

The Moderating Effect of Need for Affiliation on Conformity in Response to Group Reactions

Cody T. Macdonald and Jay K. Wood
Auckland University of Technology, New Zealand,

Building on the work of Heerdink et al. (2013), this research assessed the relationship between group reactions and conformity, with feelings of acceptance/rejection proposed to mediate and the need for affiliation to moderate the effect. The direct relationship between the need for affiliation and conformity was also examined. There was a direct relationship between group reactions and cognitive conformity. Furthermore, there was a relationship between group reactions and feelings of acceptance/rejection and between acceptance/rejection and affective and behavioural conformity. Full mediation of acceptance/rejection was not present between group reaction and cognitive conformity. Finally, there was a partial effect for need for affiliation on conformity; however, the moderating effect of need for affiliation was inconsistent.

Keywords: conformity, need for affiliation, group reactions, acceptance/rejection

Imagine as vividly as possible that you and several friends decide to go on a vacation together. After some discussion, the group decides to go to a ski resort. Once realising how expensive flights are, you propose to change plans and take a road trip to the next city. Your friends respond as if they are disappointed, even angry. Take a moment to try to picture everything in your 'mind's eye'. Imagine how you might feel in the situation. Does this negative emotional response lead you to conform to the group, or do you leave the group?

Conformity is a rational process, where individuals construct a norm based on other people's behaviour to determine what is appropriate or right for themselves (Asch, 1952). Conformity occurs when the pressure for uniformity influences individuals to change their behaviours, opinions, or perceptions to become closer to the group norm (Cialdini & Goldstein, 2004). Although the literature on the decision-making processes involved in conformity is vast, comparatively little is known about emotional and motivational influences on those processes. The present study, therefore, aims to contribute to our understanding of this area by looking at the effects of group reactions and feelings of acceptance and rejection on conformity, as well as whether the need for affiliation moderates the relationship between group reactions and feelings of acceptance/rejection.

Emotions in Groups

In recent years there has been an increasing awareness of emotions having interpersonal consequences and functions (Cote, 2005; Elfenbein, 2007; Fischer & Manstead, 2008; Hareli & Rafaeli, 2008; Lazarus, 1991; van Kleef, 2009). Emotions expressed by groups or individuals may influence the behaviours, emotions, and thoughts of other groups and individuals through inferential or affective processes (e.g., liking or emotional contagion; Hess & Bourgeois, 2010; van Kleef, 2009; van Kleef, De Dreu, & Manstead, 2010; see also Molden, Lucas, Gardner, Dean, & Knowles, 2009). Regarding inferential processes, observers often infer information about people's attitudes, feelings, behavioural intentions, and relational orientation based on their emotional expressions (DeWall, 2010; Keltner & Haidt, 1999). For instance, sadness becomes apparent when an individual experiences irrevocable

loss and has little coping potential (Smith, Haynes, Lazarus, & Pope, 1993). Therefore, observers of sadness may infer that the expresser is in need of support, which may lead the observer to offer support (Clarke, Pataki, & Carver, 1996). In addition, when a person is the focus of an angry expression, they may infer that they are to blame and did something wrong, which in turn may inform behaviour (van Kleef, 2009).

Evidence suggests that expressions of emotions can also have an interpersonal influence by provoking affective reactions in observers, and therefore affect their behaviour (Chow, Tiedens, & Goven, 2008; van Kleef, 2009). Emotions can transmit directly to the observer from the expresser by emotional-contagion processes that involve afferent feedback (i.e., physiological feedback from either facial, postural or vocal shifts), imitation, and mirror-neuron activity (van Kleef, 2009). On the other hand, emotional expressions can also affect interpersonal liking and impressions (van Kleef, 2009). One study found that working teams with an angry manager also became angry themselves and acquired a negative impression of the manager, while teams with a happy manager became happy and developed a positive impression of the manager (Sy, Cote, & Saavedra, 2005). Additional studies found that negotiators whose colleagues expressed anger became angry themselves, disliked the colleague and were less willing to meet again. However, people whose colleague expressed happiness became happy and liked the other, and were more satisfied and willing to meet again (van Kleef, De Dreu, & Manstead, 2004; van Kleef, De Dreu, & Manstead, 2004b).

Heerdink, van Kleef, Homan, and Fischer (2013) conducted a series of five studies on social influence and emotions in groups, including the interpersonal effects of emotions in relation to conformity and deviance. In this series of studies, the authors investigated the relationship between majority emotions and feelings of acceptance and rejection by a deviant group member. In one study, Heerdink et al. (2013) used a vignette approach to examine the idea that emotional expressions are indicators of an individual's inclusionary status. Participants imagined themselves in a group where the majority reacted with anger, disappointment, happiness or no emotion to their deviant opinion. Results indicated that

in a situation where a person disagrees with the majority, participants felt more rejected if the group expressed anger. However, deviant group members felt more accepted if the group exhibited happiness.

