Exclusion As Self-Protection: The Function of Subtypes for Ingroup Members
Elizabeth J. Parks-Stamm
Pers Soc Psychol Bull 2013 39: 651 originally published online 6 March 2013
DOI: 10.1177/0146167213479978

The online version of this article can be found at:
http://psp.sagepub.com/content/39/5/651
Exclusion As Self-Protection: The Function of Subtypes for Ingroup Members

Elizabeth J. Parks-Stamm

Abstract
Three studies examined the consequences of subtyping ingroup members for evaluations of the self. The first study examined the impact of subtyping high-performing or low-performing ingroup members on self-evaluations. Study 2 employed an alternative manipulation of subtyping. Given the observed benefits of subtyping low-performing ingroup members for the group and the benefits of subtyping high-performing ingroup members for the self, Study 3 investigated participants’ subtyping target selection (i.e., high-performing vs. low-performing ingroup members) when the focus of the sorting task was on self-evaluations or group evaluations. In sum, these studies suggest that subtyping ingroup members can serve a self-protective function.

Keywords
subtyping, subgrouping, ingroups, social comparison, motivated reasoning

Received April 1, 2012; revision accepted December 22, 2012

Individuals who threaten the reputation of their ingroup through failing or exhibiting incompetence (e.g., bad seeds, black sheep) are often derogated or set aside as pariahs by their ingroup members. On the other hand, individuals who exceed the expectations derived from group stereotypes (e.g., businesswomen) are also rejected by their ingroup members, and not seen as “real” members of the group. Why do group members subtype, or exclude from group membership, these individuals who could raise the status of the group as a whole? How can subtyping ingroup members—low-performing or high-performing—benefit normative group members?

Subtyping Versus Subgrouping
Despite contact with individuals who disconfirm them, stereotypes are very resistant to change (Kunda & Oleson, 1995). Subtyping, a process whereby group members who disconfirm stereotype expectations are set aside as exceptions to the rule and therefore not included when considering the group, has been proposed as a mechanism underlying the preservation of stereotypes about outgroups (Taylor, 1981; Weber & Crocker, 1983).

An alternative response to stereotype-disconfirming group members is known as subgrouping. Subgrouping refers to the categorization of group members into subgroups of similar others within the superordinate social category, allowing for a more diverse representation of group members (Park & Judd, 1990; Park, Ryan, & Judd, 1992; for a review, see Richards & Hewstone, 2001). Whereas subtyping functions to maintain stereotypes, subgrouping allows group perceptions to change by broadening expectations about what is typical for the group through the recognition of diverse subgroups within the superordinate group (Brewer & Miller, 1988; Maurer, Park, & Rothbart, 1995).

Two variables have emerged as central to distinguishing subtyping from subgrouping: perceived group variability and outlier atypicality. Excluding outliers via subtyping leads to less perceived group variability (i.e., greater group homogeneity) relative to subgrouping (Park et al., 1992; Ryan, Park, & Judd, 1996) as individuals who disconfirm the stereotype (and therefore add variability to the group) are excluded from the group’s representation. Subtyping also leads to a greater perceived atypicality of the outliers (Kunda & Oleson, 1995; Maurer et al., 1995), as individuals who are set apart are seen as less typical of the group. Richards and Hewstone (2001) report that as “a measure of subtyping,” perceived atypicality is “perhaps the best approximation that can be reached” (p. 55).

1Northcentral University, Prescott Valley, AZ, USA

Corresponding Author:
Elizabeth J. Parks-Stamm, Department of Psychology, Northcentral University, 10000 E. University Drive, Prescott Valley, AZ 86314, USA. Email: eparksstamm@my.ncu.edu
To test the implications of subtyping for group perceptions, subtyping has been manipulated in the lab (often with subgrouping as a control). One way to subtly manipulate subtyping is through the distribution of atypical information across group members; stereotype-disconfirming attributes lead to less stereotype change when distributed among only a few group members (who can be subtyped) than when well distributed (Weber & Crocker, 1983). Subtyping is also made more likely when disconfirming group members share a certain unrelated attribute; for example, Kunda and Oleson (1995) found that when disconfirming members of a “lawyer” stereotype all came from a large firm (or small firm), or atypical gay men were all depicted as accountants, subtyping was facilitated and stereotype change reduced. Thus, by including information that stereotype-disconfirming group members share other distinctive characteristics that could potentially explain their atypicality, subtyping is encouraged.

To keep the information about the target constant across the subtyping and subgrouping conditions, Maurer and colleagues (1995) devised a card-sorting task to manipulate subtyping and subgrouping directly. Participants in the subtyping condition were asked to place cards describing individuals into one of two piles representing those who confirm or disconfirm the group stereotype whereas those in the subgrouping condition were asked to form as many groups as they wished by clustering together those who were similar to each other. Using this procedure, it was found that subtyping led to greater perceived group homogeneity and stereotypicity (Maurer et al., 1995).

Because of the experimental focus on subtyping as a vehicle for stereotype preservation, starting with Alport (1954) and continuing to the present day (e.g., Richards & Hewstone, 2001), researchers have primarily been concerned with the consequences of these categorization processes for the perception of outgroups and outgroup members. Some research has examined the role of perceived subgroups within ingroups and outgroups as it relates to perceived group variability and the outgroup homogeneity effect (e.g., Park et al., 1992; Wallace, Lord, & Ramsey, 1995), but the consequences of subtyping ingroup members for self-evaluations and for evaluations of one’s ingroup has not been explored. Examining the implications of subtyping atypical ingroup members for performance evaluations is pertinent because ingroup members are central to how we evaluate our groups and ourselves.

