Professional status and norm violation in email collaboration

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Abstract

Purpose – Status is a central aspect of teamwork relationships and successful collaboration in teams, both online and offline. Status group membership and status perception shape behavioural expectations and norm perceptions of what is appropriate, but despite their importance have been neglected in previous research. Status effects are of special interest in online collaboration, e.g. via email, where no immediate feedback or non-verbal/paraverbal communication and direct observation is possible. The purpose of this study is to address this gap in research.

Design/methodology/approach – An experimental scenario study with two different professional status groups (lecturers and students) tested status effects on causal attributions, intergroup bias and emotional and collaborative responses to perceived norm violations in emails.

Findings – Results overall showed three key findings: a "black-sheep-effect" with harsher negative attributions for same status members, more aggression and less cooperation towards lower status senders and stronger (negative) emotional reactions towards high status senders.

Originality/value – The findings are important for managing professional online communication because negative personal attributions, strong emotions and aggressive behaviours can increase team conflict, lead to mistakes and generally undermine performance.

Keywords Status, Causal attribution, Email communication, Emotional reactions, Inter-group bias, Norm perception

Paper type Research paper

Although there are many other digital media available today with chat and texting functions, e-mail is still one of the most common methods of workplace communication (Derks and Bakker, 2010). While email is an established communication medium at work, there is still ambiguity regarding its formality, and email communication norms are not firmly set compared to letters (with their high degree of formality) and texting or instant messaging which are recognised as having low formality. Email is influenced by those other forms of communication but perceived as somehow "in between" which leaves much room for different interpretations and expectations about norms of formality and appropriateness (Byron and Baldbridge, 2007). There is still a lack of understanding regarding how the specific properties of email as a medium interact with central organisational structures such as status to impact on work attitudes and behaviours. In particular, the role of social norms relating to professional status (which is one of the most fundamental ways of signalling group membership at work) has been neglected in the past. This paper aims to address this gap by examining the role of status and social norms in online interactions with an

experimental scenario study. An experimental design allows systematic testing of the effect of email formality for members of different status groups with a randomised between-subjects design. In the following section of the paper, we review the relevant literature on email communication, social norms and status groups that underpin our hypotheses.

Social norms and email communication

Social norms are expressions of shared values and beliefs by a group, organisation or society at large that shape subsequent expectations of what is appropriate in a given situation and influence both attitudes and behaviours (Bicchieri, 2006; Smith and Postmes, 2009). Email norms are not static and are influenced by the proliferation of newer communication media such as instant messaging, texting and micro-blogging which can be seen as aligning particularly with the values and expectations of the younger generation and are considered to be less formal than other forms of communication (Colley *et al.*, 2004; Gilson *et al.*, 2014). As a result of these other forms of communication a range of shortcuts have developed such as number or letter substitutions for words (e.g. "2" instead of "to" or "RU" instead of "are you") and no sign-off or address (Kim *et al.*, 2007). The appropriateness of when to use different levels of formality is not clear across the different digital media, including email, and has led to calls for a greater focus on contextual factors and a closer look at *who* is involved in the social interaction (Ducheneaut and Watts, 2005; Stephens *et al.*, 2011).

Email, in common with other text based digital media, is a fairly lean medium with fewer social cues available compared to face to face interactions, which means there is less contextual and social information available to interpret the intentions of the sender (Sproull and Kiesler, 1986). The lack of individuating cues about the sender can lead to more extreme and inaccurate impressions when evaluating the message (Walther, 2007). Negative impressions of others in a virtual environment have been shown to negatively affect collaborative behaviours (Cramton, 2001; Stephens *et al.*, 2009). Evaluation of others in electronic communication is also influenced by social identity processes (Lea *et al.*, 2001) as specified in the SIDE model.