In another study, Heerdink et al. (2013) explored situations in which the majority's emotions can pressure deviant group members to conform by prompting feelings of acceptance and rejection. The role of perceived cooperativeness was investigated by asking participants to recall a situation where their opinion had differed from those of the group and to report the emotions that were expressed by the majority. Following this, participants were asked to what extent they felt pressure to conform to the situation. Heerdink et al. (2013) preferred this method compared to asking participants whether they actually conformed, given that individuals are generally disinclined to overtly disclose their conformity. Interestingly, evidence suggests that individuals distort their memories of acting with conformity to make it look as if they initially agreed (Griffin & Buehler, 1993). Heerdink et al. (2013) also examined whether the effects of the majority emotions on conformity pressure were facilitated by perceived rejection. The results of this study replicated the finding that the majority's emotions are related to the extent to which individuals feel accepted or rejected. In addition, this study indicated that in situations that were perceived as cooperative, higher conformity pressure was experienced to the extent that less happiness and more anger was expressed, and this correlation was mediated by feelings of rejection. In situations that were perceived as competitive, a similar mediating effect was not found, which is consistent with the idea that conformity is not a meaningful way of showing good group membership in a competitive setting (Heerdink et al., 2013).

Although the aforementioned evidence suggests that emotions influence conformity in interpersonal relationships, individual differences in the motivations to conform should also be considered. One significant issue that Heerdink et al. (2013) suggest require future research is the idea of teasing apart the motivational processes that may underlie the behavioural conformity effect observed. As participants adapted their behaviour because they felt rejected, Heerdink et al. (2013) note the possibility that their participants were driven by a desire to affiliate.

Need for Affiliation as a Moderator of Conformity

To extend from the study conducted by Heerdink et al. (2013), the present study examined the moderating role of need for affiliation (Leary, 2010). The need for affiliation is powerful and pervasive, and it motivates the way in which individuals form positive and lasting interpersonal relationships (Leary, 2010; Steinal et al., 2010). As early as 1967, McGhee and Teevan argued that a high desire for affiliation to referent groups may be associated with greater conformity; however, this relationship has seldom been clearly demonstrated. Rose, Shoham, Kahle, and Batra (1994) found that socially oriented people exhibited a greater need for affiliation, which was consistent with the empirical findings of Homer and Kahle (1988) and Rotter (1966). Furthermore, Rose et al. (1994) found that people with a high need for group affiliation tend to conform more and that conformity

and high group identification were positively related. Rose et al. reasoned that people with strong group identification may be more reliant on others and are therefore more likely to conform to gain approval. In contrast to these findings, numerous other studies found no significant relationship between need for affiliation and conformity (Crutchfield, 1955; Samelson, 1957). These inconsistencies in past literature make it problematic to draw conclusions as to whether or not there is, in fact, a relationship between need for affiliation and one's desire to conform.

The Current Study: Aims and Hypotheses

Although the effects of conformity in group behaviour are clearly important to understand, the brief review above indicates that there are a number of outstanding and unresolved issues. The aim of the present research is to add to our current understanding of the emotional and motivational processes involved in conformity, and to contribute to the resolution of some of the conflicting findings that have been noted. Our approach was to begin by partially replicating the study by Heerdink et al. (2013) to determine whether there was an effect of group reactions on conformity. We first wanted confirm the relationship between group reactions and acceptance/rejection. It was hypothesised that participants would feel more accepted if the group responds with happiness, whereas individuals would feel rejected if the group responds with either negative or neutral emotion.

Next, we were interested in determining if the relationship between group reactions and conformity is mediated by feelings of acceptance and rejection. We hypothesised that the relationship between group reactions and conformity would be mediated by feelings of acceptance and rejection. We hypothesised that participants who felt greater rejection would feel more pressure to conform compared to those who felt accepted in an effort to regain standing in the group. Furthermore, we sought to explore whether the need for affiliation moderated the relationship between group reactions and feelings of acceptance and rejection. It was hypothesised that need for affiliation will moderate the effect of group reactions on feelings of acceptance/rejection, with those participants reporting a high (versus low) need for affiliation feeling greater pressure to conform after experiencing rejection.

Finally, we wanted to assess whether there was a direct relationship between the need for affiliation and conformity. As mentioned, several studies (e.g., Hardy, 1957; McGhee & Teevan, 1967; Rose et al., 1994; Schacter, 1951) have found that conformity is positively correlated with a high need for affiliation, whereas other studies have found no significant relationship (Crutchfield, 1955; Samelson, 1957). Therefore, the relationship between need for affiliation requires clarification.