**The Impact of Ingroup Members on Evaluations of the Group and the Self**

Performance outliers are more threatening when they are in one’s ingroup than when they are outgroup members. Because of their shared social identity, low-performing ingroup members are more threatening to one’s group identity than low-performing outgroup members (Marques, Yzerbyt, & Leyens, 1988). On the other hand, because ingroup members are a relevant target for social comparison, high-performing ingroup members are more threatening to the self than high-performing outgroup members (Major, Sciacchitano, & Crocker, 1993).

**Threat to the Group**

According to the social identity theory (Tajfel & Turner, 1979), identity and self-esteem derive in part from identification with one’s group, and for this reason, people are motivated to preserve a positive evaluation of their ingroup. Low-performing ingroup members are threatening to one’s social identity because their performance reflects poorly on other group members through shared group membership, and are therefore judged more harshly than similar outgroup members (the black sheep effect; Marques et al., 1988).

The black sheep effect suggests that people are motivated to distance themselves from low-performing ingroup members by mentally excluding them from their ingroup to preserve the status of the group. By devaluing ingroup members, one is able to “purge” individuals who negatively impact group evaluations (Marques & Paez, 1994, p. 38); this is particularly found among highly identified group members (Brancombe, Wann, Noel, & Coleman, 1993). When individuals are able to restructure group boundaries to exclude counternormative ingroup members, the threat from these individuals is reduced (Eidelman, Silvia, & Biernat, 2001).

These findings suggest that individuals’ ingroup evaluations would benefit from subtyping low-performing ingroup members (i.e., setting them aside as exceptions to the rule). Once excluded, the ingroup could be evaluated more positively as the low-performing ingroup members would be perceived to be highly atypical of the now homogenous group, and therefore uninformative for group evaluations. This also suggests that individuals should be motivated to subtype low-performing ingroup members to the extent that their group identity is salient.

**Threat to the Self**

Members of one’s ingroup also provide a particularly impactful standard of comparison for self-evaluation. Individuals tend to avoid upward comparisons in favor of downward comparisons, especially under threat (Buunk, 1994; Wills, 1981). However, in reality, it is difficult to avoid comparisons with similar others when their performance is known. Upward comparison with a relevant target (e.g., an ingroup member who is superior on a critical dimension) can be painful to the self (Brickman & Bulman, 1977).

Tesser’s (1988) Self-Evaluation Maintenance model (Tesser & Campbell, 1983) has shown that people can protect themselves from unavoidable upward comparisons by changing the impact of the comparisons on the self. For example, one may reduce the relevance of the performance...
domain (i.e., by reducing the importance of that domain to one’s self-definition; Tesser & Campbell, 1980) or the closeness of the comparison target (e.g., Pleban & Tesser, 1981). The variable of similarity has been central in understanding when threatening social comparisons may or may not be avoided (Gilbert, Giesler, & Morris, 1995; Lockwood & Kunda, 1997).

As individual differences are perceived to be smaller within groups but are exaggerated between groups (Tajfel & Wilkes, 1963), one important indicator of similarity is ingroup membership. For this reason, comparisons with ingroup members are more threatening than with outgroup members who can be “dismissed as not self-relevant” (Major et al., 1993, p. 719); information about outgroup members have little impact on self-evaluations (Brown, Novick, Lord, & Richards, 1992). There are variables that moderate this ingroup effect (e.g., centrality of the group to self-concept, H. Markus, 1977; dominant vs. subordinate group status, Martinot, Redersdorff, Guimond, & Dif, 2002; majority vs. minority status, Brewer & Weber, 1994), but in general a highly successful ingroup member provides a threatening comparison target that is difficult to avoid.

Subtyping threatening others may provide a way out. Cash, Cash, and Butters (1983) found that when the experimenter categorized an attractive female as a “professional model” (as opposed to merely another student), the self-defeating effect of this upward comparison for female participants’ self-ratings of attractiveness was eliminated. This separate subcategory of women helped to deflect the self-evaluative consequences of an upward comparison with a threatening standard of comparison. Further support for the self-protective effect of subtyping may be found in research examining the self-evaluative consequences for women of characterizing a successful woman as an Unlikeable businesswoman (Parks-Stamm, Heilman, & Hearns, 2008). In these studies, female participants selectively applied a negative businesswoman stereotype to successful women (i.e., only when the target was threatening to the self), suggesting that subtypes may be used strategically to protect self-evaluations from high-performing ingroup members. Although these studies suggest subtyping high-performing ingroup members may protect self-evaluations, subtyping itself was neither manipulated nor measured.

Overview of the Present Research

The present research examines the function of subtypes for ingroup members. In the following studies, participants completed a mock interpersonal intelligence test and received a score in the middle of a normative range of scores. To model the unsystematic exposure to members of one’s ingroup experienced in daily life, these scores, as well as numerical outliers, were ostensibly drawn randomly from participants’ ingroup. The purpose of the present research was to answer the following questions: Does subtyping high-performing ingroup members protect self-evaluations from threatening comparisons with overachievers? Do self-and group-evaluative concerns motivate the selection of subtyping targets?

Study 1: The Consequences of Subtyping Ingroup Members for Self-Evaluations

In Study 1, participants were exposed to a sample of scores ostensibly selected at random from their ingroup, and were asked to sort these scores according to subtyping or subgrouping instructions. Subgrouping instructions were given in the place of a no-instruction control, which would generate a mix of spontaneous responses to outliers, including subtyping and subgrouping. It was expected that subtyping ingroup members would reduce their relevance as a standard of comparison by increasing the perceived atypicality of the outlier, and that this increase in perceived atypicality would be associated with a lower perceived self-target similarity relative to subgrouping. As similarity is a necessary precondition for social comparison (Festinger, 1954; Gilbert et al., 1995), subtyping should therefore protect participants from threatening comparisons with high-performing ingroup members. On the other hand, subtyping low-performing ingroup members should reduce participants’ evaluations of their own performance relative to subgrouping by removing the positive impact of a comparison with a less successful ingroup member.