The social identity model of de-individuation effects (SIDE, Postmes *et al.*, 1998) proposes that visual anonymity induces a state of de-individuation in which group membership becomes more salient. This situation induces greater social influence and adherence to group norms (Postmes *et al.*, 2001) where deviance from the expected norms of behaviour is noticeable (Lea and Spears, 1992). Norm violations occur when an individual's behaviour falls outside of the range of behaviour that is considered appropriate for that particular social context (Levine *et al.*, 2000) and can result in negative emotional, cognitive and behavioural reactions (Wilson, 2005). Depending on the perceived degree of violation and harm, emotional reactions are likely to be triggered such as anger (Frijda, 1986; Roseman, 1984) and behaviour may extend from lack of cooperation with the perpetrator to more aggressive or confrontational behaviours (Mackie *et al.*, 2000). For instance, norm-incongruent emails have been found to influence a superior's willingness to comply with a subordinate's request in an email (Stephens *et al.*, 2011). Although not examining norms, Mackie *et al.* (2000) found that offensive actions by the out-group were linked to anger and an impulse to confront or attack the out-group. Cognitive attributions relating to whether the norm violation is judged to be caused by internal individual factors or external contextual factors are also likely to be affected (Kelley, 1973). Given the poor contextual information available in lean media like email, negative personal attributions about the sender (such as laziness or incompetence) are more likely (Cramton, 2001; Cramton *et al.*, 2007). Negative personal attributions have been found to lead to counterproductive behaviours such as

increased conflict and coalition forming (Cramton, 2001) which has important implications for organisational effectiveness and harmony. Thus, we expect that perceived email formality norm violations will have a negative impact on emotional, cognitive and behavioural responses as hypothesised:

H1. Perceived email norm violation is related to negative emotional and attributional reactions towards the sender and less favourable collaborative intentions.

Status and group membership

The role of hierarchical status has been rather neglected in research on electronic communication. However, reactions to email norm violations are likely to be influenced by the hierarchical status as well as group membership of the sender and recipient. Indeed, status is intrinsically related to norms that define in-groups and out-groups at work (Piazza and Castellucci, 2014). Hierarchical status is used as a formal means of categorisation within organisations and regulates group processes and behaviour at work by assigning duties, rights, and responsibilities to different status groups (Cowen, 2012). Thus, hierarchical status within organisations is related to the concept of power, which refers to the extent to which someone is able to influence the behaviour of others in line with their own intentions (French and Raven, 1959; Tiedens *et al.*, 2000). A given status defines the structure in which the use of power is acceptable within organisations, with those of higher status tending to have greater power (Bunderson and Reagans, 2011; Sell *et al.*, 2004).

Status has a strong influence on behaviour during interpersonal communication (Giles *et al.*, 1987; Gregory and Webster, 1996) and there may be different expectations of what is appropriate depending on the status of the recipient and the sender (Tiedens *et al.*, 2000). For instance, Postmes *et al.* (2000) found that individuals tend to alter their email formality when writing to higher status individuals. Moreover, superiors may expect more formal email communication from subordinates and react negatively if expectations are not met (Stephens *et al.*, 2011). However, past research has not explored the reactions when the same email behaviour is received by someone of the same or higher status, and yet this reaction may be quite different and likely to affect collaborative relations across different levels within an organisation in various ways.

Social identity theory (Tajfel and Turner, 1986) can help to explain the different reactions to norm violation when the sender and recipient belong to either the same or different groups. For instance, individuals tend to overlook transgressions made by others who share their social identity (Lea and Spears, 1992). Thus, in-group favouritism may be shown in relation to email norm violations, so that reactions remain positive or neutral. Being part of the in-group offers some protection against negative judgements. In contrast, email violations by out-group members may be subject to more negative reactions (Postmes *et al.*, 2001) and the emotional and cognitive responses may be more severe and less forgiving for those who do not share the same social identity. Thus, when people belong to the same group we might expect to see in-group favouritism (a tendency to overlook norm violations by in-group members) and out-group bias (a stronger negative reaction towards norm violation by outgroup members).

However, hierarchical status is likely to moderate this effect such that those in a low status out-group will be treated more harshly by those from a high status group. This is because high status group members have a tendency to feel more comfortable when communication patterns reflect the social order (Tiedens and Fragale, 2003). Moreover, according to appraisal theories of emotion (Frijda, 1986; Roseman, 1984) those in a strong position with resources are more likely to have an anger response to offensive behaviour

from others. Thus, high status recipients are less likely to tolerate communication norm violations from low status individuals and more likely to see it as a lack of respect. Norm violations in emails to high status recipients are thus likely to induce stronger negative emotions, more negative internal attributions, and lower collaborative intentions towards low status senders. In line with this, Stephens *et al.* (2009, 2011) found that emails that did not match lecturer formality expectations had a negative effect on their reactions. Their studies examined reactions to email communication from students to lecturers, and also students' opinions of emails sent to lecturers, and found more negative reactions from the lecturers. However, they did not examine the opposite effect, where someone of lower status receives an email from a higher status individual. Yet, it is important to examine the reactions to communications from those of higher status because positive interactions with superiors has a profound effect on perceptions of the organisation and the employee's relationship with it (Rhoades and Eisenberger, 2002). We therefore investigate the reactions of lower status recipients as it has been neglected in previous research on email communications.