Methods

Design

The design of this study was partially based on the research of Heerdink et al. (2013). We first looked at the

effect of group reactions on conformity. Group reaction had four conditions (i.e., anger, happiness, disappointment, and neutral). Feelings of acceptance and rejection were proposed to mediate the relationship between group reaction and conformity. Conformity was evaluated using three separate measures: affective (feelings of pressure), cognitive (abiding by the majority), and behavioural (leaving the group). Need for affiliation was proposed to moderate the effect of group reactions on feelings of acceptance and rejection. Finally, a test was conducted to address the inconsistencies regarding the relationship between need for affiliation and conformity (see Figure 1 for an illustration for the proposed relationships among the variables).

Participants were first asked to read a vignette that described a group situation in which the group's emotional response was manipulated (Heerdink et al., 2013). In the vignette, participants were asked to try to imagine as vividly as possible the situation described, imagining that they are in the scenario and how might they feel in the situation. The participant and three close friends had an issue with another friend and had come together to discuss and decide what they should do. All three friends shared the similar ideas, whereas the participant had a conflicting idea. The vignette ended with 'when it is your turn to tell your friends your idea, they don't immediately agree with you.....' followed by 'they then stared blankly with no sign of emotion whatsoever' (neutral/

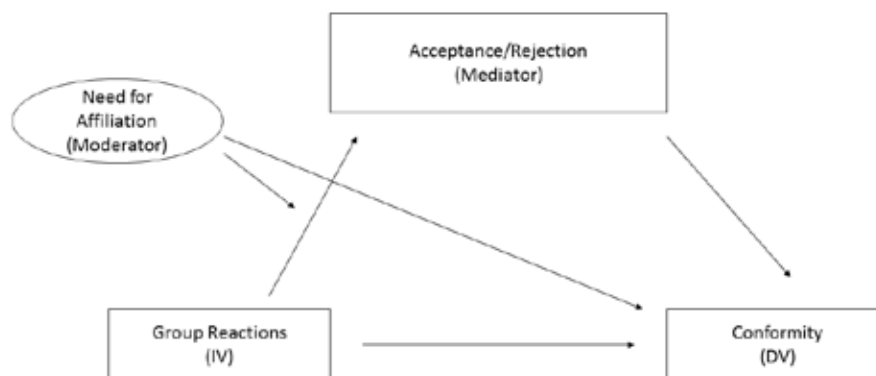


Figure 1. Proposed relationships among group reactions, conformity, acceptance/rejection, and need for affiliation.

Participants

A total of 216 undergraduate participants from a New Zealand university took part in this study, and 181 of the 216 questionnaires were fully completed and were able to be used for analysis. Out of the 181 participants, 163 identified as women and 17 as males. One participant preferred not to say. The sample consisted of 128 who identified as New Zealand/European, 17 as Maori, 1 as Samoan, 3 as Cook Islander Maori, 3 as Tongan, 1 identified as Chinese, 2 as Indian, and 26 identified as other. The average age of participants was 27.63 ($SD = 10.86$). The minimum age of participants was 17 and the maximum was 68.

Materials and Procedure

This study consisted of an online questionnaire, and employed materials similar to those used by Heerdink et al. (2013) including a similar vignette, acceptance/rejection scale, a question on conforming versus leaving the group, and a question on conformity pressure. In addition, the Interpersonal Orientation Scale (IOS; Hill, 1987) was administered. A manipulation check was included at the end of the questionnaire before the demographic items. Demographic items queried participants' gender, ethnicity, and age.

no emotion condition), 'they then looked toward the ground, shaking their heads, clearly disappointed' (disappointment condition), 'they then smile and nod, clearly happy' (happy condition), or 'then they frowned, looking clearly angry' (anger condition). Participants were randomly assigned to one of the four emotional conditions mentioned above, two of which were negative emotions (i.e., anger and disappointment).

The acceptance/rejection scale (Heerdink et al., 2013) measured the extent to which participants felt accepted versus rejected. The scale consists of four items; 'I feel rejected due to the group's reaction,' 'the group's reaction makes me feel alone,' 'the group's reaction makes me feel happy,' and 'I feel supported due to the group's reaction'. The latter two items are reverse coded. The items are scored on a 4-point scale (1= strongly disagree, 2= disagree, 3= agree, and 4= strongly agree). Higher scores on the acceptance/rejection scale indicate greater feelings of rejection. For the current study, the acceptance/rejection scale showed an overall Cronbach's alpha of $\alpha = .84$, which indicates excellent internal consistency.

The three conformity items were all measured using a 7-point scale (Heerdink et al., 2013). The cognitive conformity item asked participants to indicate the extent to which they would 'conform to the group, while disregarding your own thought or idea (abide my majority)' and the item regarding

leaving the group (behavioural conformity) asked participants whether they would 'attempt to find other friends whose reasoning is similar to your own'. Options ranged from 'definitely not conform to the group' to 'definitely conform to the group'. For the affective conformity question, participants were asked to 'please indicate to what extent you felt pressure to be in agreement with the group', and responses ranged from 'absolutely no pressure' to 'an extreme amount of pressure'.

