, expectations, and rewards of the respective team or organization (Ellemer, De Gilder, and Haslam, 2004), general scientific attention on the underlying motivations for work-related behavior in teams does not yet reflect the transformation of contemporary work situations appropriately (Ambrose and Kulik, 1999; Erez, Kleinbeck, and Thierry, 2001, Ellemer, De Gilder, and Haslam, 2004).

In the following, we extend previous research on team performance (see e.g., Cohen and Bailey, 1997; Joshi and Roh, 2009 for reviews) with the insights from our theoretical model, and propose a new conceptualization how diversity affects team performance.

Types of Teams

An important characterization of teams relates to their type and nature. In their extensive literature review, Cohen and Bailey (1997) identified four types of teams, namely work, project, parallel, and management teams. Due to their predominance, we focus on the former two in the remainder of this discussion. Work teams are characterized by stable, typically full-time, and clearly defined memberships. Project teams, in contrast, are time-limited in their existence. Because work teams are characterized by longevity, we propose that they are more likely to be perceived as coherent entities in comparison to project teams, which are mostly composed to solve problems in the short-run. The perceived entitativity of work teams is thus likely to be greater than that of project teams.

Proposition 9: The perceived degree of entitativity is greater for work teams than for project teams

As a direct implication of proposition 9, we can infer that belonging to a work team does contribute more strongly to a group member's social identity than does belonging to a project team.

Proposition 10: Due to the work team's greater longevity, work team experiences contribute relatively more to the formation of members' social identity than project team experiences..

Team Diversity

Many researchers consistently assert that team composition has a strong impact on team performance because it affects the range of available, task relevant resources and impacts the way that team members interact with each other (Bell, 2007). Following Harrison and Klein (2007), team diversity may be conceptualized as the distribution of differences of a common characteristic across team members. Researchers in this area commonly distinguish between relations-oriented and task-oriented diversity (Jackson, Joshi, and Erhardt, 2003; Joshi and Roh, 2009). Relations-oriented diversity refers to "surface" characteristics, such as gender, age, or ethnicity, which are immediately observable. Task-oriented diversity involves diversity of "deeper" characteristics, such as knowledge or skills, which are not directly observable. A so far unresolved puzzle is why studies on team-level diversity regularly find relations-oriented diversity to harm team performance, while task-oriented diversity tends to promote team performance.

Generally, relations-oriented diversity makes it more difficult to find consensual categorical attributes, which align the in-group members' prototypical beliefs, attitudes, feelings, and behavior. Joshi and Roh (2009) argue that the lack of prototype clarity leads group members to overemphasize inter-group differences with salient out-groups in order to reduce the own

perceived uncertainty. The resultant discriminatory behavior against out-groups is largely unproductive and, thus, explains the negative influence of relations-oriented diversity on team performance. We propose that the lack of a clear prototype also undermines the in-group members' willingness to collectively engage in productive activities. Contingent on the opportunities for social mobility, the members will look for alternative groups that are certainty-enhancing and, if possible, positively valued. In line with our reasoning, van Knippenberg, De Dreu, and Homan (2004) find relations-oriented homogeneity to be positively correlated with self-categorization processes. Further support stems from existing theories of membership dynamics, for instance, on the underlying mechanisms for cultural recomposition effects on group interaction processes (Hopkins and Hopkins, 2002). Cultural recomposition is an "event in which individuals from diverse cultures are added to or replace members of an existing group. These incoming members do not share the same culture with one another" (p. 542). This literature concludes that cultural recomposition impacts self-categorization processes in homogenous groups to a larger extent than in heterogeneous groups. In view of the relatively greater threat to group members' self-certainty in the former case, negative production reactions become more likely. We thus formulate the following general proposition:

Proposition 11: Besides unproductive out-group discrimination, relations-oriented team diversity also increases in-group-members' uncertainty about the self and undermines their willingness to collectively engage in productive activities.

Increases in task-oriented diversity do not increase uncertainty about the self as much as greater relations-oriented diversity. The reason is that task-oriented characteristics are not as important as relations-oriented characteristics for social categorization, e.g., regarding