For low status recipients, we might expect less negative emotional and cognitive (attributional) reactions towards senders of high status, and a stronger likelihood of retaining collaboration intentions towards them. Those of low status may feel less power to do anything about poor email communications from high status individuals and this may create a tension between their immediate reaction and the options open to them for dealing with it. Moreover, higher standards tend to be used to judge those who are considered to be competent, such as lecturers (Biernat *et al.*, 2010) and so it may be unexpected for someone of high status within the organisation to act incompetently by violating norms. They may be judged more leniently at first, until more evidence is gathered (Biernat *et al.*, 2010), but there will likely be some confusion about the competence and intentions of the high status sender until greater clarity is achieved. Such tensions and confusions create discomfort and cognitive dissonance that need to be resolved (Stone and Cooper, 2001).

Dissonance is a drive state that arouses the need to reduce the discomfort and resolve the inconsistency (Festinger, 1957) by changing ones' cognitions (Leippe and Eisenstadt, 1999) or interpreting the event differently (Simon *et al.*, 1995). To reduce the cognitive dissonance, lower status individuals may therefore actively choose to dampen the reaction they have or interpret the event in a more favourable light; in effect giving the high status sender the "benefit of the doubt". Thus, reactions from those of lower status towards higher status senders might be more generous and more similar to their own favourable in-group evaluations. We would therefore expect to see a weaker relationship between norm violations and reactions if inappropriate emails are sent from someone of higher status to a lower status recipient. Hence, we expect the status of the sender and recipient to complicate the relationship between norm violations and outcomes, in such a way that there will be harsher reactions towards lower status senders by high status recipients and a more forgiving reaction towards high status senders from low status recipients:

H2. The relationship between norm violation perception and reactions will be moderated by the status of the sender and recipient. Specifically, we expect there will be a stronger relationship between norm violation and reactions (with more negative reactions experienced) when the sender is low status and the recipient is high status. In contrast, the relationship between norm violation and reactions will be weaker (and similar to more favourable in-group reactions) when the sender is high status and recipient low status.

We test these hypotheses within a higher education institution as this is a context where there are clear status demarcations between lecturers (high status) and students (low status).

A balanced design is used where participants either "receive" the email from someone of the same or different status. We also consider the influence of proficiency with relevant communications technologies (email and text-messaging) as greater familiarity with these are likely to affect email formality norm expectations (Extejt, 1998). Age and ethnicity may also impact on results in terms of perceptions and reactions as younger people tend to have a greater tendency to use less formal communications like text messaging (Stephens *et al.*, 2009) and those in low power distance cultures (such as the UK) may be less deferential to those of higher status (Loh *et al.*, 2010).

Negative emotions are generally more of a concern at work than positive ones as they might lead to conflicts. Anger is thus an important emotional reaction to include in this study on norm violation and what might be perceived as offensive behaviour (Kam and Bond, 2009). To enable testing for differential effects we have also included the positive emotion of happiness as being treated with unexpected informality might invoke a positive emotional response. Negative personal attributions tend to increase in virtual environments where little is known about the situation of the sender (Cramton, 2001). Such cognitions can be very damaging to work relations which is why this study focuses on personal attributions, both negative (laziness) and positive (competence). For the behavioural intentions, the focus is on compliance with the email request as a positive, collaborative response as well as a negative and potentially conflictual intention to confront the sender.

Method
Design and participants
A 2 (recipient status) $\times$ 2 (sender status) fully balanced experimental between-subjects design was used in which members of actual professional status groups (students vs lecturers) either received an email from an in-group member (same status) or an out-group member (different status). Two online surveys (one with student as sender and one with lecturer as sender) were developed and lecturer and student participants were randomly allocated to one of the conditions. Participants (177 students and 53 lecturers) were from a British University. The age range of the student sample was from 18 to 76 with a mean age of 26 ($SD = 9.37$), 69.5 per cent were female and 82 per cent were of white British ethnicity. The lecturer sample's age ranged from 26 to 68 with a mean age of 43 ($SD = 11.33$); 75 per cent were female, and 100 per cent were white British.