The IOS (Hill, 1987) was developed to focus on four aspects assumed to correlate with affiliation motivation: positive stimulation, attention, emotional support, and social comparison. The positive stimulation subscale (9 items; $\alpha = .85$) reflects social reward; an example item is 'I get satisfaction out of contact with others more than most people realise'. The attention component (6 items; $\alpha = .84$) reflects the social motive of attention seeking; an example is 'I like to be around people when I can be center of attention'. Emotional support (6 items; $\alpha = .89$) reflects the capacity for affiliation to decrease the experience of negative emotions related to fear-provoking or stressful situations. A sample item is 'If I feel unhappy or kind of depressed, I usually try to be around other people to make me feel better'. Finally, the social comparison dimension (5 items; $\alpha = .73$) includes seeking information about self-relevant issues when objective criteria for evaluation are not available. An example is 'I find that I often look to certain other people to see how I compare to others'. Each item was assessed on a 4-point scale ranging from 'strongly disagree' to 'strongly agree'.

Finally, to check whether participants perceived the intended emotional response, at the end of the questionnaire participants were asked to indicate which emotion was present in their scenario: A) Happiness, B) Anger, C) Disappointment, or D) Neutral (no emotion).

The questionnaire was approximately 15 minutes long. As a Koha or offer of reciprocity, participants who fully completed the questionnaire were eligible to enter the draw to win a \$100 gift voucher.

Results

Manipulation Check

A chi-square test of independence was used to determine whether the manipulation of the group's reaction had been successfully perceived by participants. The manipulation check indicated that what people perceived the group reaction to be was significantly different from what was expected, $\chi(N = 181) = 24.34, p < .01$ (refer to Table 1). Each of the four conditions had roughly the same number of participants. Interestingly, participants in the angry condition were more likely to have observed disappointment. Participants in the happy condition were more likely to have equally perceived both disappointment and neutral emotion. Participants in the disappointment condition observed the portrayed emotion correctly for the most part. Furthermore, participants in the neutral condition often observed disappointment. Nevertheless, given that the other measures may detect effects of the manipulation to which our check was not sensitive, we continued with the remainder of the analyses.

Table 1

Manipulation Check of Perceived and Actual Group Reactions

Condition	Anger	Happy	Disappointment	Neutral	Total
Anger	5	3	23	17	48
Happy	1	8	16	16	41
Disappointment	2	0	31	18	51
Neutral	5	0	20	16	41
Total	13	11	90	67	181

Group Reactions on Conformity

Affective conformity

A one-way between groups analysis of variance (ANOVA) was conducted to explore the of impact of groups reactions on feelings of conformity pressure. There was no significant effect ($F(3, 177) = 0.27, p = .85$, partial $\eta^2 = .01$; see Table 2), as each of the conditions' means are approximately the same.

Cognitive conformity

A one-way between groups ANOVA was conducted to explore the impact of group reactions on cognitive conformity. There was a significance difference ($F(3, 177) = 5.48, p = .001$, partial $\eta^2 = .09$) for participants abiding by the majority. Post-hoc comparisons using the Tukey HSD test indicated that the difference was between the happy condition and each of the others ($ps < .03$). All other comparisons were nonsignificant, $ps > .85$. The significant effect can also be seen in Table 2. Individuals in the happy condition tended to disregard their opinion less compared to each of the additional conditions.

Table 2

Means (M) and Standard Deviations (SD) of Conformity Measures by Group Reactions

Group Reaction	Affective M(SD)	Cognitive M(SD)	Behavioural M(SD)
Anger	3.62 (1.66)	4.83(1.59)	4.25(1.93)
Happy	3.49(1.83)	3.78(1.73)	4.29(1.93)
Disappointment	3.47(1.73)	5.02(1.39)	4.55(1.68)
Neutral	3.76(1.59)	4.76(1.55)	4.1(2.06)
Total	3.58(1.69)	4.63(1.62)	4.31(1.88)

Behavioural conformity

In relation to behavioural conformity, a one-way ANOVA was conducted to examine whether there was an impact of group reactions on behavioural conformity. There was no significant effect on participants intentions to leave the group, $F(3, 177) = 0.46, p = .71$, partial $\eta^2 = .01$.

In sum, the present study concluded that group reactions did not affect feelings of pressure or intentions of leaving the group. However, there was a cognitive change; individuals in the happy condition tended to disregard their opinion less compared to each of the additional conditions. We therefore used Baron and Kenny's (1986) procedure to assess whether acceptance/rejection mediates the effect of group reaction on cognitive conformity.

Group Reactions on Acceptance/Rejection

To test whether there was a relationship between group reactions and feelings of acceptance/rejection, a one-way between groups ANOVA was conducted. Group reactions did have a significant effect on participants' feelings of acceptance and rejection, $F(3, 177) = 13.55, p < .001$, partial $\eta^2 = .19$.

