1

Running head: CREATIVITY AND SOCIAL IDENTITY

Social identity and the recognition of creativity in groups

Inmaculada Adarves-Yorno

Tom Postmes

S. Alexander Haslam

University of Exeter

Correspondence should be addressed to Inmaculada Adarves-Yorno: University of Exeter,

School of Psychology, Washington Singer Laboratories, Exeter EX4 4QG, UK. Ph: + 44

1392 264655 Fax + 44 1392 264623. E-mail: I.Adarves-Yorno@exeter.ac.uk

Abstract

This paper develops an analysis of creativity that is informed by the social identity approach. Two studies are reported which support this analysis. Study 1 (N = 73) manipulated social identity salience and the content of group norms. The group norm was either conservative (i.e., promoted no change) or progressive (i.e., promoted change). When social identity was salient and the group norm was conservative a non-novel proposal was perceived to be more creative. Study 2 (N = 63) manipulated social norms and personal relevance. Results showed that while social norms influenced perceptions of creativity, personal relevance influenced positivity but not perceptions of creativity. These findings support the idea that perceptions of creativity are grounded in the normative content of group membership and self-categorization processes.

Key words

Creativity, identification, social identity, group norms, leadership.

Creativity: A social identity perspective

The central research question addressed in this paper is "When is creativity perceived or recognized?" As we elaborate below, this question is deceptively simple. The traditional answer to the question is that any product is creative as a result of its intrinsic properties, for example, its novelty (Barron, 1955). But if creativity is something intrinsic to the creator or the product, why do some artists (like Van Gogh) or politicians (like Martin Luther King) receive only broad recognition for the creativity of their work and ideas after their life has ended? Why did it take so long until the "time had come" for their innovation to be appreciated? Later approaches to creativity pointed out that perceptions of creativity depend not just on intrinsic properties, but also on features of the context and the perceiver (Csikszentmihalyi, 1998). Indeed, we have no other way of knowing the intrinsic properties of an object other than through our subjective perceptions (e.g., Amabile, 1996). Thus, in the extreme, it can be claimed that an idea or object is not creative until it is perceived as such. For this reason, it appears that research should focus not simply on identifying creative people or creative creations, but also, and perhaps more so, on the social processes (e.g., of judgement and evaluation) involved in recognizing them as creative. Doing so would give the study of creativity a social psychological dimension. Moreover, the benefits of such an approach would not be theoretical alone as there are practical benefits in terms of understanding and predicting when and why innovations are adopted (Rogers, 1995).

A more subjective approach to creativity implies that it should be studied within a given social system. Within such a system, the created object and the creator are just two of many elements that can be considered. Perhaps as a result of the complexities that this introduces, a systematic analysis of the factors that might influence the recognition of

creativity has so far been theoretically and empirically limited. The present paper takes a first step towards developing such a systematic account, and explores the factors that impact on the perception of creativity in intragroup settings. Our approach to the question is informed by the social identity perspective (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

Defining creativity

In the field of psychology, there has been a lot of disagreement and discontent over the definition and assessment of creativity (Amabile, 1996). One of the key problems is that traditional conceptual definitions of creativity are difficult to use for empirical research (Amabile, 1996). The most commonly accepted conceptual definition of creativity revolves around the intrinsic properties of novelty (i.e., originality) and appropriateness (i.e., utility in a particular context; e.g., Barron, 1955; Bruner, 1962; Newell, Shaw & Simon, 1967; Stein, 1974). Conceptual definitions, like this one, have been the basis for theoretical formulations of creativity (Amabile, 1983) and they are considered intuitive and reasonable. However, a challenge to these approaches is that novelty and appropriateness are not static properties of an object, but rather these depend on the evaluative context and on the *perceiver*. For example, something novel in London may be old hat in New York, and something appropriate in New York may be considered shocking in London. More formally, the conceptual definition of creativity as based on novelty and appropriateness presents a "criterion problem" because it is not ready to be translated into useful assessment criteria (Amabile, 1982). For the purposes of empirical research, therefore, one has to abandon the hope of finding the "ultimate" objective criteria for creativity, in favour of a definition that relies on inter-subjective criteria (Amabile, 1983, p. 359). Ultimately, it has been argued that

a product or response is creative when relevant judges independently agree that it is so (Amabile, 1982). In other words, researchers such as Amabile (1983) have argued that creativity depends upon subjective evaluations of the product's creativeness, which may be partially based on its perceived novelty and/or appropriateness.

In the same vein, Csikszentmihalyi (1998) has argued that definitions of creativity should recognise the importance of perceivers, and the wider group context within which their evaluations take place. In Csikszentmihalyi's words, "what we call creativity is a phenomenon that is constructed through an interaction between the producer and audience … creativity is not the product of single individuals but of *social systems* making judgments about individuals' products" (1998, p. 41, emphasis added). According to this observation, what is fundamental to understanding creativity and its potential impact is its endorsement and acceptance (and hence potential adoption) within a wider community of people. These are bold claims. Nonetheless, in real life settings, the evaluations made by relevant perceivers (so-called gatekeepers; Csikszentmihalyi, 1994; Lewin, 1956; and regulators; Stein, 2003) is what determines what is implemented and what gets through to the public. In light of this argument, the evaluative process needs to be explored in order to fully understand when an outcome is considered creative.

Although Csikszentmihalyi's (1998) approach emphasizes the importance of collective judgements made in social systems as a whole, his own work in fact tends to focus largely on the influence of individual factors (e.g., past experience) on individual judgements of creativity. While we agree that personal factors could potentially explain how individuals in isolation evaluate a given creation, we feel that such analysis disguises the reality that such evaluations are not made in a social vacuum. In real life settings the

relevance of relational factors becomes crucial. One of these relational factors to

perceptions of creativity is group membership (i.e., the group to which perceivers and

creators belong). For example, it has been argued that in some organizations, insiders can

be quite antagonistic and reject outsiders' contributions by displaying what is referred to

as an "NIH" attitude: if it is "not invented here", it is no good (Stein, 2003, p. 387). In a

similar vein, but in artistic domains, it has been noted that people often display

ethnocentric bias when judging other people's creations (Simonton, 1984). That is, they

consider the creations of members of their group to be better than creations of members

of other groups. This research on group-related factors (Simonton, 1984; Stein 2003)

offers some very interesting and novel pointers towards the processes that play a role in

shaping perceptions of creativity. We believe that the social identity perspective (Tajfel

& Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) offers a

comprehensive framework within which such group-related factors (e.g., group

membership) can be understood as contributing to the perception of creativity.

Social identity and creativity

      The central premise of the social identity perspective (encompassing social identity

theory, SIT, Tajfel & Turner, 1979; and self-categorization theory, SCT, Turner, et al., 1987)

is that individuals derive aspects of their identity from their membership of particular social

groups. These internalized group characteristics are called social identities. Social identity

can be contrasted from personal identity (Turner, 1982), which comprises aspects of the self

that are not derived from group memberships, but which define the individual as an

idiosyncratic person, different from other individuals. Thus, a woman called Mary may see

sometimes see herself as 'Mary', distinct from others individuals, or as a 'woman', similar to

other women and different from men. When she interacts with a man (e.g., James), she may self-categorize as an individual person (i.e., her personal identity is salient), thereby defining herself and James in terms of idiosyncratic characteristics, and dealing with him as an individual. However, in other contexts, Mary and James can self-categorize themselves in terms of divergent group memberships (e.g., as representatives of two groups, men and women).