Procedure
The survey asked the participant to consider an email vignette in which the sender was requesting a meeting with the recipient to discuss some research. Students can conduct research projects during their studies and some might approach potential supervisors to discuss their ideas. Lecturers might also offer research opportunities. The instructions just before the vignette specified the status of the sender (either a lecturer or a student). Otherwise, the email vignette in each condition was exactly the same as detailed below:

Hi

How r u? I'm getting involved in a project you might be interested in.

I would really like to discuss it if you are around this week. Free 2 meet tomorrow?

Cheers!

The vignette contained a number of grammatical errors and formality norm violations including the address ("Hi" – with no name), texting short cut ("r u" instead of "are you"), a spelling error (disscus), number substitution ("2" instead of "to"), incomplete sentence and an informal sign off ("Cheers"). After reading the email, the participants were asked to rate their reactions to the email on a range of measures as described below.

Measures
Perceived norm violation. Participants rated the email on its formality, address, shortcuts, length, language, content, spelling, sign off and other aspects on a seven-point scale from "completely unacceptable" to "completely acceptable". Responses were reverse scored and summed so that a high score represented high norm violation perception. Internal consistency of the scale was good ($\alpha = 0.90$).

Emotions. Participants were asked how the email vignette had made them feel using both a negative and positive measure of emotion. *Anger* (consisting of three items – angered, outraged, annoyed) and *Happiness* (consisting of four items – happy, delighted, pleased, amused), were measured using an adapted version of the measure used by Gordijn *et al*. (2006). Responses were given on seven-point scales from "absolutely not" to "absolutely". Internal consistency was good (Anger: $\alpha = 0.82$; Happiness: $\alpha = 0.79$).

Attributions. An adaptation of a measure used by Lea and Spears (1992) was used to determine the attributions participants made about the sender of the email. Participants were asked to rate the sender on two attributional items: a negative personal attribution *"laziness"* and a positive personal attribution *"competence"*. Responses were given on a seven-point scale from "none" to "a great deal (much more than some people)".

Collaborative intentions. A positive (compliance) and negative (confrontation) collaborative intention were measured. *Compliance* was measured using items that Stephens *et al*. (2009) used [which is adapted from that used by Mottet *et al*. (2004)] and indicated participants' willingness to comply with the sender's request in the email ("right now") and similar requests by them in the future ("in future"). Responses were given on a seven-point scale from "very unwilling" to "very willing", achieving internal consistency of $\alpha = 0.94$. *Confrontation* tendency was measured using a scale from Mackie *et al*. (2000) measure of action tendencies. The measure consisted of three items: "confront", "oppose" and "argue with" the sender. Responses were given on a seven-point scale from "not at all" to "very much". Internal consistency of the measure was good ($\alpha = 0.83$).

Status. Status was coded as 1 lecturer/0 student.

Demographic/control measures. Control measures included age, gender (0 = Male, 1 = Female), and ethnicity (0 = White British; 1 = Other). Familiarity with electronic text-based forms of communications was measured by asking respondents the frequency with which they used email and text messaging on a seven-point scale from "never" to "very frequently – several times a day". These were used as single items in the analysis.

Results
As can be seen from Table I, a clear norm violation was perceived by most respondents ($M = 4.4$, $SD = 1.4$). In line with *H1* norm violation perceptions were positively correlated with negative outcomes: Anger ($r = 0.46$; $p = 0.001$); laziness ($r = 0.19$; $p = 0.006$); and confrontation ($r = 0.25$; $p = 0.001$), and negatively correlated with happiness ($r = -0.53$; $p = 0.001$); competence ($r = -0.21$; $p = 0.002$); and compliance ($r = -0.59$; $p = 0.001$). The status of the recipient was also related to outcomes. High status recipients tended to perceive a stronger norm violation ($r = 0.14$; $p = 0.046$) and responded with more anger ($r = 0.17$; $p = 0.010$) and less happiness ($r = -0.14$, $p = 0.040$) than low status recipients. Higher status