Method

Participants and Design. A total of 90 undergraduate New York University (NYU) students (20 males, 70 females) participated to fulfill partial course requirements. The experiment employed a 2 (sort instructions: subtype vs. subgroup) × 2 (outliers: high-performing vs. low-performing) between-subjects design. Gender did not affect the following analyses ($F < 1$).

Materials and Procedure

The Interpersonal Skills Inventory (ISI). Participants began by receiving information about a fictional interpersonal intelligence test called the ISI. The format of this test was based on the computerized MESI-IV (Managerial Effectiveness Skills Inventory) used by Parks-Stamm et al. (2008) to manipulate
participants’ beliefs about their managerial potential. On a cover sheet, information about the importance of the ISI was included to ensure that performance feedback would be impactful (i.e., important to one’s self-concept; Tesser, 1988). Participants read that business community has become increasingly interested in selecting employees high in interpersonal intelligence “as it directly affects one’s ability to effectively lead others, maintain relationships, gain influence, and command authority.” They were also told interpersonal intelligence “is highly correlated with being perceived as likeable, attractive, and respected” and that individuals who perform well on the ISI “receive significantly higher employee evaluations, higher salaries, and report higher life satisfaction than those with lower scores.”

After reading the cover sheet, participants began the ISI on the computer. The test consisted of 25 questions related to interpersonal intelligence, and participants were asked to select one of two responses for each question (e.g., “Standing ___ establishes dominance and authority.” Response selections: “A. in front of” or “B. above”), with their score ostensibly derived from both accuracy and response times. Participants read that because the computer version of the ISI incorporates recent research on the importance of intuition and lightening-quick decision making in interpersonal interactions,” the questions would be presented for only a few seconds each. A clock appeared on the screen for each question showing the amount of time left to respond; response windows ranged from 5 to 15 s (depending on the length of the question, $M = 9.21$ s, $SD = 1.64$). This was done to ensure that participants were not able to realistically evaluate their performance. On completion of the ISI, the computer “calculated” participants’ scores, returning a 500 for each participant. They were asked to record this score both on the ISI cover sheet and on an index card.

The computer then advanced to provide the cover story. Participants read that this study was investigating how to help people form an accurate overall impression of a group based on a small number of randomly selected individuals. They were told that the computer would randomly select 12 ISI scores out of approximately 100 psychology students’ scores, which they should write on separate index cards as they appeared on the screen. Ten of these scores formed a normative group between 440 and 560 (with a mean and mode of 500, a score shared by the participant). Interspersed within these scores appeared the two outliers, either 320/340 or 660/680 in the low- and high-performing outliers condition, respectively. With the addition of these outliers, all the normative scores differed by less than one standard deviation from the normative mean. The outliers differed by more than 2 standard deviations from the mean, and by at least 100 points from the closest normative score. Participants were then asked to add their own card to the pile to emphasize that these scores were drawn from participants’ ingroup.

**Experimental Manipulation.** Participants were then given different instructions for how to sort the index cards based on the card-sorting task created by Maurer and colleagues (1995). Participants in the subtyping condition read,

> To form an accurate impression of the group, it helps to consider primarily those individuals who fit with the group as a whole, setting aside those who do not fit. As you are looking through the cards, please think about which individuals fit your perception of the group of NYU psychology students, and who are not really representative members of the group.

Those in the subgrouping condition instead read,

> To form an accurate impression of the overall group, it helps to consider all the different subgroups of individuals who make up the group as a whole. As you are looking through the cards, please think about the different subgroups of individuals who make up this overall group of NYU psychology students.

Participants were then asked to sort the cards, along with their own, into piles. In the subtyping condition, they read,

> Now please sort the cards into two groups. Set aside one or two individuals.

Those in the subgrouping condition instead read,

> Now please sort the cards into either three or four subgroups, so that individuals who are similar to each other are placed together in a subgroup. These groups should be approximately equal in size.

Participants then sorted the cards and were asked to list the groups they had formed on the front page of their final questionnaire packet.

**Manipulation Checks.** After sorting the cards, participants were asked to report on the groups they formed. The first check on the data was to ensure participants had followed the sorting instructions. Because subtyping involves “sorting disconfirmers and confirmers into separate categories” (Richards & Hewstone, 2001, p. 68), individuals in the subtyping condition who did not separate the two outliers from the rest of the group were removed ($N = 7$). Because in subgrouping there must be some groupings that include both disconfirmers and confirmers” (Richards & Hewstone, 2001, p. 68), individuals in the subgrouping condition who placed the two outliers alone in a single group were removed ($N = 4$). Rates of exclusion did not differ by sort condition, $\chi^2(1, N = 90) = 0.33$, $p > .55$, or outlier performance, $\chi^2(1, N = 90) = 2.34$, $p > .12$.

**Typicality of the outliers.** Participants were asked “how typical of the group” participants were who scored 340, 660,
and 500 on a scale from 1 (not at all typical) to 7 (very typical). Perceived typicality of the outliers was assessed by subtracting the typicality score of the outlier encountered by each condition (i.e., 660 for the individuals who sorted the high-performing outliers, 340 for those in the low-performing outliers condition) from the typicality rating for the normative group member (500). Thus, a larger number represented a greater atypicality rating.

Perceived group variability. The perceived group variability was assessed through a Group Variability Scale (α = .78) consisting of two items (reversed): “How alike do you think the interpersonal intelligence scores of the overall group are?” and “How similar to each other in interpersonal intelligence are the NYU psychology students?”