stereotype formation (Dahlin, Weingart and Hinds, 2005). Task-oriented diversity attributes, which are associated with skill-based and informational differences among work group members, are assumed to constitute a team's cognitive resource base (Jackson, May, and Whitney, 1995). More specifically, task-oriented diversity bears on intra-group processes, such as the exchange of information and perspectives, mutual feedback, and knowledge integration. If there are task-interdependent complementarities, these elaboration-based processes can in principle explain the positive performance effects of task-oriented diversity at the team-level. However, our theory about the sequential relation between the two fundamental motives for social identity processes sheds new light on group members's *willingness* to fully utilize task-oriented diversity. Specifically, we propose that this willingness is conditional on members' achievement of a critical level of self-certainty. Recently, Kearney, Gebert, and Voelpel (2009) found team members' need for cognition to moderate the influence of team diversity on team performance. An individual's need for cognition is defined as "intrinsic motivation for and enjoyment of effortful cognitive activities" (p. 583). As the authors discuss subsequently, "team members' tendency to enjoy learning new ways to think and coming up with new solutions to problems may help curtail or even prevent negative effects of diversity" (p. 584). It seems to us, though, that one's motivation to engage in such effortful cognitive activities requires a considerable degree of self-certainty that opens individuals for new experiences. Once such a high degree has been obtained, however, our theory implies that task-oriented diverse teams are more tolerant to partial prototype diffusion as long as it is consistently perceived as situationally beneficial. Besides, individual overachievement must, in the long term, be attributable to the group. If the group's distinctiveness is perceived as sufficiently stable the prospect of collectively increasing the in-group's positivity by exploiting the team's potential in task-interdependent complementarities may energize substantial effort.

Proposition 12: Task-oriented team diversity may energize substantial effort to collectively increase the in-group's positivity if the distinctiveness is perceived as sufficiently stable and if the potential in task-interdependent complementarities are consensually realized to enhance self-esteem.

Our theory thus predicts that a high [low] need for cognition positively [negatively] affects the relationship between task-oriented [relations-oriented] diversity and team performance. This is exactly in line with the empirical findings by Kearney et al. (2009).

As propositions 11 and 12 suggest, a thorough acknowledgement of individuals' underlying motives to engage in social identity processes results in a re-conceptualization of how diversity affects team performance that is able to reconcile the previously puzzling findings on relations- and task-oriented diversity.

Finally, the combined consideration of our diversity-related and team-longevity-related propositions may help explain why previous work has found team-longevity to be an important moderator for the effect of team-diversity on team-performance (Harrison, Price, Gavin, and Florey, 2002). Once it is acknowledged that work team's social identity is more salient for a group member than for a project team member, we hypothesize that both relations- and task-oriented diversity have a stronger impact on team-performance in the former case. This line of reasoning documents a first step towards a further development of membership dynamics theory across work and project teams⁷, as called for by Hopkins and Hopkins (2002).

Proposition 13: Productivity losses associated with relations-oriented team diversity are

⁷ Hopkins and Hopkins use the terms „standing“ and „acting“ teams for work and project teams, respectively.

larger for work teams than for project teams.

Proposition 14: Productivity gains associated with task-oriented team diversity are larger for work teams than for project teams.

We conclude this section on team diversity with a graphical illustration of the in-group social identity processes that cause diversity to influence team performance.

--- Insert Figure 2 about here ---

Figure 2 builds on the framework by Jackson et al. (2003) on group dynamics of diversity, and combines it with our conceptualization in Figure 1. It displays that diversity, team distinctiveness, and team positivity influence performance through affective reactions (such as cohesion, satisfaction, and commitment), and team behaviors (such as communication, conflict and cooperation), and allows team performance to impact group members' motivations for uncertainty reduction and self-esteem. It further extends the framework by Jackson et al. (2003) insofar as it considers the moderating influence of group longevity on diversity effects, and distinguishes the motive-related channels by which relations- and task-oriented diversity affects team performance.

6. Conclusion

The theory we present in this article extends Hogg and Terry's (2000) theory of motives for social identity and self-categorization processes in organizational contexts. We provide clarification on the relation between the need for uncertainty reduction about the self, and the need for self-esteem. Specifically, we offer the theory that the pursuit of self-esteem in most socially structured environments is contingent on self-certainty, and that both motives differ

substantially in terms of their conditions for activation and motivational consequences.

Several avenues for future research come to mind. First and foremost, empirical work should evaluate the validity of our theoretical propositions. While each proposition is soundly grounded in existent theory, we need reliable field evidence from organizational contexts.

A promising direction for further theory development alludes to the interrelation between multiple social identities, both within and outside the organization. Such a holistic approach that studies an individual's *set* of social identities may help to better understand a person's overall need for uncertainty reduction and self-esteem. Previous research suggests that individuals may „voluntarily diversify their memberships“ in order to „self-regulate the amount and strength of categorization cognitions“ (Hopkins and Hopkins, 2002, p. 545). A related key question for organizational practitioners concerns the extent to which social identities are influenceable and thus allows for active social identity management practices.

The integration of group empowerment as a potential driver of social identity formation into our theoretical framework might be a fruitful extension which lays beyond the scope of this paper. We acknowledge mechanisms of group empowerment to be an important topic for organizational design that could draw on our discussion. For instance, it seems likely that greater group empowerment might result in an improved group status, because it provides a greater “toolkit” for group members to follow their motivation for enhanced self-esteem. At the same time, it is not clear to us how group outcomes that are caused by the group members' decisions directly, attribute to social identities. Answering such questions seems to be promising to understand the interrelation between group empowerment and social identity processes.

