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The determinants and consequences of intragroup respect:

An examination within a sporting context

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Abstract

Respect is a term widely used in society yet its determinants and consequences on group-related factors are unclear. Four studies (pilots, *N*=23 and *N*=20; validation study, *N*=137; main study, *N*=76) examined these issues. In the main study, high-level rowing crew members completed measures of respect, liking and group identification, pre- and post-competition and attribution items post-competition. Although respect and liking did not predict team success, success was associated with subsequent levels of respect but not liking. The effect of success on group identification was mediated by respect. Moderation analyses indicated intragroup liking, but not respect, increased the likelihood of group-serving attributions. The results highlight the determinants of respect, its role in group processes and outcomes and distinguish respect from liking.

The determinants and consequences of intragroup respect: An examination within a sporting context

The term respect is widely used in society. Within caring professions, ethical codes of conduct stress the importance of treating clients with respect; in schools, children are taught the importance of respect for learning, for their teachers and for social institutions; and disadvantaged groups complain that they are not treated with sufficient respect. However, respect has been viewed in a number of different ways and this can hinder its utility as a psychological construct. In order to be functional, respect needs to be clarified conceptually and to be distinguished from other related concepts, such as liking. As well as examining this issue, the current research extends previous work in several ways. First, it is concerned with respecting one's group members (rather than receiving respect from them or an authority). Second, the explicit separation of respect and liking enables us to examine more systematically the relationship between respect and liking and the effects of respect and liking on group identification and on group performance. Third, it examines the influence of respect (and liking) on group serving bias. Finally, in the main study, these relationships are assessed in a longitudinal design that allows for reciprocal relationships to be examined in the context of a real-life sporting event.

What is respect?

There have been varied definitions and a range of antecedents of respect identified within the literature. These have been predominately at an interpersonal, rather than intra-group, level. Kellenberger (1995), for instance, has talked of respect for persons as persons and as distinguished from respect for persons based on their achievements,

success or abilities, respecting the rights of other human beings, and respect for duty or authority. Similarly, White (1991) has distinguished between achieved respect that is associated with one's achievements, status respect due to persons because of their position in society, and unconditional respect for persons viz. respect due to all humans because persons have intrinsic worth (see also Darwall, 1977; Dillon, 2003; Hudson, 1980). This paper will focus on the notion of achieved respect rather than respect based on intrinsic worth or one's position in society.

Some writers have treated respect and liking as components, or sub-categories, of one another, though specifying different relations between them. For example, Spears, Ellemers, and Doosje (2005) consider respect a higher order construct which can be based on liking or on competence. Alternatively, Rubin (1970) sees respect as a component of the more general concept of liking. His "liking" scales includes several items concerning respect and admiration as well as items focussed on liking. At an intra-group level, respect has also been viewed as akin to liking with some researchers manipulating liking as a means of changing respect (Branscombe, Spears, Ellemers, & Doosje, 2002), while at an interpersonal level others see respect and liking as more distinct (Frei & Shaver, 2002; Hamilton & Fallot, 1974; Kellenberger, 1995; Segal, 1979). While it is not our aim to compare across different levels (in this contribution the focus is predominately at the intra-group level), the relationship between these concepts needs to be clearly specified and any differentiation empirically validated. The distinction between respect and liking has not always been recognized within the literature and has led to some confusion regarding "respect"-based manipulations. De Cremer (2002) too stresses the need for a clearer separation between these two concepts.

Drawing on previous work on interpersonal perception, we consider liking and respect to be two overlapping but non-identical elements of evaluation. Rosenberg, Nelson and Vivekanathan (1968) distinguish between interpersonal or social qualities (qualities such as warmth, sociability, happiness and popularity) on the one hand and intellectual attributes (such as determination, skill, industriousness and intelligence) on the other. In an extension of this work, Hamilton and Fallot (1974) showed that "social" qualities influence the extent to which a target person is liked, whereas "intellectual" qualities influence respect for the person. Similarly, Fiske, Cuddy, Glick and Xu (2002) have distinguished between 'warmth' and 'competence' as content dimensions of intergroup perception and suggested that liking is linked to warmth and respect to competence. It should be noted that while Rosenberg et al. and Fiske et al. both uncover distinct dimensions, their work also shows that the two dimensions are related, thus implying an overlap between respect and liking.

The distinctions described above, which have been made in the study of the perception of people and of groups, echo an earlier distinction made in the study of group processes. Bales and Slater (1955) distinguished between two general functions of group life: task functions and socio-emotional functions. The traits labelled "intellectual" by Rosenberg et al. (1968) or "competence" by Fiske et al. (2002) seem to be particularly related to task functions; while "social" qualities or "warmth" appear to be more related to socio-emotional functions.

Some consequences of being treated with respect

A wide range of studies have shown the positive consequences of being treated with respect, though their conclusions needed to be treated with some caution as the

distinction between respect and other aspects of positive treatment are not always clear. Tyler and Smith (1999) have reviewed evidence indicating that someone who is treated with respect from an authority is more satisfied with the experience than someone who is not, particularly when the authority represented an ingroup as opposed to an outgroup. Indeed, a variety of studies stress the importance of the source of the respectful behaviour, and particularly whether it is performed by members of one's own group. Thus, being treated with intra-group respect has been shown to influence group serving actions (De Cremer, 2002; Simon, Lücken, & Stürmer, 2006; Simon & Stürmer, 2003). This is line with the considerable body of theory and evidence that stresses the importance of group membership for social identity (see Tajfel & Turner, 1986; Turner et al., 1987). Respectful treatment by one's group or organization also leads to greater identification with the group (Branscombe et al., 2002; Simon et al., 2006; Simon & Stürmer, 2003, 2005; Smith, Tyler, Huo, Ortiz, & Lind, 1998), and the effects of respectful treatment on group serving activities are mediated by group identification (Simon & Stürmer, 2003).

Many of these studies were conducted on newly formed groups and thus it is unclear how these findings generalize to established groups or teams. In addition, the researchers did not examine the reverse effects (i.e. the effect of group identification on respect) and research assessing the relationship between respect and willingness to help the ingroup has tended to focus on *intentions* to help the group, rather than actual behaviour (e.g., Ellemers, Doosje, & Spears, 2004; Simon & Stürmer, 2003, 2005). Even here, the consequences of respect for willingness to engage in group-serving behaviour were found only in the immediate situation. Interestingly, Simon and Stürmer (2003)

presented some evidence that suggests that respectful intragroup treatment might, in the long-term, *reduce* group members' willingness to act in a way that is helpful to the ingroup.