Self-categorization as a group member has several consequences that are relevant to the question of how creativity is recognized. In the first instance, self-categorization theory argues that social identity and the recognition of shared group membership are critical determinants of people's willingness to engage with others (Turner, 1991). The straightforward implication is that if a product is perceived to be associated with an ingroup or its creator is perceived to be an ingroup member, it is more likely to be approached and regarded favourably than it is when it comes from an outgroup. Research outlined above (Simonton, 1984; Stein, 2003) confirms that this is a phenomenon that occurs in real life settings. We believe that this "creative ingroup bias", is a critical and pervasive phenomenon that determines people's responses to creations and attempted innovations. In previous studies, we have provided an experimental demonstration of such an ingroup bias and of the way that it affects creativity judgements outside the artistic and organizational domains (Adarves-Yorno, 2005). These studies demonstrated that the same ideas (and creations) are considered to be more creative when they are said to originate from an ingroup source, than when the source is said to be an outgroup member. This confirms results of prior non-experimental work (Simonton, 1984; Stein, 2003), but controlling for the actual product being evaluated.

An extension of this basic idea is that the nature of a person's relationship to their group should also influence such perceptions. Put slightly differently, self-categorization theory states that group members expect to have shared perceptions and understandings of those issues that are relevant to group membership (Postmes, Haslam, & Swaab, in press; Turner, 1991; Turner & Oakes, 1989). In other words, self-categorization creates an anticipation among group members that their perceptions on group-relevant dimensions will be similar, and that they will converge when such perceptions are different (see also Asch, 1951, p. 484). This process has far-reaching consequences because these expectations often assume normative properties, regulating group members' actions and perceptions. This may help to explain, for example, why men and women typically wear different clothes, perform different roles, and have a different perspective on certain issues. Moreover, the fact that social identities are central to a person's sense of social selfhood can also explain why gendered norms of this form are willingly embraced by the members of each group and do not need to be imposed coercively.

Such arguments have a number of direct implications for the analysis of creativity. In the first instance, the nature of a person's relationship to their group should influence perceptions of creativity. Identification is an important variable to analyze because it is closely associated with higher commitment to the group and greater involvement in its efforts and products (Ellemers, de Gilder, & Haslam, 2005; Ellemers, Kortekaas, & Ouwerkerk, 1999; Haslam, 2001). In the same way that the strength of a child's identification with a parent shapes his or her behaviour, so identification with a social group determines the degree to which the individual is influenced by social identity (Jetten, Spears, & Manstead, 1997; Turner, 1999).

Creativity research indeed has confirmed that there is a relationship between identification and people's reactions to innovation. Identification with the developer of the product, and involvement in the process of product development, have both been shown to be factors that influence people's responses to organizational innovation (King, 2003). Consistent with the above findings, we expected that social identification would determine the extent to which people recognize a specific ingroup product as creative, with stronger identification being associated with higher perceptions of creativity. To initially examine this suggestion we (see Adarves-Yorno, 2005) asked participants to (a) complete a three-item identification measure (e.g., "I identify with other students of Exeter University", $\alpha = .80$) and (b) evaluate five ideas proposed by a potential student representative ($\alpha = .90$). Consistent with predictions, regression analysis revealed that identification was a good predictor of perceptions of creativity, $\beta = .22$, $t(157) = 2.85$, $p = .005$. Thus, results of this study suggest that identification is an important variable when making intragroup judgments about creativity.

So far, research has established the existence of a creative ingroup bias, and has demonstrated that the perceived creativity of an ingrouper's creation is also related to the strenght of identification with the group. However, these studies have not demonstrated a direct implication of social identity processes in the assessment of creativity. That is partially because identification is not the critical factor that determines whether groups exert influence over their members. According to SCT, the critical factor here is social identity *salience.* Salience is a product of a given identity's accessibility and fit (Oakes, 1987; Oakes, Turner, & Haslam, 1991). Although salience is certainly related to identification (see, e.g., Haslam, Postmes, & Ellemers, 2003), an experimental demonstration of the impact of social identity

would be more compelling if salience could be directly manipulated. This would also address the issue of causality that always plagues studies in which identification can only be measured (Doosje, Spears, & Ellemers, 2002).

Purpose of the current research

One of the key goals of the present research is to manipulate salience directly (thereby speaking to the self-categorization processes underlying creativity perceptions). As mentioned, social identity salience makes it more likely that people will be responsive to social influences from the group, but the precise direction and form of this influence is channelled by the content of social identity and group norms. Most social contexts will provide clear group norms that serve to dictate the forms of creativity that are acceptable and unacceptable (for illustrative case studies, see Howe, 2000). In line with this idea, Amabile (1996) noted that the perception of creativity depends on normative criteria. It is largely on the basis of specific norms that we decide, for example, whether someone's clothing is normal, fashionable, original or just plain weird. To ascertain the influence of this norm on group processes, a strong test of the hypothesis requires one to manipulate its content (see, e.g., Postmes, Spears, & Cihangir, 2001). In line with this reasoning, Study 1 seeks to orthogonally manipulate both norms and salience.

We expect that when social identity is salient, a product that is consistent with a given group norm is more likely to be perceived as creative than a product that is inconsistent with this norm. This is likely to be the case even when the group norm encourages one to be essentially uncreative as is the case in groups that expect their members to maintain the status quo. Study 1 tests the proposal that when a group norm is conservative (i.e., when it promotes no change), ideas that are consistent with this norm could be seen as creative,

depending on the salience of group identity. In other words, the study tests the counter-intuitive suggestion that, when social identity has been made salient, a non-novel product will be seen as more creative than a novel one. Study 2 aims to replicate the effect of a group norm on perceptions of creativity (using different ideas and norms) and also aims to show that perceptions of creativity, although related to positive evaluations, are partly determined by different underlying processes.

Study 1

The aim of this study was to analyse the impact of group norms and salience on the perception of a non-novel idea. The salience manipulation focused on participants' personal identity versus their social identity as an Exeter University student. Orthogonal to that, the content of the group norm was manipulated by portraying Exeter students as either conservative (i.e., willing to keep things as they are) or progressive (i.e., willing to make changes).

The participants were asked to evaluate a non-novel proposal (i.e., one that promoted no change). In order to verify that this proposal was indeed non-novel, a pilot study (n= 21) was conducted. The novelty of the proposal was assessed on a 7-point Likert scale ranging from 'not at all' (1) to 'very much' (7). The mid-point (4) of the scale was identified as "neutral". Results showed that evaluation of the proposal was significantly lower than the mid-point ($M = 3.00$, $SD = 1.37$) $t(20) = 3.32$, $p = .003$. This indicates that the proposal was perceived to be non-novel.

Participants were told that the purpose of the study was to collect information from students about issues that affected them and that this was the second study in an ongoing project examining the "opinions of students at the University of Exeter". After the identity

salience and group norm manipulations, participants were presented with a conservative idea (i.e., to keep things as they are) proposed by a conservative candidate (i.e., who endorsed no change). In this study participants not only evaluated the creativeness of the candidate's idea but also they evaluated his leadership qualities.

