Gender differences in response to Facebook status updates from same and opposite gender friends

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ABSTRACT

We conducted two studies to examine gender differences in response to Facebook status updates from same and opposite gender friends. Study 1 surveyed 522 undergraduate students (216 females and 306 males), and compared males' and females' responses to two Facebook status updates: one from a same gender friend and one from an opposite gender friend. Females' public replies and private messages to a female friend showed higher levels of emotional support than males' public replies and private messages to a male friend. In contrast, there were no significant gender differences in response to an opposite gender friend. Furthermore, males showed higher levels of emotional support in private messages than in public replies to male friends. Study 2 recruited 484 participants (295 females and 189 males) using CrowdFlower. Approximately half received a Facebook status update from a same gender friend and the other half received it from an opposite gender friend. Females' public replies to a female friend showed significantly high levels of emotional support than males' public replies to a male friend and there was a similar but marginally significant gender difference for private replies to same gender friends. There was no gender difference in response to opposite gender friends. The practical and theoretical implications of these findings are discussed.

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1. Introduction

Females generally use social media sites more than males (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015; Lenhart, 2015). Duggan et al. (2015) reported 77% of female Internet users used Facebook compared to only 66% of male Internet users. They found that this gender differences was even greater for the more visually-oriented social networking sites, such as Pinterest (42% female internet users, 13% male internet users), whereas the opposite was true for Twitter (21% female internet users, 24% male internet users). Moreover, females spend more time using social media sites than males. Denti et al. (2012) found that females spend 84 min a day on Facebook, compared to 64 min for males. Furthermore, there are gender differences in social media use. Females use social media for communicating and connecting with others, whilst males use social media for gathering information (Denti et al., 2012; Junco,

2013; Smith, 2011). In addition, there are gender differences in language use on social media. Thelwall, Wilkinson, and Uppal (2009) investigated gender differences in the use of emotional language in MySpace comments. Compared to males' comments, females' comments contained more instances of positive emotion and support. Wang, Burke, and Kraut (2013) explored gender differences in of Facebook status updates. Females shared more personal topics, whilst males discussed more public topics. Walton and Rice (2013) analyzed 3751 tweets and found that females were more positive, disclosed more information and disclosed more private information than males. Finally, Brandtzaeg (2015) investigated Facebook liking practices regarding expressions of civic engagement among 21,706,806 Facebook users in 10 countries and found distinct gender differences concerning those practices.

These findings on gender differences in language use on social media are consistent with research regarding gender differences in language in general (Leaper, 2014). Leaper (2014), in a review of gender differences in language, reports that studies have consistently shown that females are more likely to use affiliative language (used for connecting to others), whereas males are more likely to

use assertive language (used for dominance and achieving practical goals). There are three major explanations for these gender differences in language and they differ in how much emphasis they place on socialization, social situational demands, or biological predisposition. These explanations are not mutually exclusive and can be complimentary. In this paper, we focussed on the two social explanations.

The first social explanation is the socialization approach (Leaper, 2014; Leaper & Ayres, 2007; Maltz & Borker, 1982), which emphasizes the impact of children's participation in gender stereotypical activities in same sex peer groups. Children develop different norms and social identities and use language differently when they participate in gender segregated peer groups. Girls' interactions are more likely to involve cooperative social dramatic activities, and boys are more likely to participate in more solitary or competitive group play (Maccoby, 1998). These gender differences in activities lead to gender differences in language use (Leaper, 2014; Leaper & Ayres, 2007; Maltz & Borker, 1982) where boys use language to assert their dominance through commands and challenging statements, whereas girls learn to use language to create and maintain social closeness through supportive and inclusive forms of talk. This theory predicts that gender differences in language will be greatest in same gender interactions (i.e. when comparing male–male and female–female communication), because partners of the game gender share similar social norms concerning language and communication (Carli, 1989, 1990; Leaper, 2014; Leman, Ahmed, & Ozarow, 2005; Leman et al., 2011).