The Current Study

According to previous research the factors associated with feeling respected or liked differ. Feeling respected is related to task functions and liking is linked to socio-emotional factors. Furthermore, being treated with respect by ingroup members and authorities matters but respect from outgroup members and authorities does not (e.g., Tyler & Smith, 1999). The research to be reported takes advantage of this latter finding by focusing intragroup, within *established* (rather than newly-formed) rowing teams and in the context of a high level rowing competition. Additionally, it seeks to further identify the factors that lead to one's respect (and liking) for others (pilot studies), the validity of items assessing these factors (validation study) and, in the main study, the direct, mediated and moderated relations between intragroup respect, liking, identification and task success. While previous research has focussed on the consequences of being treated with respect, the current study examines the determinants and consequences of *respecting* (and liking) *members of one's own group*. By measuring liking, respect, and group identification before and after the competition, the reciprocal relations between these variables, and between them and the outcome of the competition will be examined. Together, these studies should help to identify the differences between respect and liking primarily at an intra-group level.

Main Study Hypotheses

Direct effects.

1. Respect, group identification (and liking) will predict success. Consistent with a wide range of literature on group performance, we suggest that good relations within a group should lead to better performance (see Brown, 2000; Levine & Moreland, 1998, for reviews). As Brown (2000) points out, the ingredients of these "good relations" are not always clearly specified. We seek to establish whether this effect is mainly the result of respect or of liking. Following from the work of Rosenberg et al. and Hamilton and Fallot, we suspect that respect (with its emphasis on task functions such as skill and determination) may be more important than liking (which is more related to the socio-emotional characteristics of warmth and sociability) in predicting performance outcome. Given the importance of group membership for a person's identity as well as its relationship with group serving behaviour, we would also expect group identification to predict performance.

2. Success will predict changes in respect and group identification (but not liking). The present study is also concerned with examining the determinants of respect (and liking). The generally positive consequences of success for positive social relationships within groups have been well documented (see e.g. Sherif, 1966), [though this effect is not invariant, (Brown, 2000)] and so we expect performance outcome to be related to group identification. We will also examine whether intragroup respect and liking are differentially affected by success and anticipate success to have a greater effect on respect (with its focus on the task) than liking.

Mediated effects.

3. Effects of task success on intragroup identification will be mediated by intragroup respect. Previous research has shown that the effect of respectful treatment (feeling

respected) on group serving actions is mediated by group identification (Simon & Stürmer, 2003). Given this, and that task success should increase intra-group respect (and intra-group identification), giving respect could mediate task success-group identification relations. Task success should enhance task relevant constructs such as respect and by increasing respect for team members one's identification with the group should also be strengthened.

Moderated effects.

4. Group failure will be attributed to external factors, and group success will be attributed to internal factors, particularly when intra-group liking is high. Respect will have less impact on these group-serving attributions. The study also breaks new ground by looking at the relationship between respect and attribution. One of the more robust findings in the study of attribution processes is the "self-serving" bias (Nisbett & Ross, 1980) or "group-serving" bias (Hewstone, 1989). Respondents (at least in "the West", see Smith & Bond, 1993) tend to explain their failures in terms of external, situational factors, and their successes in terms of internal ones. Positive actions by members of one's own group are similarly explained in terms of their positive characteristics; while negative actions are more likely to be explained in terms of situational factors. As respect and liking are both aspects of positive relationships with one's group, we expect group-serving bias to be moderated by both. However, since respect is a cooler and more dispassionate attitude, and is frequently based on perceptions of competence (e.g., Fiske et al., 2002; Kellenberger, 1995; Spears et al., 2005; White, 1991), we suspect that the effect of respect on group serving bias will be less pronounced than the effect of liking. In other words, there should be a greater need to "protect" those that one likes than those

that one respects, as the latter should be able to utilise their competence to achieve future group success.

Pilot Studies

Two pilot studies were conducted in order to explore which factors influence the extent to which an individual respects, or likes, other members of a group. The first pilot study served to generate a measure of intragroup respect. The 23 participants were informed that the study was concerned with the basic aspects of respect, particularly in the context of team sports and what makes one athlete increase or decrease their respect for a member of their sports team. After being told that there were no right or wrong answers, and ensured of their confidentiality, participants were asked to write down 3 things that a team member might do that would increase their respect for team members and 3 things that would decrease their respect for team members.

As there were 23 rowers that participated, there were a maximum number of 138 responses across the six answers to the respect questions. Categories in both pilot studies were generated by the authors on the basis of the responses provided. The responses were then coded independently by one author and a research assistant and any discrepancies were discussed and rectified. Responses to both questions fell into five main categories: selflessness (25 responses), being overly critical/having a critical personality (20 responses), mental toughness (26 responses), ability (7 responses) and commitment (52 responses). There were an additional five replies that fell outside of the five categories (e.g. good sportsmanship, making intelligent comments) and 3 missing responses (Cohen's kappa = .852).

A separate pilot study was conducted in order to generate the categories relevant for a liking measure. Twenty students were asked to write down 3 things that someone might do that would increase (decrease) the respondent's liking for them. In the present context, where we were attempting to elicit categories which distinguished respect from liking, this question, framed in terms of social relationships generally, was preferred to a question framed in terms of a sports team. Questions in terms of whom they would choose as members of a new team (Hogg & Hardie, 1991; Hogg & Hains, 1996) or actions that might be performed to increase liking as team members were avoided since they may have elicited some responses in terms of respondents' evaluations of competence in performing the task at hand. The validity of the categories derived in this way was established through a separate validation study and confirmatory factors analyses within the main study. Responses to these pilot study questions fell into five main categories: similarity (6 responses), helpfulness (21 responses), rudeness/politeness (37 responses), friendliness (17 responses) and fun (18 responses).[1] A further 21 responses (e.g., arrogance, advocating genocide, commit a crime) were provided (Cohen's kappa=.801).