In line with the arguments above, it was predicted (H1) that participants would perceive the conservative idea to be more creative when their social identity was made salient and the content of the group norm was congruent with the content of this idea (i.e., conservative). When personal identity was salient the content of the group norm was expected to have no effect on perceptions of creativity, and hence the conservative idea should not be perceived as more creative.

In addition to perceptions of creativity, we were also interested in knowing how the creator himself was evaluated. In the present context, the evaluator was a potential representative (i.e., leader), thus we explored how participants evaluated his leadership abilities. Previous research has shown that in the early phases of their leadership, leaders have to build up credibility among followers (Hollander, 1958) and that one way of doing this is by conforming to ingroup norms (Merei, 1949). This study tested whether factors which shape judgments of an idea's creativity were also implicated in judgments of the person who proposes the idea — in particular, in judgments of the creator's leadership qualities. Based on this argument and in line with the hypotheses predicted above, it was expected (H2) that participants whose social identity was salient would evaluate the conservative candidate as a superior leader when he embodies ingroup norms (i.e., when norms are conservative). When personal identity was salient, it was expected that participants would not evaluate the conservative candidate as a superior leader when he embodies

ingroup norms.

Method

Design and Participants

Identity salience (group identity vs. personal identity) and group norm (conservative vs. progressive) were manipulated in a 2 X 2 between-participants factorial design. Participants were randomly allocated to conditions. Seventy-three students at the University of Exeter participated in this experiment and received course credit for their participation. Stimulus materials were presented via computers, and participation took place on-line.

Procedure

The experiment was presented as the second study in an ongoing project examining the 'opinions of students at the University of Exeter'. Participants were told that the purpose of the study was to collect information from students about issues that affected them. Specifically, they were asked to give their opinion about a student candidate for the Guild Council Presidency and his ideas. First, identity salience was manipulated. Subsequently, the content of group norms was manipulated by providing participants with feedback about ostensible conclusions of a previous year's survey. After these manipulations, participants were asked to rate the creativity of the candidate's proposal and to assess his leadership qualities.

Independent variables

Identity salience was manipulated by means of the "three things" procedure developed by Haslam, Oakes, Reynolds & Turner (1999). Participants were asked to list three things that distinguished themselves as unique idiosyncratic individuals (e.g., 'List up to three things that you like to do during the day') or three things which they had in common

with others in their group (e.g., 'List up to three things that you and most other students of the University of Exeter like to do').

Group norms, either conservative or progressive, were manipulated by providing (false) feedback about the opinions and values of University of Exeter students. This feedback was provided in the form of a fictitious research report which was supposedly written on the basis of research conducted in the previous year. Specifically, participants were led to believe that a survey had previously been conducted which asked, "What do students like most about the University of Exeter?" ($N = 526$). There was never any explicit feedback about group norms, but the results of the survey nevertheless presented a relatively unambiguous picture about the shared values of Exeter students. To wit, the report listed the "top ten things that more than 71% of students like best". In the conservative condition the ten things listed were all conservative attributes of the University such as "Exeter is one of the Universities that still maintains the three-term system". The report then concluded by emphasizing the general theme across these 10 best liked things: "In sum, what Exeter students like most are the conservative aspects of the university". In the progressive condition, the list consisted of things such as 'Exeter University is open to change". This list concluded with the observation "In sum, what Exeter students like most are the progressive aspects of the University". In order to give the cover story more credibility, participants were also asked if they themselves had participated in this earlier survey.

A manipulation check consisted of three questions. Participants were asked to give their opinion after reading three randomly selected statements from the "top ten things that more than 71% of students like best". For example, one of the statements randomly selected in the conservative condition was "The University has proved that old tried and tested

systems are more effective than new systems". Students were asked to read those statements and state the extent to which they thought the average University of Exeter student would be in favour or against making changes to the University. In the conservative norm condition, statements revolved around willingness to keep things as they are while in the progressive norm condition, those statements revolved around willingness to make changes. These items were scored on 7-point Likert scales ranging from "not at all" (1) to "very much" (7) with higher scores indicating more perceived willingness to make changes. The three items of the manipulation check were aggregated creating one scale (α = .75).

Dependent variables

After the manipulation of the group norm, students were presented with a proposal from a candidate for the presidency of the Guild Council. The Guild Council is an actual organization that represents all student' societies at the University of Exeter. The candidate's argument was conservative: 'I believe the university should keep on doing what it has been doing over the past years' and his key policy proposal was also conservative: 'To maintain old buildings and the campus'. His proposal was rated on 7-point Likert scales, ranging from "not at all creative" (1) to "very creative indeed" (7).

The candidate's leadership qualities were measured using three dimensions of a transformational leadership scale ("shows genuine concern", "is accessible and approachable", and "encourages critical thinking", α = .84, see Alban-Metcalfe & Alimo-Metcalfe, 2000). Participants were asked to what extent the conservative candidate had each of these leadership attributes. The three measures were aggregated. Again, all items were rated on 7-point Likert scales ranging from "not at all" (1) to "very much" (7).

Results

Manipulation check

We conducted 2 (identity salience) X 2 (group norm) analyses of variance. On the group norm check, there was a main effect of group norm suggesting that the manipulation of group norm was successful. Participants considered students to be less willing to make changes when the norm was conservative (M = 3.27, SD = 1.18) than when the group norm was progressive (M = 4.51, SD = 1.03), F (1,69) = 20.68, p < .001, η^2 = .23. Results showed no main effect of identity salience (p = .77) and the interaction between identity salience and group norm was non-significant (p = .23).

Perceptions of creativity

Consistent with H1, there was a significant interaction between identity salience and group norm, F (1,69) = 5.36, p = .023, η^2 = .072. In order to decompose this interaction, we analysed simple main effects of group norm for each salience condition. As predicted, participants whose social identity was salient considered a conservative idea to be more creative when the group norm was conservative (M = 4.76, SD = 1.56) than when the group norm was progressive (M = 3.60, SD = 1.68), F (1, 69) = 5.92, p = .057, η^2 = .051. Also as predicted, when personal identity was salient, the group norm had no effect on participants' perceptions. Participants whose personal identity was salient did not consider the conservative idea to be more creative when the group norm was conservative (M = 3.40, SD = 1.85) than when the group norm was progressive (M = 4.10, SD = 1.67), F (1, 69) = 1.75, p = 1.95. There was neither a main effect of identity salience (p = .28), nor a main effect of group norm on the perception of creativity (p = .56).