The significant difference was again found in the happy condition (see Table 3). Post hoc Tukey HSD comparisons demonstrated that participants in the happy condition scored lower on rejection than those in the other conditions ($ps < .001$), and differences between each of the other conditions were nonsignificant ($ps > .92$).

Table 3

Means (M) and Standard Deviations (SD) Acceptance/rejection scores by Group Reaction Conditions

Group Reaction Condition	M(SD)
Anger	3.05(0.55)
Happy	2.46(0.60)
Disappointment	3.08(0.59)
Neutral	3.12(0.43)
Total	2.94(0.60)

Acceptance/Rejection Mediating the Effect Between Group Reactions and Cognitive Conformity

A general linear model with a categorical variable (i.e., group reaction) and a continuous moderator¹ (i.e., acceptance/rejection) was used to evaluate the third step of Baron and Kenny's (1986) procedure, which was to determine whether feelings of acceptance/rejection mediated the effect of group reactions on cognitive conformity (i.e., disregarding one's opinion in favour of the group).

A marginally nonsignificant effect was found for feelings of acceptance/rejection ($F(1, 176) = 3.66, p = .06$, partial $\eta^2 = .02$) on cognitive conformity. The effect for group reaction was still present, ($F(3, 176) = 6.78, p < .001$, partial $\eta^2 = .10$), which indicates full mediation is not applicable.

Acceptance/rejection on affective conformity. Despite the fact that mediation of acceptance/rejection was not present between group reactions and both affective and behavioural conformity, we were still interested in examining whether feelings of acceptance/rejection predict the additional two conformity measures.

Simple regression was used to examine if feelings of acceptance/rejection predict whether individuals felt pressure to conform to the group. Results indicate that there was a relationship between feelings of acceptance/rejection and pressure to conform, $b = 1.14, t(179) = 5.92, p < .001$, partial $\eta^2 = .16$. The effect size for acceptance/rejection influencing conformity is large and in the positive direction. This illustrates that as feelings of rejection increase so does conformity pressure.

Acceptance/rejection on behavioural conformity

Simple regression was used to examine if acceptance/rejection predicts intentions to leave the group.

¹ All continuous variables were centred prior to inclusion as moderators in the model.

Results indicated a small, negative effect on intentions to leave the group, $b = -.59, t(179) = -2.56, p = .01$, partial $\eta^2 = .04$. As rejection increased, intentions of leaving the group declined.

IOS Moderating the Effect Between Group Reactions and Acceptance/Rejection

IOS general. A series of general linear models with the IOS scales included individually as a continuous variables were used to explore if IOS general and its subscales moderated the effect of group reaction on feelings of acceptance/rejection.

Results indicate that IOS as a whole did moderate the effect of group reactions, $F(1, 171) = 3.40, p = .02$, partial $\eta^2 = .06$. The effect was found for participants in the disappointment condition ($b = .51, t(179) = 2.02, p = .05$, partial $\eta^2 = .02$), but not in the remaining conditions ($ps > .11$). Results indicated a small, positive effect that suggests that individuals in the disappointment condition with higher need for affiliation were more likely to experience feelings of rejection, compared to each of the other conditions (see Table 4).

With regard to the emotional support and positive stimulation dimensions, mediation was not present. The effect of the mediation was largely driven by the social comparison subscale, $F(3, 171) = 6.11, p = .001$, partial $\eta^2 = .10$, and was again present in the disappointment condition, $b = .73, t(177) = 4.00, p < .001$, partial $\eta^2 = .09$. Participants in the disappointment condition who scored higher in social comparison tended to feel more rejected. No effects were observed in the other conditions, $ps > .77$.

The relationship between attention and group reactions was marginally nonsignificant ($F(3, 173) = 2.64, p = .051$, partial $\eta^2 = .04$), with a small to moderate effect size. The marginal difference was driven by the angry condition, ($b = -.34, t(177) = -1.68, p = .10$, partial $\eta^2 = 0.02$) which again was marginally nonsignificant. All other comparisons were nonsignificant, $ps > .84$.

In brief, the present study concluded that the IOS general did interact with the group reaction condition on acceptance/rejection. The effect was largely driven by the social comparison subscale and to some extent the attention subscale, and existed primarily in the disappointment condition.