In conclusion, commitment was the most frequently listed category for respect and rudeness was the most frequent for liking. While these studies linked respect and liking to different constructs, some of the categories that seem to underlie them (critical personality and rudeness/politeness; selflessness and helpfulness) appear to be rather similar. Based on the results of these studies, 10-item scales of respect and liking were generated and further validation work was conducted in order to more reliably identify the determinants of respect and liking.

Validation Study

A further study was conducted in an attempt to validate the liking and respect scales. In this study, participants were required to think of a group of people that they like but do not especially respect and a group of people that they respect but do not especially like. They were then asked to respond to 20 items along six point scales (strongly disagree-strongly agree) for each of these two groups (respect, not like; like, not respect). The items concerning these two groups were presented in a counterbalanced order.

Two items were used to represent each of the ten constructs identified in the pilot studies: 'Members of this group are successful', 'Members of this group perform well' (ability); 'This group gives 100% effort', 'This group is more concerned with partying than success' (commitment); 'People in this group put others ahead of their own personal success', 'This group is selfless in their approach' (selflessness); 'This group of people are fun', 'This group are a good laugh' (fun); 'This group of people are very friendly', 'This group of people are unsociable' (friendly); 'This group are impolite', 'The members of this group are bad-mannered' (rudeness); 'I enjoy the same things in life as this group', 'I have similar interests to this group' (similarity); 'People in this group are mentally tough', 'This group are positive in their mental approach' (mental toughness); 'This group are helpful people', 'This group are always willing to lend a hand' (helpfulness); 'Members of this group complain when things are not going well', 'This group can be overly critical of others' (critical personality).

One hundred and thirty-seven students completed all of the items. The responses are summarized in Table 1. The mean average response on the respect components (tapping ability, commitment, selflessness, mental toughness and critical personality)

were significantly greater for the respect (but not especially like) group (M = 3.82, SD = 0.68) than the like (but not especially respect) group (M = 3.49, SD = 0.68), $t(136) = 4.24$, $p < .0005$. Differences in commitment, mental toughness and ability were significant differentiating measures for these two groups. The mean average response on the liking items (similarity, helpfulness, friendliness, fun, rudeness/politeness) were significantly greater for the liking (but not especially respect) group (M = 4.19, SD = 0.81) than the respect (but not especially like) group (M = 3.78, SD = 0.92), $t(136) = -4.20$, $p < .0005$. Of the specific liking components, there were significant differences in fun, friendliness, helpfulness and similarity. The results of this study suggest that the scales have discriminant validity.

Main Study

Method

Participants

Eighty-eight members of high-level rowing crews competing in a college competition were originally recruited for this study following an email advertisement. Seventy-six participants also completed time 2 measures with a mean age of 22.07 years (SD = 3.81 years) and consisted of 31 men and 45 women from 24 rowing crews. In this final sample, 73 participants rowed within the college first team and 3 competed for the college second squad. A team consisted of 8 same-sex rowers plus one cox. Rates of drop-out did not differ across sex, $\chi^2(1) = 1.30$, $p = .25$, or college rowing crew, $\chi^2(24) = 22.83$, $p = .53$. MANOVA indicated that there were no differences between participants who completed all measures and those who dropped out in age, respect, liking and group

identity, $F(4, 83) = 0.72$, $p = .58$. The participants that completed all measures were entered into a prize draw.

Design and Procedure

The study used a repeated measures/longitudinal design with data collected pre- and post-competition. Participants completed measures at time 1 (7-12 days prior to competition) and time 2 (1-4 days post competition). The rowing competition lasted for 4 days and required all rowers to compete once, as a team, on each day. On average, participants completed time 2 measures 15.06 days (SD = 1.91 days, range = 9 days) after they answered time 1 measures.

An email was sent requesting participation in a study assessing the characteristics of high-level rowing teams. The email stated that participants needed to complete a number of questionnaire items. The email also provided the dates that participants should answer each questionnaire and included a link to a website that contained the time 1 measures only. At time 2, the previous questionnaire was removed from the webpage and replaced with the revised questionnaire. This prevented participants from identifying subsequent items outside the appropriate time period. Email reminders were sent to encourage participants to revisit the website at time 2.

At each time point participants completed the same measures in the same order. Upon entering the website, participants entered their email address, date of birth, college and sex. This enabled the identification of each participant at each stage of the study. They then answered questions that constituted the measures of liking and respect, before responding to the group identity items. Participants re-visited the website following the end of the event, thus at this stage the success of the group was determined. Furthermore,

at time 2, participants completed additional items concerning their attributions regarding their success or failure.

Measures

Items assessing respect, liking, group identity, along with attribution items, used 6-point bipolar scales ('strongly disagree' [1]-'strongly agree' [6]). The items assessing *respect* (α = .71 based on 10 items, α = .78 based on the 6 items shown to have discriminant validity) and *liking* (α = .79 based on 10 items, α = .75 based on 8 items shown to have discriminant validity), were the same as those presented in the validation study (see above) except the target changed from 'this group' to 'my team/team members'.

The Private Collective Self-Esteem subscale taken from the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) was used as a measure of *group/social identity*. The subscale reflects the extent to which one is happy to be part of a particular group and comprises four items: 'Overall, I often feel that it's not worthwhile being a member of this team' (reverse-coded); 'I feel good about being a member of this team'; 'I often regret being a member of this team' (reverse-coded), and 'I am glad to be a member of this team'. This scale has shown good internal and test-retest reliabilities and convergent and discriminant validities (Luhtanen & Crocker, 1992). Furthermore, the scale can readily be adapted for a specific group without compromising its psychometric properties (Luhtanen & Crocker, 1992, Study 3). In this study, the subscale demonstrated good internal reliability (α = .82).

An objective measure of group *success* was determined by subtracting the final race position of the participants' rowing crews from their starting race position. The

competition involved 68 rowing crews and the crews are ranked based on their performance in previous years. Each crew begins each race in staggered fashion. That is, the team performing best in the past is ranked first and starts first (race position 1), the second best team begins second (race position 2), and so forth. The competition lasted 4 days (in which each rowing crew competed once each day) giving the opportunity for a team to make a sizeable improvement or loss. The changes in race position of the participants in our study ranged from -4 to +6, providing, in effect, an 11-point scale.