Leadership

Consistent with H2, there was an interaction between identity salience and group norm, $F (1,69) = 7.23$, $p = .009$, $\eta^2 = .095$. Relevant means are presented in Figure 2. In order to decompose the interaction, we again analysed simple main effects of the group norm. Results were consistent with predictions: when social identity was salient, participants in the conservative condition considered the conservative candidate to have more of the qualities required of a transformational leader ($M = 4.45$, $SD = 1.26$) than in the progressive group norm condition ($M = 3.75$, $SD = 0.68$), $F (1,69) = 3.89$, $p = .054$, $\eta^2 = .053$. Unexpectedly, when personal identity was salient the opposite pattern could be seen. Although it was only a marginal effect, participants in the conservative norm condition evaluated the leader somewhat less positively ($M = 3.58$, $SD = 1.07$) than those in the progressive norm condition ($M = 4.15$, $SD = 0.86$), $F (1,69) = 3.46$, $p = .070$, $\eta^2 = .047$. There were no main effects on participants' evaluations of the candidate's leadership (identity salience $p = .32$, group norm $p = .80$).

The correlations coefficient between perception of creativity and evaluation of the leader indicated that these two dependent variables were moderately associated $r = .60$, $p < 001$. However, there was no indication from analyses of mediation that the effects on leadership mediated the effects on perceptions or vice versa.

Discussion

The results of the study suggest that an idea which appears to be not particularly innovative on its own can nevertheless be perceived to be more creative and desirable under specific social circumstances. The present study showed that such an idea was perceived most creative when judged by group members whose social identity was made salient in the

context of group norms that were congruent with the idea being evaluated (i.e., when both the idea and the norm were conservative).

In addition, the present study also showed a similar finding for the evaluation of the creator. He was perceived more positively (i.e., as having more leadership qualities) when he embodied the group's norm, and when the social identity of participants was salient. When personal identity was salient, however, there was some indication (although it was only marginally significant) that the creator was endorsed more when he deviated from the norm. This pattern is consistent with findings of previous research (Postmes, Spears, Sakhel & de Groot, 2001) suggesting that those whose social identity is salient display an "assimilative tendency" towards group norms, whereas those whose personal identity is salient can sometimes display a "contrastive tendency" (a finding that is consistent with suggestions that personal identity is constituted by seeking intra-group differentiation; see Turner, Reynolds, Haslam, & Veenstra, in press).

Although leadership was not the central focus of this research, the findings are intriguing — especially because they confirm that under certain conditions a person who proposes a rather non-novel idea can be perceived as a transformational leader (i.e., a leader who is seen as well placed to make organizational changes). These findings are consistent with social identity perspectives on leadership (e.g., Duck & Fielding, 1999; Haslam & Platow, 2001a, 2001b; Platow & van Knippenberg, 2001) but also extend these by providing direct evidence — to our knowledge for the first time — that leadership judgments are structured by group norms and social identity salience.

There are two shortcomings of this research. One is that the norm was manipulated in a rather overt way. This could have triggered certain demand issues. Although a

straightforward demand could not explain the interaction pattern that we found, it is

nonetheless preferable to use more subtle manipulations of group norms to rule out the

possibility that such issues of demand played a role. Furthermore, critics could argue that

perceptions of creativity are no different to other forms of positive evaluation, and that these

results are in effect simply a reflection of ingroup bias. Indeed, we believe that perceptions of

creativity are likely to be strongly related to other positive evaluations. However, we argue

that there is a subtle but important difference between the two. Both shortcomings were

addressed in Study 2.

<p style="text-align:center">Study 2</p>

In this study, social identity salience was kept constant throughout. Two factors were

manipulated: the social norms of the superordinate category, and personal relevance (i.e., the

extent to which proposals were relevant to participants). As in Study 1 the social norm was

manipulated to be either congruent or incongruent with the ideas suggested. Personal

relevance was manipulated to be either relevant or irrelevant with the proposal. We reasoned

that creativity judgments are effectively a matter of social value and would be strongly

anchored in group norms (see Study 1). However, the assessment of positivity would be more

strongly determined by personal relevance[1]. There is personal relevance when ideas are

appealing to and/or relevant for someone. Generally, we would expect that when ideas are

relevant for someone, then he or she will evaluate those ideas more *positively* but not

necessarily more *creative*.

In this study, participants evaluated proposals to introduce new high-tech innovations

in a University. The personal (and subgroup) relevance of these proposals was varied by

selecting participants from different schools. Here it was assumed that the proposals would

be more appealing to, and relevant for, science students than for humanities students. The norm manipulation in this study was more subtle than that of Study 1. In this study, students were asked to respond to a set of statements which encouraged them to construe university students as either pro-technology or pro-culture. Thus, the norm was either congruent with the proposal (i.e., pro-technology) or incongruent (i.e., in favour of cultural activities, or pro-culture for short). Social identity as university student was made salient for all participants.

To explore whether group norm and personal relevance help us to disentangle the underlying processes driving perceptions of creativity from positive evaluations, participants rated the ideas not only on the dimension of creativity (creative and innovative) but also on more generic dimensions of positivity (good and appropriate). There was one further difference from Study 1: leadership measures were not included in this study.

In line with results of Study 1, it was predicted (H1) that participants would perceive high-tech ideas to be more creative when the content of the group norm was congruent with the content of the idea (i.e., pro-technology). In relation to personal relevance, it was predicted (H2) that personal relevance would impact on the positive evaluation of ideas, so that high-tech ideas will be evaluated more positively by science students (high relevance) than by humanities student (low relevance).

Method

Design and Participants

In a 2 (personal relevance: high [science students] vs. low [humanities students]) X 2 (group norm: pro-culture vs. pro-technology) between-subjects design, participants evaluated ideas related to high-tech innovations. The participants' social identity as a university student was made salient for all participants. Participants of each school were randomly allocated to

conditions. Sixty-three undergraduate students at the University of Exeter with ages ranging from 18 to 27 ($M = 19$) participated in this study.

Procedure

The procedure was similar to Study 1. The experiment was presented as the second study in an ongoing project examining the 'opinions of students at the University of Exeter'. Participants were told that the purpose of the study was to collect information from students about issues that affected them. Specifically, they were asked to give their opinion about the proposal of a potential student representative. First, student identity was made salient (using the procedure presented in Study 1). Subsequently, the content of group norms was manipulated. After this, participants were asked to rate the creativity and positivity of the candidate's ideas.

Independent variables

Personal relevance was manipulated simply by selecting participants from science versus humanities disciplines. Group norms were subsequently manipulated by providing participants with conclusions from a fictitious research report, which was supposedly written on the basis of research conducted in the previous year about "students' opinions". Rather than explicitly informing participants about what the majority of students thought, we asked them to indicate their own personal opinions and attitudes towards the conclusions of the research report. Thus, the focus ostensibly was on them rather than on the opinions of their peers. Participants were asked to tick those conclusions they agreed with. Participants in the pro-culture condition were exposed to five general conclusions that were designed to lead them to think that students were in favour of cultural activities (e.g., they want more culture, music, and art at the university). Participants in the high-tech condition were exposed to five

conclusions which suggested that students were pro-technology (e.g., they want more online access). In order to avoid any demand characteristics, there was never any explicit feedback about group norms, but on the basis of prior research we assumed that participants would spontaneously infer what the underlying norm was (see Jetten, Spears, & Manstead, 1997, for a similar procedure).

A manipulation check of personal relevance consisted of one question assessing the importance of technology over culture: 'I think that technology is more important than culture'. This item was scored on 7-point Likert scales ranging from "not at all" (1) to "very much" (7) with higher scores indicating more agreement with the statement.