Table 4

Means (M) and Standard Deviations (SD) of IOS and Subscales by Group Reaction Conditions

Condition M(SD)	IOS	Emotional support	Attention	Positive Simulation	Social Comparison
Anger	2.69(0.40)	2.18(0.64)	2.39(0.62)	2.88(0.54)	2.75(0.43)
Happy	2.57(0.33)	2.00(0.59)	2.26(0.64)	2.71(0.47)	2.80(0.52)
Disappointment	2.59(0.46)	2.04(0.67)	2.23(0.59)	2.78(0.53)	2.75(0.60)
Neutral	2.69(0.43)	2.12(0.61)	2.53(0.52)	2.78(0.51)	2.81(0.58)

Relationship between the Need for Affiliation and Conformity Measures

Finally, the relationship between need for affiliation (as measured by the IOS) and the three conformity measures (i.e., cognitive conformity, behavioural conformity and affective conformity) was investigated using the Pearson correlation

coefficient.

As shown in Table 5, there was a weak positive relationship between the IOS general and affective conformity, indicating that high levels of need for affiliation were associated with high feelings of pressure to conform. Furthermore, a weak positive correlation was found between the attention subscale and affective conformity, which shows that higher scores on attention were associated with higher feelings of conformity pressure. Interestingly, a weak negative relationship was found between the social comparison subscale and cognitive conformity, demonstrating that high levels of social comparison are related to lower levels of conforming to the group, while disregarding one's own thought. The final significant relationship that was present was a weak to moderate positive correlation between social comparison and affective conformity, which shows that higher scores on social comparison were associated with greater pressure to conform.

Table 5

Pearson Correlations Between Need for Affiliation (IOS) and Conformity

Measures	Cognitive	Behavioural	Affective
IOS	-.12	-.07	.15*
IOS_ES	-.04	.01	-.02
IOS_Attention	-.12	-.11	.15*
IOS_POSSTIm	-.05	-.08	.11
IOS_SocCom	-.20**	-.04	.26***

N = 181. IOS = Interpersonal Orientation Scale. * $p < .05$ ** $p < .01$. *** $p < .001$.

Discussion

The aim of the present experimental study was first to partially replicate the study conducted by Heerdink et al. (2013), to determine whether there was an effect of group reactions on conformity. The second objective was to determine whether there was an effect of group reactions on feelings of acceptance/rejection. From this, we were interested in examining if the relationship between group reaction and conformity was mediated by feelings of acceptance/rejection. The third aim was to explore whether the need for affiliation mediates the relationship between group reactions and acceptance/rejection. The final aim was to investigate whether there was a direct relationship between the need for affiliation and conformity.

Key findings suggest that there was no direct relationship between group reactions and affective or behavioural conformity. There was, however, a relationship between group reactions and cognitive conformity. Furthermore, results indicated there was a relationship between group reactions and participants' feelings of acceptance/rejection and between conformity pressure and behavioural conformity. However, acceptance/rejection did not mediate the effect of group reaction on cognitive conformity. The relationship between group reaction and acceptance/rejection was moderated by the (general) need for affiliation. It is important to note that a moderating effect for social comparison was found and a marginally nonsignificant interaction was found for attention. Finally, results indicated that there was a direct relationship between some elements of need for affiliation and conformity.

Manipulation Check

In the present study, the manipulation check replicated from Heerdink et al. (2013) showed inconsistent findings. Out of the four conditions, the disappointment condition was the only condition to be observed correctly by the majority of participants. In contrast to this finding, the manipulation check conducted by Heerdink et al. (2013) confirmed that the majority reaction was perceived correctly. Given that the present study's manipulation check was employed slightly differently, this could be a possible reason for the inconsistencies in the findings. For instance, at the completion of the experiment Heerdink et al. (2013) asked participants to demonstrate to what extent the group had reacted with anger, enthusiasm and disappointment (from 1 = not at all to 7 = very much). The present study added an additional reaction (i.e., neutral) and at the completion of the questionnaire asked participants to demonstrate which emotion was present in the above vignette, which was presented in a multiple choice format. In the present study's vignette, the group reactions were projected in a rather explicit manner, and one possibility is that participants inferred that it was an intentionally misleading question. For instance, at the end of the vignette participants in happy condition were told that the group members then 'smile and nod, clearly happy.' Clearly, a happy emotional response was demonstrated, yet the majority of participants still choose either disappointment or neutral.

Perhaps a more realistic interpretation pertains to the ambiguous wording of the question (i.e., "Please indicate which emotion was present in the above scenario"). It is unclear whether this refers to the emotion expressed by the group members, the emotional reaction of the participant, the emotion initially expressed to the group by the participant, or some combination of the above. This ambiguity may have affected participants' responses to the manipulation check item, despite the manipulation itself having the intended effect. An individually administered debriefing, or perhaps additional follow-up questions given to a subset of participants might have clarified the interpretation of this item. Unfortunately, this was not possible due to the anonymous and online nature of the data collection.