Depending on their response to an item asking them about whether they viewed the team as being successful or unsuccessful in the competition (a dichotomous measure of *success/failure*), participants completed either an attribution measure of success or an attribution measure of failure. The attribution items were based on the well established attributional concepts of ability, mood, motivation, effort, task difficulty, luck and other people (see Weiner, 1980) and were adapted for this study. The items assessing the external component of attribution were: Our opposition were weak (Our opposition were very strong); Our opposition were unlucky (Our opposition were lucky); Our opposition didn't try very hard in this competition (Our opposition tried harder than usual in this competition); Our opposition couldn't care less about winning or losing (Our opposition really cared about winning). The items assessing internal attributions were: The performance of the team has been successful (unsuccessful) because: We are excellent oarsmen/oarswomen (We are not very good oarsmen/oarswomen); We were in a good mood (We were in a bad mood); We are an extremely motivated team (We are an unmotivated team); We put more effort into our rowing than usual (We put less effort

into our rowing than usual). Responses to the items were averaged to generate measures of *internal attribution* (α = .79) and *external attribution* (α = .73).

Method of Analysis

Confirmatory factor analyses were conducted to compare models of intragroup respect and liking. Correlational analyses were conducted to assess the inter-relationships between the study variables and to test hypothesis 1 that intragroup respect, liking and group identification at baseline will relate to task success in the future. Regression analyses were conducted to ascertain whether success was related to changes in respect, liking or group identification (hypothesis 2). The causal flow amongst intragroup respect, liking and group identification were explored using cross-lagged path analyses. Hypotheses 3, that the effect of success of group identification would be mediated by intragroup respect, were tested using mediation analyses. Moderation analysis was employed in relation to hypothesis 4, that group failure will be attributed to external factors, and group success will be attributed to internal factors, particularly when intra-group liking is high.

Results

Construct Validation

In the first validation study, seven of the ten components (commitment, ability, mental toughness, fun, friendliness, helpfulness and similarity but not selflessness, critical personality or rudeness) successfully differentiated between respected (but not especially liked) groups and liked (but not especially respected) groups. Confirmatory factor analysis was used to compare a model of liking and respect based on all 10 components and the 7-component model validated above. A range of measures were used

to evaluate the fit of the models including chi-square, Root Mean Square Error of Approximation (RMSEA) and Comparative Fit Index (CFI) measures. Good fit is suggested when the chi-square test is non-significant, the RMSEA is less than 0.08 and CFI is greater than 0.90 (Bentler, 1990; Marsh, Balla, & Hau, 1996; Steiger, 1990).

The 7-component model showed good fit, $\chi^2(13) = 17.55$, $p = .18$, RMSEA = 0.065, CFI = 0.94, and significantly outperformed the 10-component model, $\chi^2(34) = 62.42$, $p = .002$, RMSEA = 0.100, CFI = 0.86, $\Delta\chi^2(21) = 44.87$, $p < .01$. The 7-component, two-factor, model also outperformed its single factor equivalent, $\chi^2(14) = 36.89$, $p = .00077$, RMSEA = 0.140, CFI = 0.83, $\Delta\chi^2(1) = 19.34$, $p < .01$, and a single factor, 10-component model, $\chi^2(35) = 73.70$, $p = .00014$, RMSEA = 0.115, CFI = 0.81, $\Delta\chi^2(22) = 56.15$, $p < .01$. In the final 7-component, two-factor model, presented in Figure 1, commitment, $\lambda = .72$, ability, $\lambda = .54$, $t = 4.08$, $p < .0005$, and mental toughness, $\lambda = .76$, $t = 4.94$, $p < .0005$ significantly loaded on the respect factor and fun, $\lambda = .75$, $t = 3.86$, $p < .0005$, friendliness, $\lambda = .65$, $t = 3.68$, $p < .0005$, helping, $\lambda = .57$, $t = 3.45$, $p < .0005$, and similarity, $\lambda = .50$, significantly loaded on the liking factor.

The results of the confirmatory factor analyses support the conclusions drawn from the validation study. Specifically, the findings from both sets of analyses suggested that mental toughness, commitment and ability are more strongly related to respect than liking, while friendliness, not being rude, being fun and helpful were associated with liking rather than respect. On the basis of these findings, the analyses reported below were conducted using the validated 6-item measure of respect (with mental toughness, commitment and ability items) and 8-item measure of liking (using fun, friendliness, helpfulness and rudeness items).

Correlational Analysis

To assess the interrelationships between the study variables a correlational analysis was conducted. The results are presented in Table 2.

None of the time 1 variables (respect, liking or group identification) were related to success. Thus, hypothesis 1 was not supported. However, respect (r = .48, p < .0005) and group identification (r = .25, p = .03) at time 2 were significantly correlated with success[2]. This pattern of results suggests that respect or liking for team members and the extent to which one identifies with the group does not impact on success. However, success does play a role in how much one respects and identifies with their group (but not how much one likes the group).

Regression analyses further emphasized that success was associated with changes in respect rather than liking. In the three regression analyses, respect, liking and group identification (all at time 1) and success were entered as predictors. The dependent variables were either time 2 measures of respect (regression 1), liking (regression 2) or group identification (regression 3). A significant effect of success would suggest that it was related to a change in respect (regression 1), liking (regression 2) or group identification (regression 3). Respect at time 2 was significantly predicted by respect at time 1, β = .35, p = .002, and success in the competition, β = .49, p < .0005 but not liking, β = .16, p = .14.

Liking at time 2 was predicted by liking at time 1, β = .61, p < .0005 but not by success, β = .09, p = .33 (see Table 3, Regression 2), or respect, β = .08, p = .47. In other words, success is associated with changes in respect but not in liking, and liking and respect appear distinct. Similar analyses revealed that success was also associated with

changes in group identitification, β = .24, p = .006 (see Table 3, Regression 3). Hypothesis 2, therefore, was supported.