Dependent Measures

Similarity to the atypical exemplars. A reduction in perceived self-target similarity was proposed to accompany changes in self-evaluations following subtyping. A Similarity to Outliers Scale (α = .74) was created, including “How similar would you feel to a participant with a score of 660?” and “How similar would you feel to a participant with a score of 340?”

Self-ratings. Participants’ evaluations of their performance was assessed with a Self-Evaluation Scale (α = .72) consisting of four items on a 9-point scale anchored with not well and very well: “How would you rate your interpersonal intelligence?” “How well did you do on the interpersonal intelligence test you took today?” “Relative to other NYU participants, how well do you think you did on the test?” and “Given your score, how well did you feel you performed on the interpersonal test you took today?” Participants’ estimated percentile “relative to the other 100 NYU psychology students who have taken this test” served as a second dependent variable examining self-evaluation relative to the group at large.

Results

Manipulation Checks

Typicality of the outliers. An ANOVA was conducted to establish that outliers that had been subtyped were seen as more atypical than outliers that had been subgrouped. The perceived typicality of the outlier was subtracted from the perceived typicality of the normative group member; as expected, this difference was greater in the subtyping conditions (M = 3.56, SD = 1.86) than in the subgrouping conditions (M = 2.71, SD = 1.64), F(1, 73) = 4.54, p < .05, meaning the outlier was seen as more atypical in the subtyping condition. No main effect of low- versus high-performing outlier condition (F < 1) or interaction (F < 1) was found.

Perceived group variability. A main effect of subtyping versus subgrouping was also revealed in the Group Variability Scale, F(1, 75) = 9.19, p < .005. Participants in the subtyping conditions perceived the group as less variable (M = 3.33, SD = 0.77) than those in the subgrouping conditions (M = 3.94, SD = 1.05). Again, whether the outliers were low-performing or high-performing did not affect perceived group variability, p > .25, and an interaction was not found, p > .11.

Dependent Variables

Similarity to the atypical exemplars. As expected, target atypicality was negatively correlated with perceived self-target similarity, r = −.28, p = .01, reflecting an association between a target’s typicality and its perceived similarity to the self. An ANOVA was then conducted on the Similarity to Outliers Scale. A significant main effect of sort instructions was found, F(1, 73) = 11.98, p = .001, such that those who were given instructions to subtype (M = 2.57, SD = 0.94) reported feeling less similar to the outliers than those in the subgrouping conditions (M = 3.30, SD = 0.94). No main effect of low- versus high-performing outliers was observed, F < 1, and no significant interaction was found, p > .21.

Self-ratings. The anticipated interaction for the Self-Evaluation Scale was obtained, F(1, 75) = 11.57, p = .001, with no main effects of either sort instructions (F < 1) or outlier performance (p > .12). Whereas those instructed to subtype the high-performing outliers rated their test performance higher (M = 4.52, SD = 0.58) than those who subgrouped them (M = 4.06, SD = 0.57), participants instructed to subtype the low-performing outliers (M = 4.26, SD = 0.76) rated their test performance lower than those instructed to subgroup them (M = 4.73, SD = 0.44). Planned one-tailed comparisons were employed to examine this interaction effect. An independent samples t test confirmed that subtyping high-performing ingroup members led to a significant boost in participants’ ratings of their performance relative to subgrouping, t(36) = 2.52, p < .01, and subtyping low-performing ingroup members led to a significant cost in self-ratings relative to subgrouping, t(39) = 2.32, p < .05.

Participants also showed this predicted interaction in their estimated percentile for their test performance, F(1, 71) = 4.35, p < .05. In line with expectations that those who subgrouped high-performing outliers would estimate their percentile based on a mental representation with a higher mean than those who subgrouped the low-performing outliers, a significant difference was observed between those who subgrouped the low-performing outliers (M = 66.76, SD = 15.30) and those who subgrouped the high-performing outliers (M = 52.72, SD = 13.54), t(33) = 2.88, p < .01. However, in line with the hypothesis that subtyping ingroup members allows them to be excluded as a standard of comparison and therefore not included in the mental representation of the group, no difference was found in participants’ estimated percentile between those who subtyped the low-performing outliers (M = 63.75, SD = 14.32) and those who subtyped the high-performing outliers (M = 63.70, SD = 14.77), t(38) = .01, ns. This suggests that participants in the subtyping conditions are truly setting these individuals aside as atypical and irrelevant when estimating where they stand relative to the larger group.
Discussion

These findings support the idea that relative to subgrouping, subtyping extreme ingroup members reduces their perceived typicality and similarity to the self, and raises self-evaluations when the exemplars are high-performing, but lowers self-evaluations when the exemplars are low-performing. Participants in the subtyping condition were able to dismiss outliers as not self-relevant when considering where they stood relative to the larger group. Thus, Study 1 provides the first evidence that subtyping high-performing ingroup members benefits self-evaluations. To address the possibility that the explicit instructions to subtype or subgroup the outliers may have created demand, a different manipulation was used in Study 2.

Study 2: The Consequences of Subtyping Without Explicit Instructions

In Study 2, subtyping was manipulated through the dispersion of distinctive information. Atypical outliers (i.e., deviants who differ from a group’s stereotype on more than one dimension) are more likely to be subtype than more typical outliers (Weber & Crocker, 1983). Kunda and Oleson (1995) suggested that deviants are more likely to be subtyped if they are also characterized by an additional attribute that can justify perceiving them as irrelevant group members. They found that previously neutral attributes, such as the size of a lawyer’s firm, came to be viewed as atypical of the overall group, and therefore information about these group members was not generalized to the group as a whole.