Group Reactions on Conformity

There were a number of inconsistencies between the results of the present study and those of Heerdink et al. (2013). One explanation could be due to the cultural identity of participants. Heerdink and colleagues (2013) did not specify the ethnicity of their participants; however, their study was conducted in the Netherlands, which is generally considered an individualistic culture (Triandis, 1994). Collectivist cultures tend to define themselves as members of a group and subordinate their personal goals to the group's goals (Mills & Clark, 1982). On the other hand, individuals from an individualistic culture value individual achievement, self-reliance and personal goals (Fong & Wyer, 2003; Kim & Markus, 1999; Markus & Kitayama, 1991; Triandis, 2001). People from individualistic cultures often have greater skill when it comes to entering and leaving new social groups, and they make acquaintances easily (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988).

Although the majority of participants in the present study

identified as NZ European, there is a considerable influence of Maori and Pacific Island culture on New Zealand society (Houkamau & Sibley, 2010). Maori have strong connections with whanau (family) and iwi (tribe; Houkamau & Sibley, 2010). Furthermore, Pere (1979, 1988) noticed that whanaugatanga (i.e., the mutual responsibilities and relationships with group members) provide individuals with a sense of identity. Durie (1994) mentions that the Western ideal of independence and 'standing on your own two feet' is seen as maladaptive by Maori people, while interdependence, connectedness, and emphasis on whanau is actively encouraged. Unfortunately, sample sizes in the present research prevented further analyses to determine whether participants' ethnicity moderated the observed effects; however, it is possible that either a more collectivistic orientation or a greater cultural heterogeneity accounts for some of the variability in the data (Jetten, Postmes, & McAuliffe, 2002; Oh, 2013).

Group Reactions on Acceptance/Rejection

It was hypothesised that participants would feel more accepted if the group responds with happiness, whereas participants would feel more rejected if the group responds with either anger, disappointment, or a neutral emotion. In this study, results suggest that participants in the happy condition reported fewer feelings of rejection (i.e., feeling more accepted). This finding is consistent with Heerdink et al. (2013), who found that after an angry reaction, participants reported feeling more rejected, whereas after a happy response, participants felt more accepted. Despite what Heerdink et al. (2013) found, various limitations were discussed regarding the methodology. For example, the use of a vignette gave more experimental control but may be criticised for drawing on naïve concepts about emotions (Parkinson & Manstead, 1993), rather than actual reactions to emotional expression.

Furthermore, additional studies suggest that individuals who receive an angry expression tend to experience a threat to their need to belong (Baumeister & Leary, 1995). This is highly unpleasant and motivates one's behaviour to improve the level of acceptance in the group (Williams, 2007). Hollander (1960) argues that by conforming to the group norm, the deviant individual can show that they are a 'good' group member, which increases the likelihood of acceptance (Steinel et al., 2010; Van Kleef, Steinel, Van Knippenberg, Hogg, & Svensson, 2007).

Acceptance/Rejection Mediating an Effect between Group Reactions and Cognitive Conformity

Our study found a marginally nonsignificant effect for acceptance/rejection and cognitive conformity while controlling for group reactions. The effect for group reactions on cognitive conformity was still present, which indicates that full mediation is not possible. The small effect size for acceptance/rejection suggests that even partial mediation is unlikely. On the contrary, Heerdink et al. (2013) indicated that in situations that were perceived as more supportive, higher conformity pressure was experienced when anger was expressed. Interestingly, they found that this relationship was mediated by feelings of rejection; though in situations perceived as more competitive this mediation was not found

(Heerdink et al., 2013).

Acceptance/Rejection on Affective Conformity and Behavioural conformity

For both the additional conformity measures (e.g., affective and behavioural conformity), it was hypothesised that participants who felt greater rejection would conform more compared to those who felt more accepted, despite the lack of mediation of group responses.

The results for affective conformity indicate that the higher feelings of rejection an individual felt, the more pressure they felt to conform. In relation to the effect of acceptance/rejection on behavioural conformity, results suggest that there is an effect of acceptance/rejection on behavioural conformity (i.e., intentions of leaving the group): as feelings of rejection increase, intentions of leaving the group decline. That is, participants who feel accepted are more likely to leave the group.

Results from Heerdink et al. (2013) suggest that the majority's emotional expression influence feelings of acceptance or rejection. These feelings of acceptance/rejection can influence how an individual relates to conformity pressures or impede behavioural conformity. According to Heerdink et al. (2013), when the majority expresses happiness in response to deviance, the deviant individual feels accepted and in turn, is not likely to change their behaviour and is expected to persist in deviance. On the other hand, if the majority expresses anger, the deviant individual feels rejected and therefore will most likely be motivated to re-establish their sense of belonging in the group by conforming (Heerdink et al., 2013). The consequence of behavioural conformity is that the deviant individual's opinion is eliminated and by conforming the individual can demonstrate commitment to the group's goals and identity (Klein, Spears, & Reicher, 2007), which in turn can increase acceptance from the group (Hollander, 1960; Levine & Moreland, 1994). It could be argued that feelings of rejection elicit a response that participants want to remain in the group in hopes to gain acceptance and show commitment. However, when an individual has feelings of acceptance within the group, the desire to gain the favour of the group is lessened because acceptance is met and comfort is found.