Dependent variables

After the manipulations, students were presented with a proposal from a potential student representative. The proposal was to promote high-tech innovations at the university. There were three concrete elements to this: to have "Video link lectures", "Access to notes from lectures in audio format" and an "Internet café with fast and efficient computers and the latest technology". Participants evaluated these ideas on two dimensions: positivity and creativity. Both evaluations were made on 7-point semantic differentials, anchored with –3 for the negative and +3 for the positive evaluation. Positivity was evaluated with the differentials "bad" vs. "good" and "inappropriate" vs. "appropriate" ($r = .90$). Creativity was measured with "not creative" vs. "creative" and "not innovative" vs. "innovative" ($r = .86$).

<div align="center">

Results

</div>

Manipulation check

All analyses were conducted by means of 2 (personal relevance) X 2 (group norm) analysis of variance (ANOVA). Analysis of the personal relevance check revealed a

significant main effect for personal relevance, $F\ (1, 59) = 4.59$, $p = .036$, $\eta^2 = .072$. Science

students (high relevance, $M = 3.78$, $SD = 1.09$) considered technology more important that

humanities students (low relevance , $M = 2.42$, $SD = 1.39$).

Perceptions of creativity

  Consistent with H1, there was a main effect of group norm, $F\ (1, 53) = 4.45$, $p = .04$

$\eta^2 = .078$. Participants in the pro-technology norm condition considered high-tech ideas to be

more creative ($M = 1.43$, $SD = 1.17$), than participants in the cultural norm condition ($M =$

.61, $SD = 1.29$). Results also showed neither a main effect of personal relevance ($p = .161$)

nor an interaction effect ($p = .82$) on perceptions of creativity.

Positive evaluation of ideas

  Consistent with H2, there was a marginally significant effect of personal relevance on

the positive evaluation of ideas $F\ (1,53) = 5.89$, $p = .07$, $\eta^2 = .06$. Students from science

schools evaluated high-tech ideas more positively ($M = 1.60$, $SD = .96$) than those from

humanities schools ($M = .85$, $SD = 1.52$). Results also showed neither a main effect of group

norm ($p = .20$) nor an interaction effect ($p = .68$) on positive evaluation.

  Correlational analysis showed that generic positive evaluation and perception of

creativity were highly correlated, $r = .86$, $p < .001$. This is congruent with the idea that

perception of creativity is another form of positive evaluation. However, as shown above,

consistent with predictions, both dependent variables were influenced by different IVs.

<div align="center">

Discussion

</div>

  Results confirmed our hypothesis that although positive evaluations were highly

correlated with perceptions of creativity, they were determined by different underlying

processes. Group norms influenced the perception of creativity (H1) but did not affect

generic positive evaluation. On the other hand, there was some indication that personal relevance determined generic positive evaluations (H2) but not did not affect perceptions of creativity to the same extent. These results confirm that the perception of creativity is subtly different from positivity, and is partially grounded in different factors, with creativity being more closely linked to the standards of the relevant social group.

More importantly, however, the results replicated the findings of Study 1, and confirmed its theoretical assumptions. Participants (whose social identity was made salient throughout) considered ideas that were congruent with the superordinate group norm to be more creative than ideas that were not congruent with norm. This confirms the point that the perception of creativity is basically a social judgment (see Csikszentmihalyi, 1998) that depends on normative criteria (Amabile, 1996), in ways that are consistent with the operation of social identity processes.

General Discussion

Although creativity has for a long time been studied as a property that is intrinsic to objects, ideas or people, recent theorizing has suggested that it is more fruitfully studied as a social judgment (Amabile 1983) and, moreover, one that is socially constructed within a given social system (Csikszentmihalyi, 1998). In this paper, we used the social identity perspective (and, in particular, self-categorization theory) to develop a novel analysis of the processes by which creativity is recognized within social groups. The program of research outlined above has empirically explored a number of factors which, according to our approach, should be implicated in perceptions of creativity.

The findings show that ideas are more likely to be seen as creative to the extent that (a) they are congruent with group norms (Study 1 and 2), but that this effect does not occur

when (b) personal identity of the perceiver is salient (Study 1). In this way, the findings

indicate that the group processes underlying creativity judgments are not indiscriminate.

Instead, these results suggest that the content of group norms establishes the boundaries

within which objects are deemed to be creative or not. As long as an idea remains within the

normative boundaries, it is likely to be taken seriously. Thus, it appears that in order to be

perceived as creative an idea needs to fall within the range of these normative boundaries

(i.e., the group's 'latitude of acceptance'; Sherif & Sherif, 1969). The narrower the latitude of

acceptance, the more likely it is that a deviant idea will be rejected and that a normative idea

will be considered creative. The results therefore suggest that conformity and creativity are

not always as incongruent as they may at first seem.

It is important to note that, in Study 1, what allowed a seemingly non-novel idea to be

considered creative was the *interaction* between social identity salience and the group norm.

Thus we concluded that it is not simply the *content* of the prevalent social norm (or by

implication, the current culture, fashion, or zeitgeist) which drives creativity and its

perception. For, importantly, it was only among the participants who were induced to

categorise themselves as members of a particular group that the group norm had an influence

on creativity judgments. This finding qualifies existing arguments about perceived creativity

which suggest that this is *solely* dictated by the norms and values that exist at a particular

point in time (e.g., Martindale, 1990).

Of course all this does not mean that the intrinsic properties of a product or an idea

are irrelevant to, or play no role in, creativity. However, it is important to note that these

intrinsic properties are not located in a social vacuum but are always perceived within a

particular social context. In the absence of any concrete physical criteria for determining

what might constitute a creative object, social reality testing is the only way of establishing whether a product is creative or not, and this inevitably implies that creativity has to be *consensually* determined (Festinger, 1950, 1954; Postmes, Haslam & Swaab, in press; Turner, 1991). This theoretical observation opens the door for the more detailed theoretical and empirical analysis than the present paper provides (but see Adarves-Yorno, Postmes & Haslam, 2005).

Our findings also indicate that the perception of creativity is related to, but distinct from, other forms of positive evaluation. Put slightly differently, although the perception of creativity is undoubtedly a form of positive evaluation, there are conditions under which the two are driven by different underlying processes (Study 2). Thus, where positivity towards a proposal may be anchored in various social values, including preferences of a subgroup or of the person themselves, evaluation of the creativity value of the same proposal is more likely to be determined by assessment of the proposal relative to the social norms of the group that it has implications for.

In addition to evaluation of ideas, Study 1 also explored evaluation of the creator. Results here suggested that when ideas were perceived to be most creative, people also had the greatest confidence in the leadership qualities of their originator (Study 1, H2). The enhanced endorsement of someone who fitted the group norm (when social identity was salient) suggests not only that social identity and self-categorization processes are implicated in judgments of creativity, but they could also determine people's willingness to embrace particular courses of action (i.e., to be led in a particular direction).

Moreover, the fact that social identity salience is so dependent on context implies that the boundaries imposed by group norms are never entirely fixed and rigid, and that there will

be many situations in which their violation will be sanctioned or tolerated. Indeed, in intragroup contexts the social demands to behave normatively are usually quite mild (Postmes, Haslam, & Swaab, 2005).