In Study 2, participants were presented with all 14 scores from Study 1, including 2 low-performing outliers, 2 high-performing outliers, and 10 normative group members. What differed between conditions was the photograph associated with each score. Whereas 12 of the photos depicted typical college students (aged 18-22), 2 photos depicted older women (in their 30s), meant to represent “post-bacs.”

It was expected that age would be a highly salient category, as “people categorize others most readily on the basis of their age” and even more readily than gender (Kite, Deaux, & Miele, 1991, p. 24). The post-bac photos were either associated with normative scores that could not be subtyped or with outlying scores that permitted subtyping of the atypical group members (high or low). It was expected that outliers associated with the older faces would be subtyped and therefore ignored when estimating the performance of the overall group and excluded as a standard of comparison for self-evaluations.

Method

Participants and Design. A total of 135 undergraduate (111 females, 24 males) NYU students participated to fulfill partial course requirements. Participants were randomly assigned to one of three conditions: distinctive-high (in which the two photos of older women were paired with the high outlier scores, 660 and 680), distinctive-low (paired with the low outlier scores, 320 and 340), and control (paired with normative scores, 490 and 510). Two participants who were post-bacs were excluded, leaving a final N of 133. Participant gender did not significantly impact responses except where noted below.

Materials and Procedure. All participants began by receiving a 500 on the false interpersonal intelligence test, the ISI. The participants again read that the present study “examines how accurately we can form an overall impression of a group based on a small number of randomly selected individuals.” They were told they would be presented with 14 photos along with the ISI scores of randomly selected NYU psychology students (i.e., ingroup members), and that they would be given 10 s to study this information. They were additionally instructed that they would be asked to recall their impressions of these individuals at the end of the study, as well as to make evaluations of their own performance “relative to NYU psychology students in general.”

Last, participants were asked to think about how typical each individual appeared: “Do they seem like typical students from your classes? For example, ‘post-bacs’ may appear older and ‘kid geniuses’ may appear much younger than the typical NYU student.” This was done to heighten the accessibility of these possible subcategories to ensure the distinctive information was attended to.

Participants then saw 14 ISI scores paired with faces, including the 10 normative scores (between 460 and 540), 2 low-performing outliers (320 and 340), and 2 high-performing outliers (660 and 680).

Experimental Manipulation. All participants saw the 14 ISI scores in the same order. The two photos of older women were matched either with the two low-performing outliers (distinctive-low), two high-performing outliers (distinctive-high), or two normative scores (control). Two female students who appeared more typical in age were used as control faces.

Manipulation Checks

Estimated age. To ensure that the intended distinctive information was apparent, participants were asked to estimate the age of the two older women and the two control women after completing all dependent measures.

Perceived typicality of the outlying scores. As a manipulation check of subtyping, participants were asked, “how typical of the group was this individual’s score?” for a high-performing outlier (680) and a low-performing outlier (320). If subtyping occurred, these scores would seem less typical when associated with the distinctive information (i.e., older age).
**Dependent Variables**

**Similarity to outliers.** Participants were asked, “How similar do you feel to this individual?” about the ingroup members who had ostensibly received a 660 and a 340. It was expected that participants who were able to subtype the outlier (in the distinctive-high and distinctive-low condition, respectively) would feel less similar to these outliers than those who could not subtype them (when associated with a normative score in the control condition).

**Group rating.** Participants were asked to estimate the ISI performance of the population of NYU students. They were instructed, “Remember, these questions are not asking about this randomly selected group of students you just studied today, but the overall group of more than 100 NYU psychology students who took the test.” Three items rated on a 9-point scale were combined to form a Group Evaluation Scale (α = .81): “How would you rate the interpersonal intelligence of the overall group?” (very low–very high), “How impressive is the group, overall, in terms of interpersonal intelligence” (not at all–very), and “How well did NYU students do overall on the ISI test?” (not well–very well). It was hypothesized that participants in the distinctive-high condition would estimate the performance of the overall group to be less than participants in the distinctive-low condition, with the control condition in between.

**Self-ratings.** The Self-Evaluation Scale was identical to Study 1 (α = .77). It was expected that although all participants had been exposed to the same scores, those who could subtype the high-performing ingroup members would rate their own performance as better than those who could subtype the low-performing ingroup members, with the no-subtyping control in between.

**Results**

**Manipulation Checks**

**Estimated age.** As expected, participants estimated the age of the two individuals whose age was intended to be distinctive as significantly older (M = 37.09, SD = 5.43) than the two control individuals (M = 21.11, SD = 2.14), t(132) = 31.53, p < .001.

**Perceived typicality of the outlying scores.** Outlying scores were perceived to be less typical when associated with an individual who could potentially be subtyped. A 680 was seen as less typical when it was paired with an older individual in the distinctive-high condition (M = 2.24, SD = 1.49) than when it was paired with a control photo in the distinctive-low condition (M = 4.19, SD = 1.28), t(86) = 6.54, p < .001, or the control condition (M = 4.60, SD = 0.96), t(88) = 8.89, p < .001. Similarly, a 320 was seen as less typical in the distinctive-low condition (M = 2.88, SD = 1.55) than when it was paired with a control photo in the distinctive-high (M = 4.04, SD = 1.45), t(86) = 3.64, p < .001, or control condition, marginally (M = 3.40, SD = 1.32), t(88) = 2.21, p = .09. That the same score was seen as less typical of the group when it was associated with an older participant suggests that the distinct information manipulation effectively induced subtyping of the intended outliers.