Study variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
Age	30	12	–												
Gender	0.7	0.46	−0.04	–											
Ethnicity	0.1	0.34	−0.09	0.03	–										
Email frequency	5.6	0.69	0.33**	0.04	−0.02	–									
Texting freq	5.2	1.1	−0.43**	0.20**	0.03	−0.07	–								
Status sender	0.4	0.49	0.07	−0.09	−0.11	0.08	−0.01	–							
Status recipient	0.2	0.42	0.58***	0.06	−0.22**	0.31***	−0.26***	0.06	–						
Norm violation	4.4	1.4	0.01	0.02	−0.24***	−0.05	−0.04	−0.00	0.14*	–					
Happiness	3.1	1.3	−0.06	0.02	0.11	−0.02	0.10	0.28***	−0.14*	−0.53***	–				
Anger	2.9	1.5	−0.01	−0.04	−0.22	−0.06	−0.07	0.06	0.17*	0.46***	−0.17*	–			
Competence	3.3	1.3	0.07	0.04	0.02	−0.03	−0.03	−0.00	0.08	−0.21**	0.13*	−0.03	–		
Laziness	4.6	1.6	−0.03	−0.06	−0.07	0.00	0.09	0.07	−0.04	0.19**	−0.05	0.17*	−0.19**	–	
Compliance	3.6	1.8	−0.06	−0.05	0.17*	0.04	0.05	0.23**	−0.05	−0.59***	0.53***	−0.35***	0.14*	−0.23***	–
Confrontation	2.1	1.3	−0.04	0.00	0.00	0.00	0.01	−0.01	0.10	0.25***	−0.06	0.41***	0.04	0.04	−0.14*

Notes: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table I.
Correlations of study
variables

senders also received happier ($r = 0.28$, $p = 0.000$) and more compliant responses ($r = 0.23$; $p = 0.001$). Unsurprisingly, age correlated with status of the recipient, with those of higher status tending to be older ($r = 0.58$; $p = 0.000$).

Interaction effects

To examine *H2*; whether sender and recipient status had an influence on the relationship between norm violation perception and attributions, emotional and behavioural reactions, three-way interactions were tested using regression analysis. Following Dawson (2014) the independent variables and controls were centred and the three-way interaction term calculated by multiplying norm violation, sender status and recipient status together. To test the three-way interaction, the individual predictors and two-way interactions between each pair of predictors also needed to be controlled for. Age, gender, ethnicity, and email and texting frequency were controlled for (see Table II for a summary of analyses).

Significant three-way interactions were found for the attributions (see Figure 1). For the laziness attribution interaction ($\beta = 0.29$; $R^2 = 0.13$, $F(12,206) = 2.59$, $p = 0.011$) we found

Controls and IVs	Attributions		Emotions		Collaborative intentions	
	Laziness	Competence	Anger	Happiness	Confrontation	Compliance
Ethnicity	−0.046	0.003	−0.064	0.012	0.095	0.080
Age	0.064	0.024	−0.160	−0.028	−0.158	−0.112
Gender	−0.081	0.008	−0.051	0.035	−0.043	−0.031
Email frequency	0.026	−0.120	−0.077	−0.011	0.001	−0.008
Text frequency	0.106	0.032	−0.067	0.076	−0.001	0.016
Status −sender	0.016	0.115	0.162*	0.269***	0.149*	0.241***
Status – recipient	−0.145	0.029	0.384***	−0.060	0.460***	0.145
Norm violation	0.323***	−0.417**	0.265***	−0.373***	0.179	−0.561***
Send*Recip	0.077	−0.035	−0.273**	−0.011	−0.414***	−0.058
Viol*Recip	−0.032	0.185	−0.012	−0.053	−0.024	0.001
Viol*Send	−0.298	0.302	0.201*	−0.181*	0.098	0.003
Viol*Send*Recip	0.294*	−0.307***	–	–	–	−0.086
R^2	0.131	0.113	0.300***	0.390***	0.161***	0.407
$Adj\ R^2$	0.081	0.061	0.262	0.358	0.117	0.372

Table II.
Moderated regression analysis

Notes: *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$; Send = Sender; Recip = Recipient; Viol = Norm Violation, NB: Regressions for anger, happiness and confrontation were re-run excluding the three-way interaction to allow the two-way interactions to be interpreted