It is thus typically when groups are engaged in some intergroup dynamic that normative behaviour becomes most important. In the Second World War, for example, creativity was rendered largely subservient to national objectives. This is illustrated by Hitler's speech at the opening of the first German Art Exhibition in 1937 where he redefined creativity in wholly conservative terms, stating that:

> Until national socialism came to power, there was a so-called "modern" art in Germany, which was, as the term itself suggests, an art that changed almost every year. National Socialist Germany, however, wants to have a "German art" again, and like all creative virtues this art must and will be an eternal one (author's translation).

For Hitler and the Nazis, then, novelty was anything but a mark of creativity, it was a sign of degradation, a defilement of human nature.

The social system that existed in Nazi Germany is of course rare, but despite its extremity it serves to underline the key point that even if *acts* of creativity appear, under "normal" conditions, to be only partially bound by social convention and norms of appropriateness, the processes by which their creativity is *judged* are highly sensitive to normative context and perceiver identity.

Our research can also be seen to be related to the black sheep effect (e.g., Branscombe, Wann, Noel, & Coleman, 1993; Castano, Paladino, Coull, & Yzerbyt, 2002; Marques, Yzerbyt, & Leyens, 1988) in that it focuses on intragroup judgements in a normative context. However, there are three key aspects that differentiate our studies from

the classical black sheep study. First, research on creativity focuses much more on upgrading rather than derogating group members. Second, only ingroup products are evaluated. And third, the main focus of this research is on the perception of *ideas,* and although leadership evaluation has been included, once again, the dimensions to evaluate the leader were all positive.

On the basis of our findings, we are now in a position to return to the question of how creativity should be conceptualized, and whether creativity is grounded in objective characteristics of the target of evaluation. Our results support Amabile's (1983) argument for adopting a more subjective conceptualization: creativity is as much in the eye of the beholder as it is inferred from the novelty of the object. Indeed, the concept of novelty should itself come under scrutiny. On the face of it, it might appear to be a slightly easier task to establish what is novel rather than to establish what is creative. However, our research implies that any attempt to define novelty "objectively" is likely to end up in very much the same kind of epistemological miasma that surrounds questions of creativity. For this, again, is a debate in which the necessary outcome is a consensual social judgment (for a discussion see Wetherell, 1987).

Empirically too, the findings of Study 1 question directly the core assumption that novelty is an essential prerequisite for an idea to be seen as creative. Indeed, when a group identity was salient and that group's norms were conservative, the idea of preserving existing structures was perceived as more creative. Indeed, this result potentially challenges the argument of Finke (1995) that creative and conservative ideas define two extremes of the same continuum.

However, one should not draw the conclusion from this that creativity is no more than conformity, and that the restrictions imposed by culture and norms inevitably curb creativity (Churchman, 1968; Tan, 1998). There is more to creativity than an audience or (sub-cultural) norm. However, at the same time, creativity is more than the property of a particular product or creator. Instead, then, creativity is constituted in the interaction between both these classes of factor: it is a dynamic social process in which individual and social-structural factors are both elementary.

Implications of the social identity approach for understanding creativity

One of the key strengths of applying the social identity approach to the analysis of creativity is that it does justice to what Csikszentmihalyi has identified as the key defining characteristic of creativity — that it is multiply determined by factors at individual and collective levels. Indeed, the social identity perspective approaches creativity from an antireductionist and interactionist point of view (Turner & Oakes, 1986). And although our research is primarily concerned with perceptions of creativity, we believe that the principles identified here should apply equally well to the *production* of creative output and the generation of innovative outcomes. In its genesis, as in its recognition, the creative product is likely to be shaped through the interaction of different factors at an individual and collective level, and in a context within which values and norms play a pivotal role in informing the direction of the creator's activity (see Adarves-Yorno et al., 2005).

More pragmatically, innovation and creativity are fundamental for the long-term survival of organizations (e.g., Oldham & Cummings, 1996; Tan, 1998), because they are the foundations of progress. Indeed, the terms creativity and innovation have often been used interchangeably (West & Farr, 1990). However, researchers nowadays agree that creativity

refers to processes of "idea generation" and innovation refers to the implementation of these ideas (Amabile, 1996). In organizational settings, the perception of creativity is therefore a prerequisite for innovation in the sense that ideas need to be perceived as creative in order to be considered worthy of implementation. Moreover, we believe that such organizational settings are precisely where the impact of group membership (e.g., as members of different departments; van Knippenberg & van Schie, 2000), group norms (e.g., the culture of the organization and norms of different departments; Ellemers, 2003) and social identification with the organization (Haslam , 2001; Haslam et al., 2003) will be most acutely felt, and where these factors will play a particularly important role in shaping innovation.

Future Directions

As suggested above, the same factors that impact on the perception of creativity may also inform creative behavior. Creativity is generally originated within groups: artists, writers and scientists often do their most creative work when collaborating with members of their group (Farrell, 2001). Likewise, the nature of their creations is usually shaped by the group to which they belong (e.g., creative impressionist painters adhered to the artistic rules of impressionism in their paintings). We believe that future research on creativity should consider more explicitly the wider social context within which creativity is manifested. It follows from our analysis that issues of identity are intimately related to both social judgment and group behavior. In this regard, it is important to note that recent work in the social identity approach has revived one of Tajfel's (1978) original concerns, namely that identity is not merely about being but also about *becoming* (Reicher, 2001), not merely about identity achievement but also about identity *change* (Turner, Pratkanis & Samuels, 2003). It strikes us that this conceptualization of social identity as both the

vehicle and the *locus* for social change is likely to prove particularly fruitful in future study of innovation and of the processes whereby creative solutions and novel practices are embraced.

References

Adarves-Yorno, I. (2005). *Unpacking Creativity: A Social Identity Perspective.* Unpublished doctoral dissertation. University of Exeter.

Adarves-Yorno, I., Postmes, T., & Haslam, S. A. (2005). Creative innovation or crazy irrelevance? The contribution of group norms and level of identity to innovative behaviour and perception of creativity (manuscript under review)

Alban-Metcalfe, R. J., & Alimo-Metcalfe B. (2000). An analysis of the convergent and discriminant validity of the Transformational Leadership Questionnaire. *International Journal of Selection and Assessment, 8,* 158-175

Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology, 45,* 357-376.

Amabile, T.M. (1996). Creativity in context. Boulder, CO: Westview.

Asch, S. E. (1951). Effects of group pressures upon the modification and distortion of judgments. In H. Guetzkow (Ed.), *Groups, leadership, and men*. Pittsburgh: Carnegie Press.

Barron, F. (1955). The disposition toward originality. *Journal of Abnormal and Social Psychology, 51,* 478-485.

Branscombe, N. R., Wann, D. L., Noel, J. G., & Coleman, J. (1993). In-group or out-group extremity - importance of the threatened social identity. *Personality and Social Psychology Bulletin, 19*, 381-388.

Bruner, J. (1962). The conditions of creativity. In H. Gruber, G. Terrell, & M. Wertheimer (Eds.), *Contemporary approaches to creative thinking.* New York: Atherton Press.