**Dependent Variables**

**Similarity to the atypical exemplars.** Participants’ perceived similarity to the high-performing outlier differed across the three conditions, F(2,129) = 31, 97, p < .001. The individual scoring 660 (a high-performing outlier) was seen as less similar to the self when paired with an older face in the distinctive-high condition (M = 3.02, SD = 1.44) than in the control condition (M = 4.68, SD = 1.38), t(87) = 5.56, p < .001. Participants’ perceived similarity to the low-performing outlier was also examined, F(2, 130) = 41.64, p < .001. The individual scoring 340 (a low-performing outlier) was also seen as less similar to the self in the distinctive-low condition (M = 3.12, SD = 1.58) than in control condition (M = 5.24, SD = 1.17), t(86) = 7.21, p < .001. Because the older faces were female, the impact of participant gender on similarity ratings was also examined. Similarity ratings did not differ by gender (p > .16), suggesting that age was a more readily apparent category than gender as expected.

A 3 between (condition: distinctive-high vs. distinctive-low vs. control) × 2 within (scale type: group ratings vs. self-ratings) mixed model ANOVA was first conducted. The interaction was significant, F(2, 130) = 5.18, p < .01. Follow-up t tests were then conducted to examine the patterns for each scale.

**Group ratings.** In the Group Evaluation Scale, participants reported that the group performed better when distinctive information was associated with the low-performing outliers (M = 6.34, SD = 0.82) than when it was associated with the high-performing outliers (M = 5.93, SD = 0.79), t(86) = 2.34, p < .05, with the distinctive-normative condition in between (M = 6.10, SD = 0.82; see Figure 1). Male and female participants did differ in their group performance estimates. Male participants estimated that the overall group performed more poorly (M = 5.74, SD = 6.18) than the female participants (M = 6.18, SD = 1.57), t(131) = 2.43, p < .05.

**Self-ratings.** Participants evaluated their own performance more positively when they could subtype the high-performing ingroup members (M = 5.94, SD = 0.85) than when they could subtype the low-performing ingroup members (M = 5.58, SD = 0.81), t(86) = 2.05, p < .05, with the distinctive-normative group again falling in between (M = 5.78, SD = 0.77; see Figure 1). This provides further support for the idea that subtyping ingroup members excludes them as a standard of comparison. Gender did not impact self-ratings (p > .80).

**Discussion**

Although all participants saw the same sample of scores and the same pictures depicting 12 younger students and 2 older students, distinctive information associated with the outliers affected how participants evaluated both their ingroup and themselves. When outliers were notably older, their scores had less influence on the perception of
the overall group and participants’ evaluation of their own performance. This further supports the proposition that subtyping outliers not only reduces the impact of their performance on group perceptions (as in Kunda & Oleson, 1995) but also impacts perceived self-target similarity and self-evaluations.

Together with Study 1, this suggests that a trade-off exists for individuals who are highly identified with their groups, as subtyping high-performing ingroup members benefited self-evaluations at a cost to group evaluations, and subtyping low-performing ingroup members benefited group evaluations at the cost of self-evaluations. Poor performers who threaten the group should actually provide a flattering downward comparison for ingroup members concerned with their own performance. This suggests individuals may be motivated to subtype certain ingroup members depending on their current focus on their personal or social identity. In Study 3, the idea that self- and group-evaluative concerns motivate the subtyping of different ingroup members will be directly tested.

Study 3: Can the Selection of Subtyped Targets Be Motivated?
This study examines whether the observed benefits to group- and self-evaluations actually motivate subtyping different targets depending on one’s current self-categorization. In the present study, participants’ focus on their group evaluation or their personal evaluation was manipulated through the cover story. It was hypothesized that when focused on the evaluation of their group, participants would be more likely to subtype low-performing ingroup members, as this should allow participants to exclude these poor performers from the group assessment. When focused on their self-evaluation, it was hypothesized that participants would be more likely to subtype high-performing ingroup members, as this should allow participants to exclude these threatening individuals as a standard of comparison.

Method

Participants and Design. A total of 67 NYU students participated to fulfill partial course requirements. Participants were randomly assigned to one of two conditions: individual focus versus group focus.

Materials and Procedure. All participants began by completing the false interpersonal intelligence test, the ISI, and receiving a $500, as in the prior studies. All participants then received instructions to write down the scores of 14 “randomly-selected” NYU psychology students. These scores included the 2 low-performing outliers (320 and 340), 2 high-performing outliers (660 and 680), and 10 normative group members (between 440 and 560) as in Study 2.

In line with the subtyping instructions from the prior studies, participants were asked to set aside two individuals who do not fit their impression of the overall group, but form a separate identifiable group. This was emphasized to ensure that participants would choose either the high- or low-performing outliers who form a subcategory, rather than a mix of the two potential subtypes. Participants then wrote the groups they formed on the top sheet of the final questionnaire.

Experimental Manipulation. The ostensible purpose of the study was used to manipulate the focus on either the evaluation of one’s ingroup or the self. Respectively, participants in the group- and individual-focus conditions read,

People form [impressions of groups/judgments of their own performance] all the time based on just a few [exemplars/other individuals to compare themselves to]. This study examines how we can help people to [form an accurate impression of a group/accurately evaluate their own performance] based on [comparisons with/] a small number of randomly-selected individuals.

Later, after receiving instructions, participants read they should think about,

who does or does not fit in the larger group that these scores were pulled from, to ensure that you [form an accurate impression of the overall group/may accurately evaluate yourself in terms of your interpersonal intelligence].

Last, participants were told to sort the cards on the table to either “develop an impression of the larger group these

...
cards were pulled from” or to “develop an accurate evaluation of your own performance today.” Thus, the focus of the sorting task was manipulated to prime participants to think about the evaluation of their group or their personal evaluation, while experimental demand remained on accuracy rather than inflated evaluations.