Figure 1.
Three-way interactions – between norm violation, sender status and recipient status
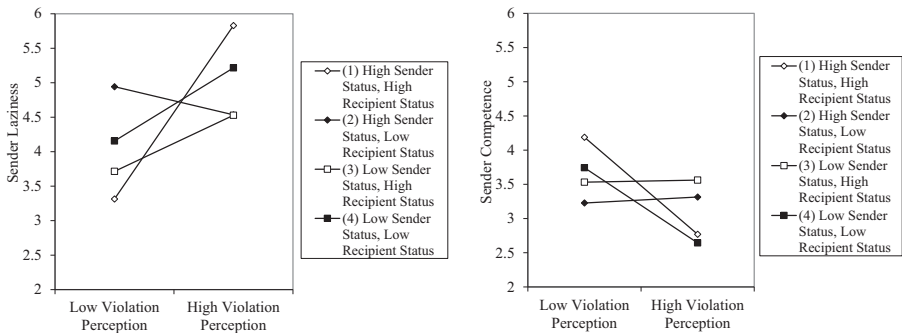
that recipients in both high and low status groups were harsher towards their own in-group when norm violation was perceived (see Figure 1- Slopes 1 and 4 on first graph). Perceived norm violation was related to higher laziness perceptions except when the sender was of a higher status than the recipient was. Indeed, slope differences [using Dawson and Richter's (2006) test] were found between Slope 2 (the high sender/low recipient status slope) and all other slopes (Slope 1: $t = 3.609$, $p = 0.000$; Slope 3: $t = -2.165$, $p = 0.032$; and Slope 4: $t = -3.373$; $p = 0.001$) indicating a significant difference in laziness attributions when the sender is of higher status than the recipient. Thus, although there was a significant three-way interaction (as expected in *H2*) it was not exactly of the form expected, as the high status group did not demonstrate the severest reaction towards low status senders. However, consistent with *H2* leniency was applied from low status recipients towards high status senders.

A similar effect was seen for the attribution of competence, where the three-way interaction was also significant ($\beta = -0.35$; $R^2 = 0.11$, F(12,204) = 2.17, $p = 0.007$). The second graph in Figure 1 illustrates that although competence attributions were similar irrespective of the level of norm violation for the outgroup pairings (Slopes 2 and 3), there was a stronger negative reaction within in-groups when high norm violation is perceived (Slopes 1 and 4). Slope differences were significant between Slope 2 (high status sender/low status recipient) and two other slopes: 4 (low status sender and recipient; $t = 3.33$, $p = 0.001$) and 1 (high status sender and recipient; $t = -2.16$, $p = 0.032$). However, again we did not see the harsher reaction towards low status senders from high status recipients predicted in *H2*.

Significant three-way interactions were not found for anger ($\beta = 0.08$; $SE = 0.36$; $p = 0.41$), happiness ($\beta = 0.13$; $SE = 0.29$, $p = 0.18$), confrontation ($\beta = -0.11$; $SE = 0.35$; $p = 0.30$) or compliance ($\beta = -0.09$; $SE = 0.41$, $p = 0.35$). However, significant two-way interactions were found for all these outcomes except compliance. Thus, the analysis was re-run excluding the three-way interaction for these reactions so that the two-way interactions could be interpreted.

Significant two-way interactions between sender and recipient status for both anger ($\beta = -0.27$, $SE = 0.43$, $p = 0.003$) and confrontation ($\beta = -0.41$, $SE = 0.42$, $p = 0.000$) confirmed the importance of status (albeit independent of norm violation perception). For instance, anger was shown towards low status senders while there was almost no difference in anger reactions from either students or lecturers towards high status senders (Figure 2).
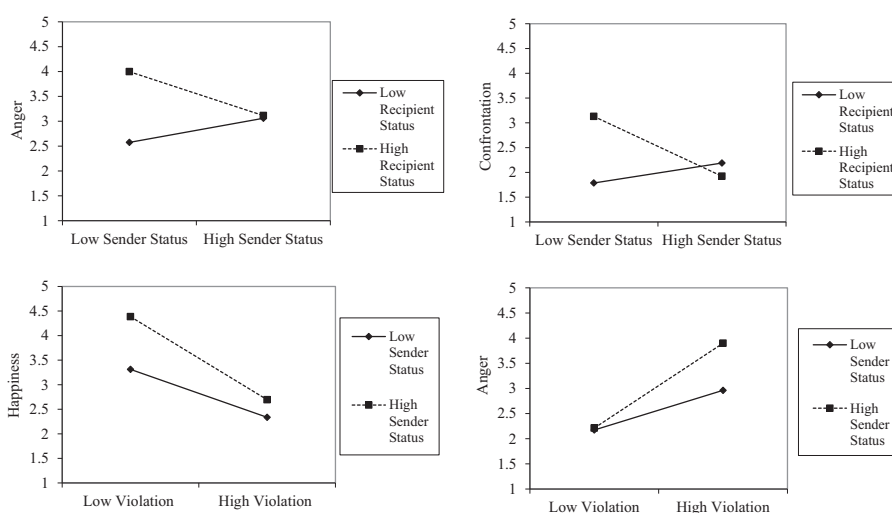
Figure 2.
Two-way
interactions with
status and/or norm
violation

An in-group protective bias was demonstrated within the low status group (with the lowest levels of anger shown towards low status senders by low status recipients – simple slope $t = 2.38$, $p = 0.02$) whereas high status recipients felt more anger towards the low status group (simple slope $t = -2.09$, $p = 0.04$). This demonstrates in-group favouritism and out-group bias for the emotion of anger but with a differential effect of status consistent with *H2* where an out-group bias was only observed from high status recipients towards low status senders.