Social identity and self-categorization theories have seen great interest from researchers in the past. In the more recent years, however, it seems that scholars have been concerned about the theories' insufficient development (e.g., Joshi and Roh, 2009). Having addressed this concern

through an increase in the theories' specificity to make clear-cut predictions about group-processes in organizational environments, we hope to see a revived interest in the theories from academics and practitioners, alike.

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Figure 1: A heuristic model of the relationship between the need for uncertainty reduction and the need for self-esteem in social identity processes.

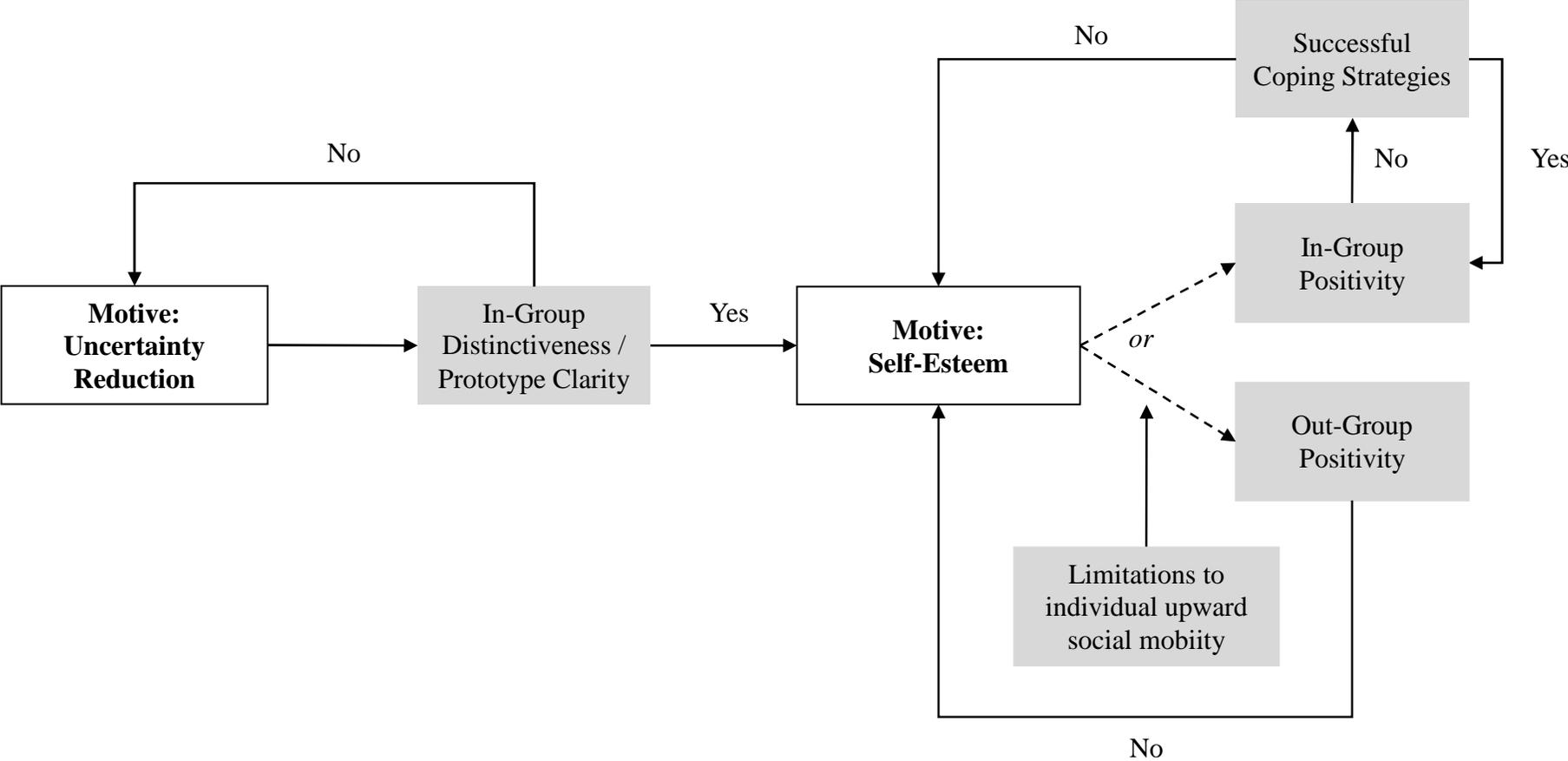


Figure 2: Social Identity Processes and Team Diversity