**Dependent Variable**

**Choice of target.** The dependent variable of interest was whether participants set aside in a separate pile—subtyped—the low-performing outliers or the high-performing outliers. Those who chose one of each (i.e., one high-performing outlier and one low-performing outlier, \(N = 11\)) were excluded from the following analyses. The proportion of participants who chose one high-performer and one low-performer rather than two similar outliers did not differ by condition, \(\chi^2(1, N = 67) = 1.09, p > .29\).

**Results**

**Choice of Target.** A chi-square test revealed that the focus on group versus individual performance did affect whom participants chose to subtype, \(\chi^2 = 4.49, p < .05\). Participants in the individual-focus condition were more likely to subtype the high-performing group members (42.31%) than those in the group-focus condition (16.67%) who overwhelmingly chose to subtype the low-performing outliers (83.33%) thereby protecting their group’s evaluation and preserving a positive social identity. Interestingly, the majority of participants did choose to subtype low-performing ingroup members (71.43%). The perceived typicality of these outliers was subsequently analyzed to investigate this tendency.

**Perceived Typicality of the Outliers.** A paired t test conducted to examine whether participants perceived the low-performing ingroup members to be less typical of the group than high-performing ingroup members. Indeed, the individual scoring a 320 was perceived to be less typical of the group (\(M = 2.31, SD = 0.90\)) than the individual scoring 680 (\(M = 2.80, SD = 1.19\)), \(t(54) = 2.79, p < .01\), although the scores were equidistant from the participant’s score of 500, which was also the mean and mode, and from the normative group. Low-performing outliers were viewed to be particularly atypical of the group when they were subtyped. Across focus condition, individuals who chose to subtype the low-performing ingroup members perceived the individual scoring 320 to be less typical (\(M = 2.13, SD = 0.66\)) of the group than those who chose to subtype the high-performing ingroup members (\(M = 2.75, SD = 1.24\)), \(t(53) = 2.43, p < .05\).

A logistic regression was therefore conducted on participants’ selection of high- or low-performing targets by condition, with typicality of the high- and low-performing outliers entered as covariates. Perceived typicality of the low-performing outliers did influence participants’ selection, Wald(1) = 5.81, \(p < .05\), but the perceived typicality of the high-performing outliers did not, Wald(1) = 2.31, \(p = .13\). Controlling for these variables, individual versus group focus significantly predicted the subtyping of high-performing versus low-performing ingroup members, Wald(1) = 6.89, \(p < .01\).

**Discussion**

The present findings suggest that motivation does influence whom individuals choose to subtype. Participants focused on evaluating their own performance were more likely to subtype successful ingroup members than those focused on the evaluation of their group, even controlling for the perceived typicality of these outliers, reflecting a strategy shown to benefit self-evaluations when exposed to successful ingroup members in Study 1. Participants focused on group evaluations were far more likely to subtype the low-performing outliers, thereby excluding those who threatened the reputation of their ingroup, thus employing a strategy found in Study 2 to significantly improve evaluations of the group. However, it should be noted that 11 (16.42%) of the participants did not subtype either the high- or low-performing outliers, suggesting that subtyping is not a universal response to a threat to either the group or the self. The tendency to subtype did not differ by focus condition.

The difference between the two conditions cannot be explained merely by experimenter demand (e.g., if participants were told to subtype to protect their group or their own evaluation): Participants believed they were being judged on the accuracy of their self- or group evaluations (e.g., “how we can help people accurately evaluate their own performance”/“how we can help people to form an accurate overall impression of a group”), a motivation that conflicts with self-presentation.

**General Discussion**

These three experiments explored whether the process of subtyping could be functional for dealing with atypical ingroup members. The present studies suggest that in addition to the well-known function of subtyping for outgroup members—stereotype preservation—subtyping ingroup members can function to protect evaluations of one’s ingroup and oneself. In Study 1, subtyping atypical ingroup members increased the perceived atypicality of the outliers and resulted in lower estimates of self-target similarity. It was found that subtyping atypical ingroup members reduced the impact of their performance on the self relative to subgrouping, allowing participants to exclude these outliers as a standard of comparison. Study 2 manipulated subtyping implicitly, through the inclusion of distinctive information; subtyping again functioned to reduce the impact of outliers on self-evaluations relative to a no-subtyping control, and also showed a parallel effect for group evaluations. Study 3 showed that a focus on group- or self-evaluations influenced whom participants selected to subtype. Participants focused
on their own evaluation were more likely to choose to subtype high-performing ingroup members than those focused on group evaluations.

The current studies employed a variety of approaches to study subtyping, by explicitly instructing participants to subtype through a card sort task, by indirectly encouraging them to subtype through the inclusion of additional distinctive information, and by allowing participants to select which outliers to subtype. Also varied were the dependent variables, including self-ratings (Studies 1 and 2), group ratings (Study 2) and target selection (Study 3), to offer a fuller picture of the consequences of subtyping ingroup members. On the other hand, many features of the experiments (e.g., the participant population, the ISI, performance feedback, and the reported range of scores) were kept constant to allow comparisons across the different studies.

Implications

The present research suggests that a trade-off exists between individual self-regard and group appraisal when faced with atypical ingroup members. How individuals choose to respond to atypical group members may be influenced by their current self-categorization (i.e., whether their personal identity or social identity is activated) and what kind of threat they experience.