The form of the two-way interaction for confrontation intention was very similar to that for anger. Figure 2 illustrates that there was a greater tendency amongst the high status recipients towards confronting the low status senders (simple slope $t = -3.62$, $p = 0.00$) and there was in-group favouritism/protection within the low status group, with low status recipients less likely to confront their own group (simple slope $t = 2.00$, $p = 0.05$). The predicted effect of status in *H2* was therefore supported to some degree, although the level of perceived norm violation does not influence this relationship as expected.

Significant two-way interactions between norm violation and sender status were also found for happiness and anger ($\beta = -0.18$, $SE = 0.11$, $p = 0.02$; $\beta = 0.20$, $SE = 0.13$, $p = 0.01$ respectively). The form of the interaction for happiness indicated that happiness was higher in general when low norm violation was perceived, and happiness was at its highest towards high status senders when norm violation was low (simple slope $t = -7.21$, $p = 0.00$). This may indicate greater pleasure experienced when a high status sender treats a recipient with such informality and familiarity. However, when norm violation is perceived, similarly low levels of happiness are experienced towards senders of either status. The interaction for anger was slightly different such that low anger is felt towards all senders when norm violation is low but when norm violation is high, more anger is shown towards higher status senders (simple slope $t = 5.95$, $p = 0.00$) perhaps because higher standards are used to judge higher status senders so there is a more intense reaction to their norm violation.

Discussion

The current study contributes to an important gap in research on how status and social norms influence communication and collaboration over email. Understanding how the expectations and norms across different hierarchical levels and professional group memberships relate to reactions and responsiveness to email communications is immensely important as miscommunications and conflicts can be very costly. Our findings indicate that the status of the recipient and sender does make a difference to how email communication norm violations are attributed, with harsher reactions occurring within in-groups and more lenient attributions towards high status senders from low status recipients. When it comes to negative emotional and behavioural intentions (anger and confrontation), however, the low status senders receive harsher evaluations from high status recipients irrespective of the level of norm violation. In contrast, we find that the emotional reaction towards high status senders does depend on the level of norm violation perceived (with a more extreme anger response if high violation is perceived and a more extreme happiness response when low violation is perceived). Thus, the relationship between norm violation and these outcomes is complicated by the inclusion of status in ways that were not entirely predicted.

The predicted harsher reaction from high status recipients towards lower status senders is not seen across the board. Where this pattern is observed, norm violation perception has little to do with it, and so this may represent a general response to email communications from high status recipients towards low status senders (e.g. perhaps they tend to feel annoyed and confrontational towards email requests in general from lower status senders). Moreover, a novel finding is that in-group favouritism is only found amongst the low status

group (for the negative reactions of anger and confrontation) and only if norm violation perception is not involved. Again, this may represent a more generalised protective response within a group that has less power against such aggressive reactions. Thus, the status effects that were predicted do not depend on level of norm violation but rather only occur in the context of aggressive and confrontational inter-status responses. This has implications for theory in this area, as certain responses seem to be more generalised across different levels of status and occur independent of any norm violation.

Somewhat surprisingly, when it comes to causal attributions regarding email norm violation, the harshest reactions are towards the in-group at both levels of status, reminiscent of a "black sheep effect" (Marques *et al.*, 1988). A black sheep effect can occur when deviation from socially acceptable norms reflects poorly on the in-group, threatening their positive identity (Marques *et al.*, 2001) and results in the deviant in-group members being derogated. Such effects usually occur when the norm is considered very important and is strongly held (Frings *et al.*, 2010) which suggests that email norms of the sort investigated here are more developed and more strongly held than originally assumed. It may also be that these email norms, and the personal attributions they stimulate when violated, are important in relation to impression management within organisations, and both high and low status individuals wish to protect their image and not appear lazy or incompetent. Certainly, research suggests that positive-controllable attributions are important for developing positive impressions (Silvester *et al.*, 2002). Especially those of high status appear to derogate in-group members that jeopardise their image and status, which may be an attempt to reduce dissonance created by negative personal attributions towards their own group.