Mediational Analysis

Success was strongly correlated with the time 2 measure of respect. Success was also correlated with group identity at time 2. Mediational analysis was conducted to determine whether the effect of success on group identity was mediated by respect. There was evidence that the effect of success on group identity (at time 2) was mediated by respect (at time 2) supporting hypothesis 3. Hierarchical regression analysis showed that success when entered on the first step, significantly predicted group identity, β = .25, p = .03. However, when respect was entered as a significant predictor on the second step, β = .67, p < .0005, success no longer predicted group identity, β = -.07, p = .49 (see Table 3, Regression 4). This change in the predictive ability of success was significant (Sobel Z = 3.82, p = .0001). Furthermore, when respect was entered as the only predictor of group identity in a separate regression, respect had a significant impact, β = .64, p < .0005. Finally, in a third regression, success significantly predicted respect, β = .48, p < .0005. All of the conditions for mediation were met (Baron & Kenny, 1986). It should be noted that within the equivalent mediation analyses in which the mediator and outcome variables were switched, the effect of success on respect remained highly significant when the effect of group identity was controlled, β = .34, p < .0005. Given this, it seems more cogent that success increases group identity, in part, because success increases respect, rather than concluding that the effect of success on respect occurs due to changes in group identity. There was no evidence that the effect of success on group identification was mediated by liking.

Causal Flow: Group Identification, Respect & Liking

The measures of respect, liking and group identification were moderately to highly related with correlations ranging from $r = .29$ (liking time 1-respect time 2) to $r = .71$ (liking time 2-group identification at time 2). To assess the causal flow amongst these variables, a series of cross-lagged path analyses were conducted.

Kline (1998) argues that when the subject/parameters ratio within path analysis is less than 5:1 the statistical stability of the results becomes doubtful. Thus while a model incorporating 4 variables (10 parameters) might be suitable to estimate using path analysis, more complex models would require greater sample sizes. Given our sample size, we could only test very basic models thus we assessed the interrelationships between pairs of constructs in separate path analyses (liking-respect; liking-group identification; respect-group identification).

In each of the crossed-lagged path analyses, the variables were correlated at time 1 and time 2 but the cross-paths (e.g., group identification at time 1→liking time 2) were all non-significant. The results, therefore, are neutral regarding the direction of the causal flow between respect, liking and group identification.

Respect and Liking and Group-Serving Bias

To examine the effect of respect and liking on group-serving attributions for success and failure, moderation analyses were conducted. In these analyses, all continuous variables (respect at time 1, liking at time 1) and dependent variables (internal attribution, external attribution) were mean centered. On the first step of a hierarchical regression, respect at time 1, liking at time 1, and the dichotomous index of success (coded as 1)/failure (coded as 0) were entered as predictors. On the second step, the two-

way interaction terms were added (respect x success/failure; liking x success/failure). Internal (see Table 3, Regression 5) and external (see Table 3, Regression 6) attributions represented the two dependent variables. Significant interactions, in the correct direction, would indicate that liking or respecting one's team members increases the likelihood that success is attributed to internal reasons and failure to external factors. Significant interactions were probed using simple slopes analyses, using the computational tool provided by Preacher, Curran and Bauer (2006), and are illustrated in Figures 2 and 3.

When the dependent variable was external attribution (see Table 3, Regression 6), on the first step, $F(3, 72) = 49.46$, $p < .0005$, success/failure significantly predicted the amount of external attribution, $\beta = -.79$, $p < .0005$. On the second step, $F(5, 70) = 37.21$, $p < .0005$, the interaction between liking and success/failure was highly significant, $\beta = -.46$, $p = .002$. Simple slopes analysis indicated that people were significantly more likely to attribute failure, rather than success, to external factors- particularly when intra-group liking was high, $B = -2.56$, $SE = .24$, $t = -10.75$, $p < .005$, rather than low, $B = -1.36$, $SE = .26$, $t = -5.20$, $p < .005$. The interaction between respect and success/failure was non-significant, $\beta = -.12$, $p = .40$.

When the dependent variable was internal attribution (see Table 3, Regression 5), on the first step, $F(3, 72) = 52.55$, $p < .0005$, success/failure significantly predicted the amount of internal attribution, $\beta = .84$, $p = .002$. On the second step, $F(5, 70) = 36.77$, $p < .0005$, the interaction between liking and success/failure was significant, $\beta = .36$, $p = .017$. Simple slopes analysis revealed that people were more likely to attribute success, rather than failure, to internal factors, and this tendency was more pronounced when intra-group liking was high, $B = 2.93$, $SE = .28$, $t = 10.63$, $p < .005$, rather than low, $B =$

1.85, *SE* = .30, *t* = 6.17, *p* < .005.. The interaction between respect and success/failure was non-significant, β = .14, *p* = .32. In sum, liking, but not respect, moderated the effect of success and failure on attributions, supporting hypothesis 4.

Discussion

There were consistent correlations between ratings of liking and respect, both before the beginning of the competition and after, which suggests that the two variables are certainly related. However, the study shows that respect and liking are distinct in terms of their determinants and consequences. The results of the confirmatory factor analysis supported a two-factor model- where respect and liking are represented as distinct factors- rather than a single factor model and also confirmed the outcome of the validity study that assessed the discriminant validity of the measures. Further, respect and liking were related in different ways to success. While pre-competition intragroup respect and liking (and group identification) did not predict success (not supporting hypothesis 1), success increases respect but not liking (hypothesis 2). Furthermore, the effect of success on group identification was mediated by intragroup respect but not liking (hypothesis 3). Finally, liking significantly increases the likelihood of group-serving attributions of performance, while respect does not (hypothesis 4).

The results of the validation study and the confirmatory factor analysis revealed that friendliness, fun, helpfulness and similarity were linked to liking while commitment, mental toughness and ability were particularly associated with respect. These findings appear consistent with previous research on person perception which distinguishes between task-related/competence and social qualities (e.g., Rosenberg et al., 1968) and links respect to task-related/competence qualities and liking to social qualities (e.g.,

Hamilton & Fallot, 1974). The results of these analyses, therefore, indicate that respect and liking are distinct concepts and should not be used interchangeably. Further evidence for this was also provided by the analyses highlighting that respect and liking relate differentially to success and that they play different roles in attributions of success and failure.

While respect was influenced by the success of the group, liking moderated the effects of group-serving bias, but respect did not. One of the main explanations of group-serving bias concerns the maintenance and protection of esteem. We posit that because respected teams are viewed as competent they are perceived to be less in need and do not require protection afforded by in-group serving attributions. The esteem of the group will be enhanced by using their abilities to achieve success in the future. However, it should be noted that such conclusions require further examination.