Need for Affiliation Moderating the Effect Between Group Reactions and Acceptance/Rejection

The present study demonstrated an interaction between group reactions and feelings of acceptance/rejection, which may be moderated by the need for affiliation. The effect was largely driven by the social comparison subscale and in the disappointment condition. For those individuals in the disappointed condition, a greater need for affiliation was associated with greater feelings of rejection. These findings to some extent support the hypothesis that need for affiliation functions acts as a moderator between group reactions and acceptance/rejection. In addition, partial mediation was suggested with regard to the attention subscale. This study represents the first attempt to examine the moderating effects of need for affiliation on group reactions and acceptance/rejection. Although firm conclusions are difficult to draw based

on the current findings, past literature suggests that need for affiliation could be an important variable in determining whether an individual remains independent or conforms to group norms (McGhee & Teevan, 1967).

Need for Affiliation and Conformity

The present study partially supported the hypothesis that there is an association between need for affiliation and conformity. There was a correlation between feelings of need for affiliation (general) and affective conformity; therefore, greater feelings for need for affiliation were associated with higher levels of pressure to conform. Furthermore, findings suggest a correlation between the attention subscale and affective conformity, and a relationship was found between the social comparison subscale and both cognitive and affective conformity.

Past research has found inconsistencies in the relationship of need for affiliation and conformity. Several studies found that the need for affiliation is associated with conformity (Hardy, 1957; McGhee & Teevan, 1967; Rose et al., 1994; Schacter, 1951). However, additional studies suggest that there is no relationship between need for affiliation and conformity (Crutchfield, 1955; Samelson, 1957). One study by Hardy (1957), found that high need for affiliation groups conformed more under conditions of non-support than under conditions of support. The moderate need for affiliation group was found to conform under both conditions. However, the low need for affiliation group conformed more under conditions of support than non-support; though participants in the low group were considered to be responding more to the objective content compared to the social structure.

Based on Heerdink et al. (2013) results, individuals who have greater feelings of need for affiliation felt more rejected and feelings of rejection was associated with higher pressure to conform or changes in behaviours related to conformity. Contradictions are still present, and questions remain regarding the association between need for affiliation and conformity; however, the present study represents an important step in understanding the nuances of this relationship.

Limitations and Future Directions

There were several limitations to this study. First, the sample was obtained from a fairly demographically limited population as most participants were young adults, female and the majority identified as NZ European. Different results may have been obtained if the sample had included a similar male to female ratio, participants of more varied age, and with greater proportions of non-European ethnic identities. Gathering results from a diverse population ensures that results can be generalised to wider populations. It may be beneficial to include an equal female to male ratio and compare under which conformity measure females and males conform. It may also be worthwhile to examine whether there is a cultural difference between Maori and NZ European and the relationship of group reactions on conformity and feelings of acceptance and rejection.

An additional shortcoming of the present study was that the respondents were offered an incentive (koha) which involved a prize draw of a \$100 shopping voucher. This might

have had impacted the likelihood of true responses, as participants were more likely to complete the questionnaire with hopes of winning the prize draw and might not have been motivated to devote full cognitive resources to the task. The consequences of this lead to questions regarding the genuineness of participants' responses.

Additional enquiry into why there was only a cognitive change in conformity compared to a behavioural or affective change would also be valuable; for instance, whether an individual had an internal fear response regarding the consequences of leaving the group which prohibited them from actually leaving compared to simply considering it.

Summary and Conclusion

In summary, this study has explored the cognitive, affective, and behavioural components of conformity and feelings of acceptance and rejection in response to group reactions. Furthermore, research regarding the moderating effects of need for affiliation on conformity in response to group reactions were also evaluated.

There was no direct relationship between group reactions and affective or behavioural conformity. There was, however, a relationship between group reactions and cognitive conformity. Furthermore, a relationship was found between group reactions and participants' feelings of acceptance/rejection and between conformity pressure and behavioural conformity. Acceptance/rejection did not mediate the effect of group reaction on cognitive conformity, but the relationship between group reaction and acceptance/rejection was moderated by the (general) need for affiliation. A moderating effect for social comparison was found and a marginally nonsignificant interaction was found for attention. Finally, results indicated that there was a direct relationship between some elements of need for affiliation and conformity.

The results of the present study need to be cautiously interpreted. Nevertheless, the findings add to previous research and clarify the effects of group reactions on conformity and feelings of acceptance/rejection. It is hoped that the contributions of the present study encourage further research into the relationship of the need for affiliation and conformity.

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Corresponding Author

Jay K. Wood
Social Sciences and Public Policy
Auckland University of Technology
Private Bag 92006,
Auckland 1142
New Zealand
Email: jay.wood@aut.ac.nz