In contrast, high status senders appear to be treated quite leniently by the low status recipients when it comes to laziness attributions, with high status offering some protection against negative attributions when email norm violation is perceived. This reaction may also represent an attempt at cognitive dissonance reduction in a situation where such norm violation would be unexpected and where there is little power to act against the sender. Thus, the recipient either attempts to trivialise their interpretation of the violation itself (i.e. see it as less important) or they modify their reaction to the violation. This effect may be heightened within an online environment where there is less information and certainty about the intention of the sender (especially from a different group) but relatively more information available about ones' own "in-group". As a result, high status senders may be given the "benefit of the doubt" until more evidence is available to make a more certain attribution (Biernat *et al.*, 2010). These effects are consistent with dissonance reduction strategies identified in previous research (Leippe and Eisenstadt, 1999; Simon *et al.*, 1995).

On the other hand, from an emotional perspective, high status senders are subject to more extreme reactions dependent on the level of norm violation. Greater happiness is observed when receiving the email from high status senders, but only when low norm violation is perceived. This might indicate amusement at receiving such an email from a lecturer, or greater delight at being treated with such familiarity by someone of high status. However, if norm violation is perceived, then greater anger is expressed towards high status senders, which may indicate greater hurt and perceived harm from this treatment, consistent with predictions from appraisal theories of emotion (Frijda, 1986; Roseman, 1984).

Despite the different cognitive and emotional responses to norm violation, the collaborative intention to comply was only influenced by the status of the sender. Irrespective of the status of the recipient or the level of norm violation perceived, greater compliance intentions were expressed towards those of higher status. Those of higher hierarchical status have greater power (Sell *et al.*, 2004) and although their actions may cause harm, there may be little choice other than to comply with their request.

Thus, overall the findings suggest that hierarchical status matters when considering reactions to emails within organisations, also sometimes independently of perceived norm violation. However, there is not a "one-size-fits-all" effect of status and the impact depends on the reaction being investigated. Theories that predict social identity effects within online communications (such as SIDE; Postmes *et al.*, 1998), emotional responses to harm (such as appraisal theories of emotion; Frijda, 1986; Roseman, 1984) and attributions (Kelley, 1973) need to take hierarchical status into account and their complex inter-play need to be considered within reactions to email communication. These findings are important, as communications from those of higher status (and even same status) can strongly affect the perceptions and experiences of employees (Rhoades and Eisenberger, 2002) and there is the danger of negatively impacting the collaborative environment within the organisation, especially for members of lower status groups.

Of course, these findings need to be interpreted in light of the study's limitations. The sample size is relatively small thus reducing the statistical power, but despite this we were able to find important differences and interaction effects, which suggests that these effects are quite strong. Another limitation is that this study occurred only within one organisational context. Whilst the participants were real group member participants from an organisational context in which there are clear demarcations between the low and high status groups (students and lecturers), this sort of distinction may be less evident in organisations where hierarchical positions are subject to change and are more ambiguous. Future studies might therefore seek to expand the types of organisations and also examine different communications media to determine if similar effects occur. Moreover, whilst we focused on the most likely emotional, cognitive and behavioural responses to email norm violations, it could be that other emotions, attributions and behavioural intentions also play a role. For instance, other emotions such as embarrassment or shame might also be influential particularly in relation to the black sheep effect and in an intercultural context where "face-saving" might be important, so could be investigated in future studies.

Despite these limitations, the current study contributes to the literature by demonstrating the complex role that status can have on different reactions to email formality norm violations. The findings are important for practice because they suggest that reactions to online communications can affect the collaborative environment and that this may be particularly pronounced within organisations where there are collaborations between people from different hierarchical levels (which is most organisations). Such issues may be especially important for impression management for those of lower status wishing to collaborate with those of higher status, but also those of high status who have an interest in preserving their reputation. Moreover, within the current study the formality norm violations might be considered fairly mild and are of such a degree that the sender might not even realise they had made any error, and yet the reactions are fairly strong. Having agreed and shared expectations of email behaviour across different status levels and subgroups might therefore be especially important in organisations. Thus, overall the findings in this study offer some intriguing insights and raises further questions that can form the impetus for future research on the topic of status and online communications.

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