The research findings are based on a correlational design and further experimental work is needed. However, by differentiating between respect and liking within these studies (the pilot studies, the validation study and the main study) it is now clearer how respect should be manipulated within such designs. The results of these studies suggest that one should target the components of respect. Of the various determinants identified within this research, and tested within the validation study, manipulating commitment, ability, and mental toughness appear to be the most important when a manipulation of respect, rather than liking, is desired. Laboratory-based approaches that have previously focused on the consequences of respectful intra-group *treatment*, such as those employed by Simon and colleagues (Simon & Stürmer, 2003, 2005; Simon et al., in press), could be readily adapted to investigate the effects of *having* intra-group respect. By targeting

underlying components of respect (in particular commitment, ability and mental toughness) researchers minimize the risk of their interpretations being confounded by liking (see Branscombe et al., 2002).

Most research regarding group identification has focused on intergroup-related features such as relative group size or status and the (im)permeability of group boundaries and how these factors affect group identity. However, intragroup factors including respectful *treatment* by fellow group members (Branscombe et al., 2002; Simon et al., in press; Simon & Stürmer, 2003, 2005) or ingroup authorities (Smith et al., 1998), has also been shown to be influential for, and increase, collective identification or commitment. Whereas past research has focused on the *consequences* of respectful *treatment* for group identification, our research examined *reciprocal* effects between *having* respect (and liking) and group identification by adopting a longitudinal design. The results of the cross-lagged path analyses suggested that the effect of respect on group identification is no stronger than the reciprocal path (group identification→respect). Similar effects also emerged between liking and group identification.

Respect and liking before the start of the competition did not predict the objective index of team success[3], and thus respect (or liking) appears to have limited consequence for group performance. Taking this into account, team building, that often involves enhancing the quality of the relationship between members for considerable lengths of time before a competition, might have little utility. These findings clearly need to be replicated and extended. However, if they are robust, they suggest that preliminary preparation should focus more on technical accomplishment than on the quality of intra-group relations.

While respect and liking for one's group members appears to have limited impact on group success, one might expect that liking and respect for one's *opponents* might have more pertinent, and divergent, effects on performance. When the relative success of two teams or opponents is controlled, competitiveness could increase with increasing levels of dislike but decrease with higher levels of disrespect. As respect is linked to success, when an opponent is disrespected they could be perceived as lacking in ability and thus underestimated. Further research could modify the intragroup respect and liking scales that we used in order to test these predictions. If, indeed, respect and liking have these unique, inverse effects on performance then this further emphasises the distinctiveness of the two constructs as well as highlighting issues relevant to the preparation of athletes and sporting teams for competitive fixtures.

The advantages and disadvantages of investigating these issues within the context of competitive rowing crews should be acknowledged. Research examining the interrelationships between respect, group identification and group-related behaviours has tended to be focused on newly formed groups inside the laboratory and thus this research, by utilizing established groups within a real-life context, presents a more unique insight into natural groups with a higher degree of ecological validity. However, the results obtained could be restricted to certain types of groups with particular characteristics (e.g., high cohesion; highly motivated). Further research should be undertaken to ascertain the generalizability of the findings.

In sum, we conclude that respect and liking are related but distinct concepts and thus researchers should exercise precision in their "respect"-based manipulations and attempt to control for the effects of liking (for an illustration of this approach, see Simon

& Stürmer, 2005). While liking and respect were moderately to highly correlated, the results of the pilot, validation and main studies demonstrate that liking and respect differ both in their determinants and consequences. Regarding determinants, respect is particularly linked to commitment, mental toughness and ability, while liking is more strongly associated with friendliness, fun, helpfulness and similarity. In addition respect, rather than liking, is strongly influenced by success. In terms of consequences, liking, rather than respect, serves a protective function by increasing the likelihood that failure is attributed to external factors and success is attributed to internal factors.

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Footnotes

[1] One reviewer enquired whether there were any coding frequency differences between the respected/liked groups and the disrespected/disliked groups. Ability was linked solely to increasing respect (7 votes) rather than losing respect (0 votes) and having a critical personality was more strongly association with losing respect (6 vs. 14). For the other respect-based categories, the distributions were more even (selflessness- 16 vs. 9; mental toughness- 17 vs. 9; commitment- 22 vs. 30; gaining respect votes listed first). For liking, being friendly (16 votes vs. 1) and fun (13 vs. 5) were linked more to increased liking than decreased liking, while rudeness/politeness (12 vs. 25) was associated more readily with dislike. Distributions for similarity (4 vs. 2) and helpfulness (10 vs. 11) were more even (liking votes listed first).

[2] Additional analysis showing that respect was inversely related to race start position, $r = -.22$, $p = .04$, supported the view that the most respected teams were the most able because teams started in a position based on previous performances. Specifically, better past performances secured a higher starting position. There was no relationship between liking and race start position, $r = -.07$, $p = .54$.

[3]A self-reported measure of success (used to determine whether participants completed attribution measures of success or failure) was significantly predicted by the 6-item measure of respect at time 1, $\beta = .23$, $p = .04$. This was not the case for either measure of liking (10-item or 8-item) or the 10-item measure of respect. Given the discrepancy between the 6- and 10-item versions of respect, more research is needed to establish whether respect can reliably predict indices of group success. Apart from this

difference between the self-reported measure of success and the objective index, all other conclusions regarding success were not influenced by the success measure used. Specifically, self-reported success also predicted respect at time 2, $\beta = .67$, $p < .0005$ (but not liking, $\beta = .18$, $p > .05$), changes in respect, $\beta = .59$, $p < .0005$ (but not liking, $\beta = .16$, $p > .05$) and the effect of success on group identification was mediated by respect and not liking.