The second social explanation is the social context, or social constructivist approach (Leaper & Ayres, 2007). It emphasizes the social interactive impact of context, rather than individual factors. Males' and females' language and communication change as the contextual factors change. One important contextual factor is males' greater status in society. Males may dominate social interactions through the use of more assertive language, whereas women may be more likely to act subordinately through using more affiliative language. This explanation would predict fewer differences between males and females in same-gender interactions because it is within opposite-gender interactions that gender becomes a status characteristic (Carli, 1989, 1990; Leaper, 2014; Leman et al., 2005; Leman et al., 2011). Another important contextual factor is group size and familiarity. Deaux and Major (1987) reported that people behave in more stereotypical ways in front of larger and unfamiliar groups. Thus, females are more likely to use affiliative language than males in a large group context in front of unfamiliar people, whereas in private communication with a familiar person these gender differences in affiliative language will be reduced. It would predict that any gender differences will be greater in public context in front of unfamiliar people than in private contexts with friends.

The authors conducted a study on gender differences in the language responding to Facebook status updates and found that females were significantly more supportive than males when responding to a Facebook status update in a public forum, but there were no gender differences in the level of support in private messaging (Joiner et al., 2014). These findings support the social context explanation because the gender difference observed for public replies disappeared altogether for private messages. The authors asked the participants how they would respond to a Facebook status update from a close friend, but they did not specify whether it was a friend of the same or opposite gender. Interestingly, the different social explanations of gender differences in language make different predictions concerning language in relation to a same or opposite gender friends (Carli, 1989, 1990; Leaper, 2014; Leman et al., 2005; Leman et al., 2011). The socialization explanation predicts that the greatest gender differences would be observed in the use of language in same gender interactions, because both parties would follow the same behavioral norms. In contrast, the social context explanation predicts that gender differences in language use would be greatest in opposite gender interactions, because gender becomes a status characteristic in opposite gender interactions (Carli, 1989, 1990; Leaper, 2014; Leman et al., 2005; Leman et al., 2011).

The aim of the current study was to replicate and extend the authors study by investigating gender differences in the level of emotional support when responding to a friend of the same gender compared to a friend of the opposite gender in public and private contexts. We are comparing the social context and socialization hypotheses explanations for the gender differences in response to Facebook status updates by testing the following hypotheses.

H1. Gender differences in level of emotional support when responding to a Facebook status update will be greatest when participants are responding to a same gender friend (socialization hypothesis).

H2. Gender differences in level of emotional support when responding to a Facebook status update will be greatest when responding to an opposite gender friend (social context hypothesis).

H3. Gender differences in level of emotional support when responding to a Facebook status update will be greatest in public contexts compared to private contexts (social context hypothesis).

2. Study 1

2.1. Method

2.1.1. Participants
The participants were 522 undergraduate students from the University of Bath and the University of Gloucester (306 males and 216 were females), with a mean age of 19.01 years ($SD = 2.09$). Ninety nine percent of the sample was aged between 17 and 25.

2.1.2. Procedure
The questionnaire was distributed during lectures and contained two Facebook status updates: "I'm having a really rubbish day" and "It's only midday and today can't get any worse. Need a hug." The messages were either from their best male or female friend and participants were asked if they would write a public reply on the status ("Yes" or "No"), and/or send a private message ("Yes" or "No"). If they indicated they would write a public reply or a private message, they were asked what they would write. The order of the Facebook status update and the gender of the close friend were counterbalanced. The Facebook status updates were selected as examples of negative self-disclosures and using the classification scheme developed by Winter et al. (2014) they were classified as personal Facebook status updates. Winter et al. (2014) found that they were the most common Facebook status updates. They are also topics that are more likely to be posted by females than males (Thelwall et al., 2009).

2.1.3. Measures
The level of emotional support was measured using the classification system developed by Thelwall et al. (2009), shown in Table 1. The scale was adapted to include unsupportive elements, because as will be reported in the results, some of the comments were very unsupportive.

Two raters coded the responses and the level of agreement between the two raters for public replies was kappa = 0.84, and for