Castano, E., Paladino, M. P., Coull, A., & Yzerbyt, V. Y. (2002). Protecting the ingroup stereotype: Ingroup identification and the management of deviant ingroup members. *British Journal of Social Psychology, 41*, 365-385.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioural sciences*. Lawrence Erlbaum Associates.

Churchman, C. W. (1968) *The Systems Approach.* New York: Dell.

Csikszentmihalyi, M. (1988). Society, culture, and person: A systems view of creativity. In R. J. Sternberg (Ed.), *The nature of creativity* (pp. 325-339). New York: Cambridge University Press.

Csikszentmihalyi (1994). The domain of creativity. In, D. Feldman, M. Csikszentmihalyi, & H. Gardner (Eds.), *Changing the World: A Framework for the Study of Creativity.* Westport, CT: Greenwood Publishing Co.

Csikszentmihalyi, M. (1998) Creativity and genius: a system perspective. In A Steptoe (Ed.), *Genius and the mind: studies of creativity and temperament.* Oxford: Oxford University Press.

Csikszentmihalyi M., & Getzels (1971). Discovery-oriented behavior and the originality of creative products: A study with Artist. *Journal of Personality and Social Psychology, 19,* 47-52.

Doosje, B., Spears, R., & Ellemers, N. (2002). Social identity as both cause and effect: The development of group identification in response to anticipated and actual changes in the intergroup status hierarchy. *British Journal of Social Psychology,*

41, 57-76.

Duck, J. M., & Fielding, K. S. (2002). Leaders and the treatment of subgroups: Implications for evaluations of the leader and the superordinate group. *European Journal of Social Psychology, 33,* 387-402.

Ellemers, N. (2003). Identity, culture, and change in organizations: A social identity analysis and three illustrative cases. In S. A. Haslam, D. van Knippenberg, M. J. Platow, & N. Ellemers (Eds.), *Social identity at work: Developing theory for organizational practice* (pp. 191-203). Philadelphia, PA: Psychology Press.

Ellemers, N., de Gilder, D., & Haslam, S. A. (in press). Motivating individuals and groups at work: A social identity perspective on leadership and group performance. *Academy of Management Review.*

Ellemers, N., Kortekaas P., & Ouwerkerk, J. W. (1999). Self-categorization, commitment to the group and group self-esteem as related but distinct aspects of social identity. *European Journal of Social Psychology, 29,* 371-389.

Farrell, M. (2001). *Collaborative Circles: Friendship Dynamics and Creative Work.* Chicago: University of Chicago Press.

Festinger, L. (1950). Informal social communication. *Psychological Review, 57,* 271-282.

Festinger, L. (1954). A theory of social comparison processes. *Human relations, 7,* 117-140.

Finke, R. A. (1995). Creative realism. In S. M. Smith, T. B. Ward, & R. A. Finke (Eds.), *The creative cognition approach.* (pp. 303-326). Cambridge, MA: MIT Press.

Golann, S. E. (1963). Psychological study of creativity. *Psychological Bulletin, 60,* 548-565.

Goldenberg, J., Mazursky, D., & Solomon, S. (1999). The fundamental templates of quality ads. *Marketing science, 18,* 333-351

Haslam, S. A. (2001). *Psychology in organizations: The social identity approach.* London: Sage.

Haslam, S. A., & Ellemers, N. (2005). Social identity in industrial and organizational psychology: Concepts, controversies and contributions. *International Review of Industrial and Organizational Psychology, 20,* 39-118.

Haslam, S. A., Oakes, P. J., Reynolds, K. J., & Turner, J. C. (1999). Social identity salience and the emergence of stereotype consensus. *Personality and Social Psychology Bulletin, 25*, 809-818.

Haslam, S. A., & Platow, M. (2001a). Your wish is our command: The role of shared social identity in translating a leader's vision into a follower's task. In M. A. Hogg & D. Terry (Eds.) *Social identity processes in organizations* (pp. 213-228). New York: Psychology Press.

Haslam, S. A., & Platow, M. J. (2001b). The link between leadership and followership: How affirming social identity translates vision into action. *Personality and Social Psychology Bulletin, 27*, 1469-1479.

Haslam, S. A., Postmes, T. & Ellemers, N. (2003). More than a metaphor: organizational identity makes organizational life possible. *British Journal of Management, 14,* 357-369.

Haslam, S. A., & Turner, J. C. (1992). Context-dependent variation in social stereotyping .2: The relationship between frame of reference, self-categorization and accentuation. *European Journal of Social Psychology, 22*, 251-277.

Hocevar, D. (1981). Measurement of Creativity: Review and Critique. *Journal of Personality Assessment, 45,* 450-464.

Hogg, M. A., & Turner, J. C. (1987) Intergroup behaviour, self-stereotyping and the salience of social categories. *British Journal of Social Psychology*, *26*, 325-340.

Hollander, E. P. (1958). Conformity, status and idiosyncrasy credit. *Psychological review, 65,* 117-127.

Hollander, E. P. (1964). *Leaders, group and influence.* New York: Oxford University Press.

Howe, M. (2000). *Genius explained.* Canto: Cambridge University Press.

Jetten, J., O'Brien, A., & Trindall, N. (2002). Changing identity: Predicting adjustment to organizational restructure as a function of subgroup and superordinate identification. *British Journal of Social Psychology, 41,* 281-297.

Jetten, J., Spears, R., & Manstead, A. R. (1997). Strength of identification and intergroup differentiation: The influence of group norms. *European Journal of Social Psychology*, *27*, 603-609.

King, N. (2003). Involvement in innovation: The role of Identity. In L. V. Shavinina, (Ed.) *International Handbook on Innovation.* (pp. 619-630) Elsevier Science.

Lewin, K. (1956). Studies in group decision. In D. Cartwright & A. Zander (Eds.), *Group dynamics: Research and Theory* (2nd ed., pp. 287-301). Evanston, IL: Row Peterson.

Lubart, T. I. (1990). Creativity and cross-cultural variation. *International Journal of Psychology, 25,* 39-59.

Marques, J. M., Yzerbyt, V. Y., & Leyens, J.-P. (1988) The 'Black Sheep Effect': Extremity of judgements towards ingroup members as a function of group identification. *European Journal of Social Psychology*, *18*, 1-16.

Martindale, C. (1990). *The clockwork muse: the predictability of artistic styles.* New York:

Basic Books.

Merei, F. (1949). Group leadership and institutionalization. *Human Relations, 2,* 23-39.

Newell, A., Shaw, J. C., & Simon, H. (1967). The process of creative thinking, In H. Gruber, G. Terrel, & M. Wertheimer (Eds.), *Contemporary Approaches to Creative Thinking* (pp. 63-119). New York: Atherton.

Oakes, P. J. (1987). The salience of social categories. In J. C. Turner, M. A. Hogg, P. J. Oakes, S. D. Reicher, & M. S. Wetherell (Eds.), *Rediscovering the social group: A self-categorization theory* (pp. 117-141). Oxford: Blackwell.

Oakes, P. J., Turner, J. C., & Haslam, S. A. (1991) Perceiving people as group members: The role of fit in the salience of social categorizations. *British Journal of Social Psychology, 30*, 125-144.

Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal, 39,* 6-7-634

Postmes, T., Haslam, S.A., & Swaab, R. (in press). Social identity and social influence in small groups: communication, consensualizations and socially shared cognition. *European Review of Social Psychology.*

Postmes, T., Spears, R., & Cihangir, S. (2001). Quality of decision making and group norms. *Journal of Personality and Social Psychology, 80*, 918-930.

Postmes, T., Spears, R., Sakhel, K., & De Groot, D. (2001). Social influence in computer-mediated groups: The effects of anonymity on social behavior. *Personality and Social Psychology Bulletin, 27,* 1243-1254.

Platow, M. J., Hoar, S., Reid, S., Harley, K., & Morrison, D. (1997). Endorsement of distributively fair or unfair leaders in interpersonal and intergroup situations. *European*

Journal of Social Psychology, 27, 465-494.

Platow, M. J., & van Knippenberg, D. (2001). A social identity analysis of leadership

endorsement: The effects of leader ingroup prototypicality and distributive intergroup

fairness. *Personality and Social Psychology Bulletin, 27*, 1508-1519.

Reicher, S.D. (1984). The St. Paul riot: An explanation of the limits of crowd action in terms of

a social identity model. *European Journal of Social Psychology, 14*, 1-21.

Reicher, S. (2001). Social identity definition and enactment: A broad SIDE against

irrationalism and relativism. In T. Postmes, R. Spears, M. Lea, & S. Reicher (Eds.),

SIDE effects centre stage: Recent developments in studies of de-individuation in

groups. Amsterdam, the Netherlands: Elsevier.

Rogers, E. (1995) *Diffusion of Innovations*. New York: The Free Press,

van Knippenberg, D., & van Schie, E. C. M. (2000). Foci and correlates of organizational

identification. *Journal of Occupational and Organizational Psychology*, *73*, 137-147.

Scott, S.G., & Bruce , R. A. (1994). Determinants of innovative behaviour: A path model of

individual innovation in the workplace. *Academy of Management Journal, 37,* 580-607

Sherif, M & Sherif, C. (1969). Social Psychology. New York: Harper & Row.

Silvia, P.J., & Phillips A. G. (in press). When does self-evaluation reduce creativity?

Personality and Social Psychology Bulletin.

Simonton, D. K. (1984). Artistic Creativity and Interpersonal Relationships across and

within Generations. *Journal of Personality and Social Psychology, 46*, 1273-

1286.

Simonton, D. K. (2003). Creativity as a variation and selection: some critical constraints. In M.

A. Runco (Ed.). *Critical Creative processes.* Cresskill, NJ: Hampton Press.

Spears, R., Lea, M., & Lee, S. (1990). De-individuation and group polarization in computer-mediated communication. *British Journal of Social Psychology, 29*, 121-134,

Staw, B., & Cummings, L.L. (Eds.), *Research in Organizational Behaviour,* creativity and innovation, Vol.10 (pp. 123-167). Greenwich, GT: JAI Press.

Stein, M. (1974). *Stimulating creativity* (Vol. 1). New York: Academic Press.

Stein, M. (2003). Intermediaries in the Creative Process: Serving the Individual and Society. In M. A. Runco, *Critical Creative Processes* (pp. 379-395). Norwood, NJ: Ablex.Lim, B., Plucker

Szymanski, K., & Harkins, S. G. (1992). Self-evaluation and creativity. *Personality and Social Psychology Bulletin, 18,* 259–265.

Tajfel, H. (1978). Interindividual behaviour and intergroup behaviour. In H. Tajfel (Ed*.), Differentiation between groups: Studies in the social psychology of intergroup relations* (pp. 27-60). London: Academic Press.

Tajfel, H., Flament, C., Billig, M.G., & Bundy, R.F. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology, 1,* 149-177.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp.33-47). CA: Brooks/Cole.

Tajfel, H., & Turner, J. C. (1986) The social identity theory of intergroup behaviour. In S. Worchel & W. G. Austin (Eds), *Psychology of intergroup relations* (pp. 7-24). Chicago: Nelson Hall.

Tan, G. (1998). Managing Creativity in Organizations: a Total System Approach. *Creativity and Innovation Management, 7,* 23-31.

Thompson, L. (2003). Improving the creativity of organizational work groups. *Academy of Management Executive, 17,* 96-111.

Turner, J.C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social Identity and Intergroup Relations* (pp. 15-40). Cambridge: Cambridge University Press.

Turner, J. C. (1991). *Social influence*. Buckingham: Open University Press.

Turner, J. C. (1999). Some current themes in research on social identity and self-categorization theories. In N. Ellemers, R. Spears, & B. Doosje (Eds.), *Social identity: Context, commitment, content* (pp. 6-34). Oxford: Blackwell.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory.* Cambridge, US: Basil Blackwell.

Turner, J. C., & Oakes, P. J. (1986). The Significance of the Social Identity Concept for Social- Psychology with Reference to Individualism, Interactionism and Social- Influence. *British Journal of Social Psychology, 25*, 237-252.

Turner, J. C., & Oakes, P. J. (1989). Self-categorization and social influence. In P. B. Paulus (Ed.), *The psychology of group influence* (2nd ed., pp. 233-275). Hillsdale, NJ: Erlbaum.

Turner, M. E., Pratkanis, A. R., & Samuels, T. (2003). Identity metamorphosis and groupthink prevention: Examining Intel's Departure from the DRAM Industry. In S. A. Haslam, D. van Knippenberg, M. J. Platow, & N. Ellemers (Eds.), *Social identity at work: Developing Theory for Organizational Practice* (pp. 261-277). Hove, UK: Psychology Press.

Turner, J. C., Reynolds, K. J., Haslam, S. A., & Veenstra, K. E. (in press).
Reconceptualizing personality: Producing individuality by defining the personal
self. In T. Postmes & J. Jetten (Eds.), *Individuality and the group: Advances in
social identity.* London: Sage.

Waldzus, S., Mummendey, A., Wenzel, M., & Boettcher, F. (2004). Of bikers, teachers and
Germans: Groups' diverging views about their prototypicality. *British Journal of Social
Psychology, 43*, 385-400.

West, M., & Farr, J. (1990). Innovation at work. In M. West & J. Farr (Eds.), *Innovation and
creativity at work: Psychological and organizational strategies.* (pp. 3-13). New York:
Wiley.

Wilder, D.A., & Shapiro, P.N. (1984). Role of outgroup cues in determining social identity.
British Journal of Social Psychology, 47, 342-348.

Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational
creativity. *Academy of Management Review, 18,* 293-321.

Footnotes

1. It is important to note here that the reliance on personal (or subgroup) values is not inconsistent with the social identity approach—from various angles, recent research has suggested that people are actively engaged in influencing superordinate group norms according to personal and subgroup agenda's (e.g., Postmes et al., in press; Sani & Reicher, 2000; Waldzus, Mummendey, Wenzel, & Boettcher, 2004). Such processes are especially likely to occur when personal relevance is high, and when the subject being evaluated is one that affects concrete self-relevant outcomes.

Figure captions

Figure 1. Perceptions of the creativity of a conservative idea as a function of identity salience and group norm.

Figure 2. Perceptions of the leadership qualities of the proponent of conservative idea as a function of identity salience and group norm.