Table 1: Results of the validation study

Component	Mean (SD) Respect	Mean (SD) Liking	*t*
1. Ability	*4.41 (1.06)*	*4.04 (1.13)*	*-2.96***
2. Commitment	*4.08 (1.12)*	*3.39 (1.25)*	*-4.63****
3. Selflessness	*3.28 (1.15)*	*3.21 (1.26)*	*-0.57*
4. Mental Toughness	*4.26 (1.15)*	*3.89 (1.13)*	*-3.67****
5. Critical Personality	*3.05 (1.27)*	*2.93 (1.18)*	*-0.93*
6. Fun	*3.60 (1.38)*	*4.35 (1.20)*	*5.30****
7. Friendliness	*4.01 (1.13)*	*4.51 (1.04)*	*3.89****
8. Rudeness (reverse-coded)	*4.39 (1.38)*	*4.46 (1.27)*	*0.45*
9. Similarity	*3.23 (1.30)*	*3.65 (1.37)*	*2.79***
10. Helpfulness	*3.69 (1.31)*	*3.99 (1.17)*	*2.05**
11. Respect (components 1-5)	3.82 (0.68)	3.49 (0.68)	-4.24****
12. Liking (components 6-10)	3.78 (0.92)	4.19 (0.81)	4.20****

*$p < .05$; **$p < .005$; ***$p < .0005$

Table 2: Summary of Correlational Analyses (Main Study)

	Mean (SD)	1	2	3	4	5	6	7	8	9
1. Success	0.20 (2.36)	-	.07	.25*	.26*	-.31**	-.14	.01	.03	.48***
2. Group Identification T1	4.63 (0.92)		-	.68***	.06	-.20	.50***	.45***	.59***	.39**
3. Group Identification T2	4.86 (0.78)			-	.20	-.34**	.44***	.71***	.43***	.64***
4. Internal Attribution	3.63 (1.33)				-	-.70***	.09	.29*	.24*	.58***
5. External Attribution	2.31 (1.16)					-	-.08	-.30*	-.29*	-.60***
6. Liking (8-item) T1	4.49 (0.58)						-	.68***	.48***	.29*
7. Liking (8-item) T2	4.54 (0.62)							-	.43***	.55***
8. Respect (6-item) T1	4.23 (0.75)								-	.48***
9. Respect (6-item) T2	4.42 (0.79)									-

*$p < .05$; **$p < .01$; ***$p < .0005$

Table 3: Summary of Regression Analyses (Main Study)

Regression	Outcome	Predictor	Step	β	R^2	ΔR^2
1	Respect Time 2	Respect T1	1	.35**	.48***	
		Success		.49***		
		Liking T1		.16		
		Group Identification T1		.07		
2	Liking Time 2	Liking T1	1	.61***	.49***	
		Success		.09		
		Respect T1		.08		
		Group Identification T1		.10		
3	Group Identification Time 2	Group Identification T1	1	.56***	.53***	
		Success		.24**		
		Respect T1		-.01		
		Liking T1		.20		
4	Group Identification Time 2	Success	1	.25*	.06*	
		Success	2	-.07	.41***	.35***
		Respect T2		.67***		
5	Internal Attribution	Success/Fail	1	.84***	.69***	
		Respect T1		-.07		
		Liking T1		.19*		
		Success/Fail x Respect T1	2	.14	.72***	.04*
		Success/Fail x Liking T1		.36*		
6	External Attribution	Success/Fail	1	-.79***	.67***	
		Respect T1		-.11		
		Liking T1		-.08		
		Success/Fail x Respect T1	2	-.12	.73***	.05**
		Success/Fail x Liking T1		-.46**		

*$p < .05$; **$p < .01$; ***$p < .0005$

Figure Captions:

Figure 1: Confirmatory Factor Analysis- Standardized Solution (Main Study)

Figure 2: Intra-group liking moderates the likelihood of attributing success/failure to external factors

Figure 3: Intra-group liking moderates the likelihood of attributing success/failure to internal factors

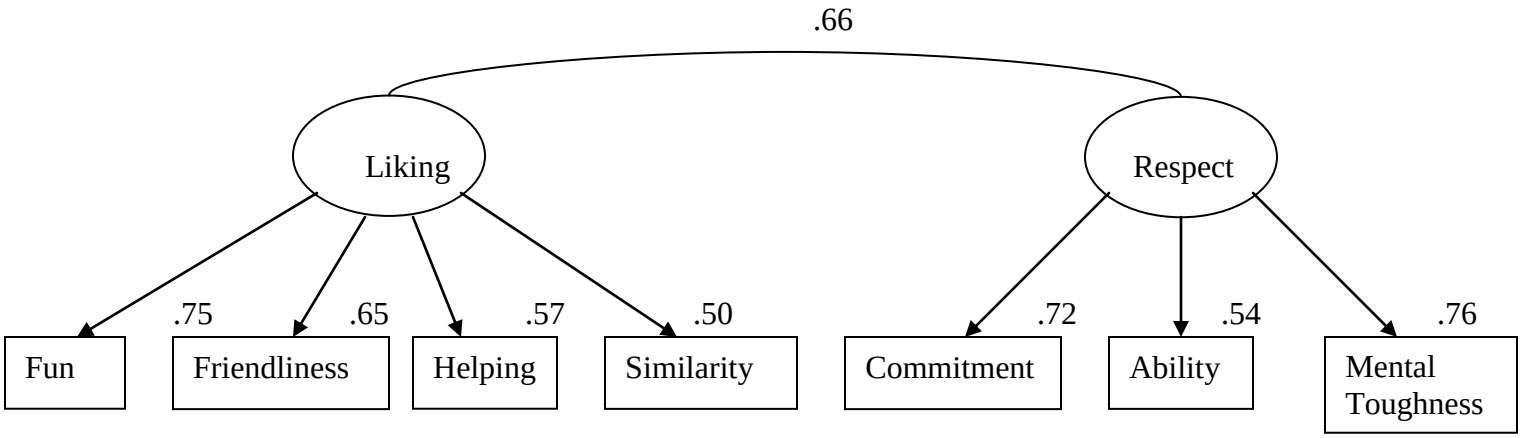
.66
Liking
Respect
.75
.65
.57
.50
.72
.54
.76
Fun
Friendliness
Helping
Similarity
Commitment
Ability
Mental Toughness