Successful businesswomen offer an example of a subcategory that could be used by other women to subtype or subgroup females who defy stereotypes through their success. Whereas accepting them as one of many varied members of the group (i.e., subgrouping them) would lead to a higher evaluation of the success of women in general, doing so would create a threatening standard of comparison for other women. On the other hand, setting them aside as atypical (i.e., subtyping them) would allow a more typical woman to feel good about herself in the face of a threatening upward comparison, but at a cost to her social identity. The current work extends the research of Parks-Stamm et al. (2008) by examining not only self-ratings following the application of a stereotype but also evaluations of the group, the features of subtyping (e.g., outlier atypicality, group variability), and the mechanisms underlying the self-protective effects of subtyping high-performing ingroup members (e.g., reduced target typicality and self-target similarity).

The idea that individuals’ self-evaluations benefit from subtyping high-performing ingroup members is not encouraging news for stigmatized groups. Like the work of Burkley and Blanton (2008) showing that endorsing negative ingroup stereotypes can protect self-esteem, this work suggests stigmatized groups may be motivated to preserve negative stereotypes by subtyping individuals who disconfirm them through their success. Indeed, the present studies suggest a mechanism by which group members can sacrifice the reputation of their group to reduce the threat of upward ingroup comparisons, thereby protecting self-esteem by embracing a negative group stereotype (Crocker & Major, 1989).

However, even if subtyping successful ingroup members initially benefits self-evaluations, eventually the resultant negative stereotype of one’s ingroup can affect individual performance. According to Steele (1997; Steele & Aronson, 1995), members of stigmatized groups who are aware of a negative stereotype experience performance failures in contexts where these stereotypes apply. If an aspiring female manager subtypes successful businesswomen to protect her own self-evaluation, thereby preserving negative stereotypes about women’s ability to succeed in business, she may later experience stereotype threat when her own ability is being tested. Thus, subtyping successful ingroup members to maintain lower group evaluations may be costly not only to the group but also to the self.

Limitations and Future Directions

The current research examined the consequences of subtyping for the ingroup and the self, but did not examine the prevalence of spontaneous subtyping in an unstructured environment. How often are these strategies used to protect the self in daily life? Who is most likely to subtype threatening others? Another question that the current studies do not address is the role of group membership in the effects of subtyping. Whether subtyping exclusively benefits ingroup members may be examined in future studies, taking into account group identification (Branscombe et al., 1993), collective self-esteem (Crocker & Luhtanen, 1990), and group status (Brewer & Weber, 1994; Martinot et al., 2002). Whether outgroup members would be “dismissed as not self-relevant” (Major et al., 1993), or as Martinot and colleagues (2002) have argued, whether only dominant group members have the luxury of dismissing outgroup members, would be worthwhile to explore. Perhaps subtyping provides even subordinate or low-status group members the means to exclude threatening individuals as standards of comparison regardless of group membership. Future research will need to examine this issue.

A further complication in the question of group membership lies in the consequences of subtyping. What is the group membership of ingroup members who are subtyped? If the boundaries of the group are re-fenced, in the words of Allport (1954), are these subtyped individuals now considered outgroup members? For example, if a low-performing ingroup member is subtyped to protect the reputation of the group, is he or she permanently erased from one’s group representation? Or could this subtyped individual later be recruited to the representation of the ingroup when one’s self-evaluation is threatened? Work by Oakes, Turner, and Haslam (1991) has demonstrated perceivers’ flexibility in using social categories to explain behavior, based on the stereotypicality of the characteristics of the actors, but could this flexibility also derive from the perceiver’s current motivational needs? Implicit social cognitive methods could be used to examine
whether subtyped individuals are still associated with the ingroup schema (e.g., by a sequential priming task with ingroup and outgroup cues such as “we” and “they” as primes and ingroup/outgroup/subtyped individuals as the target). It is possible that the association between the group and the atypical individuals would vary along with self- or group focus. This would provide further support for the idea that subtyping ingroup members is motivated.

Last, the current studies suggest that whom group members choose to subtype differs based on whether they wish to protect the reputation of their group or their position within their group. A number of variables could influence this decision beyond what is examined here, including the individual’s personal self-esteem and collective self-esteem (Crocker & Luhtanen, 1990) or whether he or she holds an independent or interdependent self-construal (i.e., whether the self is construed as an autonomous entity or as part of a larger social network; Gardner, Gabriel, & Lee, 1999). Future research could examine whether high-performing ingroup members are less likely to be subtyped in Eastern cultures, where the self is chronically interdependent (H. R. Markus & Kitayama, 1991), or among individuals within Western cultures from more collectivist cultural traditions (Cox, Lobel, & McLeod, 1991).

Research has also shown that intergroup contexts can impact an individual’s response to ingroup members’ performance (e.g., the success of other women is not threatening when women’s scores as a group will be compared with men’s; Schmitt, Silvia, & Branscombe, 2000). It is likely that both varying identification with one’s group and intragroup comparison would impact when and whom group members choose to subtype. Thus, future research could benefit from the current approach of studying the subtyping of both high-performing and low-performing ingroup members in one analysis.

Conclusion

The function of subtypes for encounters with outgroup members is widely agreed on: It is “a primary means for preventing stereotype change” (Park, Wolsko, & Judd, 2001, p. 325). The current research suggests that subtyping may also be functional for ingroup members, by both protecting self-evaluations from threatening ingroup comparisons, and protecting the evaluation of one’s group from low-performing ingroup members.

Acknowledgments

I am grateful for the support of my dissertation committee, including Madeline Heilman, Peter Gollwitzer, Gabriele Oettingen, Yaacov Trope, and Kay Deaux.

Author’s Note

This article is based on the author’s doctoral dissertation at New York University.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by an American Psychological Association (APA) Dissertation Research Award, as well as the Fryer Fellowship and Dean’s Dissertation Award from New York University.

Note

1. Students who have graduated with a baccalaureate degree may take undergraduate classes at New York University as part of a “post-bac” program.

References