Figure 1

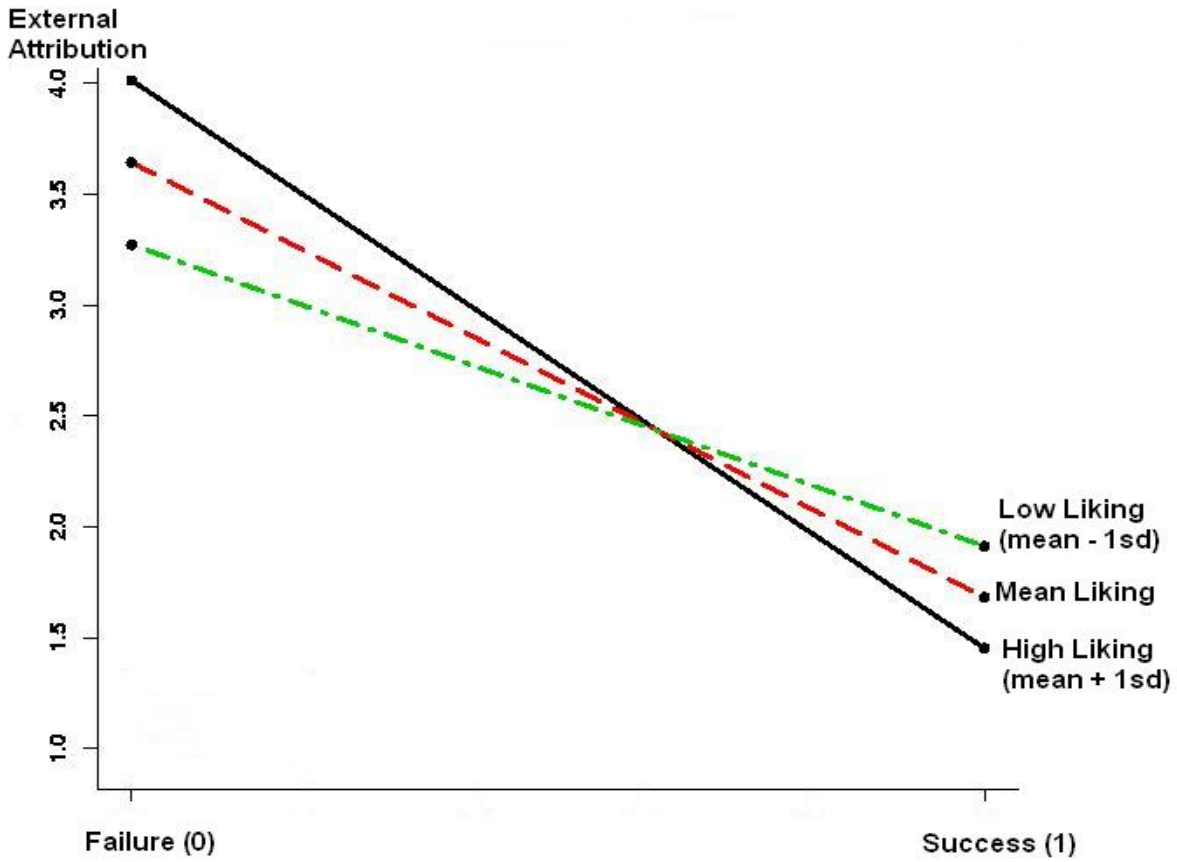
External
Attribution
4.0
3.5
3.0
2.5
2.0
1.5
1.0
Low Liking
(mean - 1sd)
Mean Liking
High Liking
(mean + 1sd)
Failure (0)
Success (1)

Figure 2

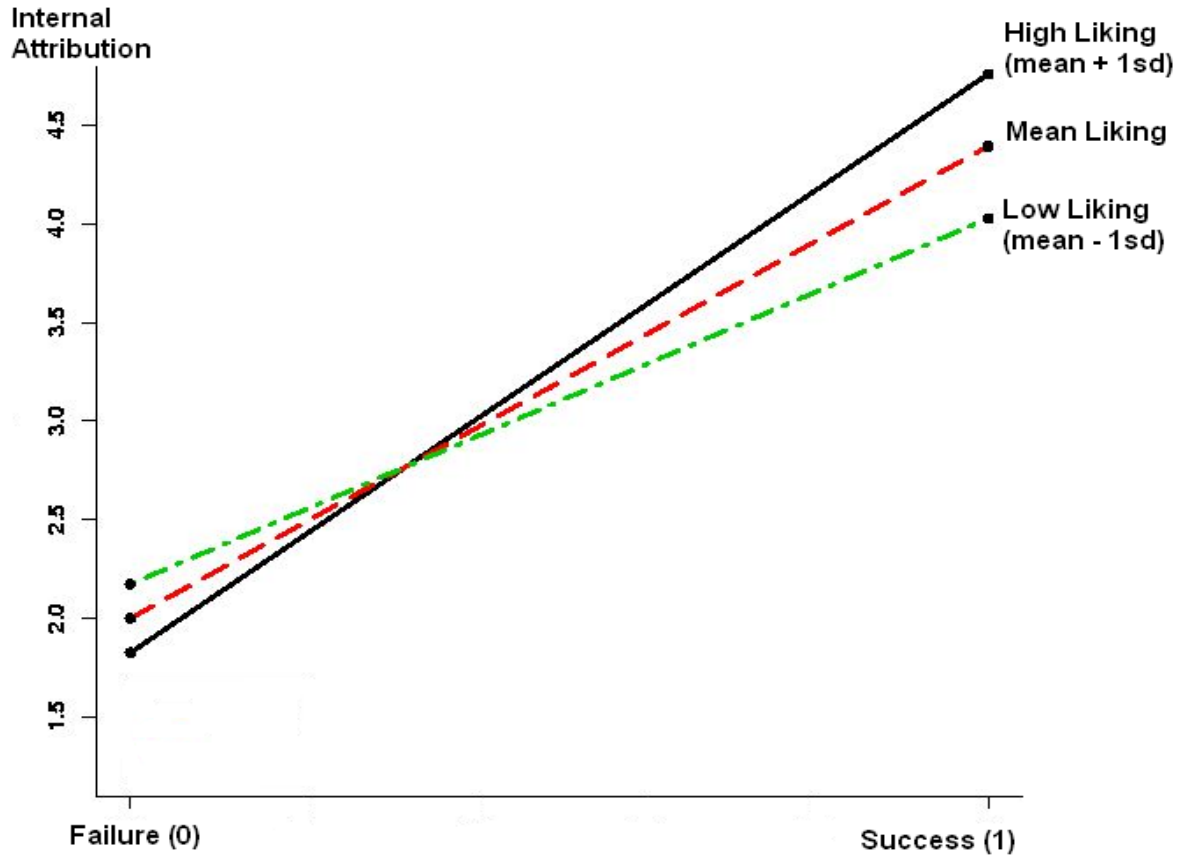
Internal
Attribution
4.5
4.0
3.5
3.0
2.5
2.0
1.5
High Liking
(mean + 1sd)
Mean Liking
Low Liking
(mean - 1sd)
Failure (0)
Success (1)

Figure 3