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**I'M ALL EARS: THE NEED TO BELONG
MOTIVATES LISTENING TO EMOTIONAL DISCLOSURE**

A Dissertation in

Psychology

by

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Abstract

People regularly disclose their emotions with friends. But why do people listen to their friends' emotional disclosures? To investigate this question this project focuses on five possible explanations, which I refer to as the (1) interest, (2) belonging, (3) mood, (4) self-esteem, and (5) validation hypotheses. According to the interest hypothesis, a fascination with emotional material motivates people to listen to emotional disclosure. In contrast, the belonging hypothesis is that the need to belong motivates people to listen to their friends disclose emotional, but not descriptive, information. Although, because of an association between belonging, mood, and self-esteem, two alternative explanations are that the desire to improve one's mood or self-esteem motivates people to listen (i.e., the mood and self-esteem hypotheses). Lastly, a fifth possibility is that interest, belonging, mood, and/or self-esteem motivate people not to listen per se, but to validate their friends' emotional, but not descriptive, disclosures (i.e., the validation hypothesis).

In support of the belonging hypothesis, Studies 1, 2, and 4 reveal that increased belonging needs are associated with an increased desire to listen to friends disclose emotional, but not descriptive, information. Study 3 suggests that this effect is specific to listening to friends, for belonging needs were not associated with the desire to listen to a stranger disclose either type of information. Study 4 demonstrated that people intended to listen to emotional disclosure because they expected it to increase their own feelings of social connectedness. For when people expected listening to generate distance between themselves and their friend, increasing belonging no longer increased the desire to listen to emotional disclosure. Negating the interest hypothesis, these effects existed above and beyond participants' interest in the emotional material. Negating the mood, self-esteem, and validation hypotheses, these effects

could not be explained by participants' concurrent mood, self-esteem, or the desire to validate another person's experiences for none of them were supported by the data.

Together these studies provide new insights into the self-disclosure process, by illustrating a potential process that encourages people to listen to their friends. This research makes a unique contribution to our understanding of self-disclosure because of its focus on the listener. That is, it extends prior work by focusing not on how speakers benefit from disclosing emotional information, but on how listeners may benefit from listening to emotional disclosure. The data indicate that people who listen to emotional disclosure with "all ears" may do so because they expect that listening to this particular type of information will help them fulfill their own need to belong.

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I'm All Ears: The Need to Belong
Motivates Listening to Emotional Disclosure

Emotional disclosure is often studied from the perspective of the speaker. Consequently, we know that people regularly disclose their emotional experiences with close others, such as friends (Rimé, 2009), and that emotional disclosure generates greater feelings of social connection than other types of self-disclosure (Espitalier, Tcherkassoff & Delmas, 2002; Laurenceau, Feldman-Barrett, & Pietromonaco, 1998). Even though people are typically disclosing such information with one or more listeners (Gable, Reis, Impett, & Asher, 2004), emotional disclosure has been studied to a lesser extent from the perspective of the listener. As a result, one aspect that we do not know much about is what motivates people to listen to emotional disclosure?

This project investigates why people listen to their friends' emotional disclosures. There are a wide array of reasons why people may listen, but in this project I focused on five possible explanations. I refer to these explanations as the (1) interest, (2) belonging, (3) mood, (4) self-esteem, and (5) validation hypotheses. Proposed by Rimé (2007, 2009), the interest hypothesis is that a fascination with emotional material motivates people to listen to emotional disclosure, especially more so than descriptive disclosure. In contrast, the belonging hypothesis is that the need to belong motivates people to listen to their friends disclose emotional, but not descriptive, information. That is, as belonging needs increase, people are more likely to want to listen to their friends disclose emotional, but not descriptive, information. A lack of belonging, however, is associated with negative feelings, such as anxiety (Baumeister & Tice, 1990; Leary, 1990), sadness (Leary, 1990), and anger (Williams, Shore, & Grahe, 1998), and relative decreases in self-esteem (Zadro, Williams, & Richardson, 2004). Consequently, it may not be people's

belonging needs, but rather their mood or self-esteem, motivating listening. Thus, the mood and self-esteem hypotheses are that the desire to improve one's mood or self-esteem motivates people to listen. Finally, a fifth possibility is that listening in and of itself may not be the key piece. The validation hypothesis is that interest, belonging, mood, and/or self-esteem motivate people not to listen per se, but to validate others', emotional, but not descriptive, disclosures. However, before going into the details behind these hypotheses, I want to first discuss two different types of self-disclosure. That is, I want to discuss what people are in fact listening to.

Emotional vs. Descriptive Self-Disclosure

Self-disclosure refers to verbally communicating information, thoughts, or feelings relevant to oneself to another person (Altman & Taylor, 1973; Derlega, Metts, Petronio, & Margulis, 1993; Jourard, 1971). Research on self-disclosure commonly distinguishes between two types of self-disclosure (Morton, 1978; Reis & Shaver, 1988). Descriptive or factual self-disclosure involves sharing information or facts about oneself (e.g., "I dated two people in the last month"). Emotional or evaluative self-disclosure involves disclosing information, such as one's feelings or emotional experiences (e.g., "My last breakup was really painful, and I'm not sure I'm ready to be in a relationship again"). This distinction is important because, as will be alluded to, the effects of emotional self-disclosure differ from those of descriptive self-disclosure.

Emotional disclosure is also referred to as the social sharing of emotion. It is the process by which people talk about, "the circumstances of [an] emotional eliciting event and about their own feelings and emotional reactions" (Rimé, 2009, p. 65). People regularly disclose major life events (e.g., Bolger & Eckenrode, 1991), daily stressors (e.g., Harlow & Cantor, 1995), and positive events (e.g., Gable, Reis, Impett, & Asher, 2004; Reis et al., 2010). For example, after

being diagnosed with cancer (Mitchell & Glickman, 1977) and following a death in the family (Schoenberg, Carr, Peretz, Kutscher, & Cherico, 1975), people report needing to share their emotional responses with other people.

In fact, people are sharing their, and by implication listening to, emotional experiences constantly. Diary and autobiographical studies indicate that approximately 80-90% of the time people disclose their emotional episodes with one or more listeners (Rimé, 2005; Rimé, Finkenauer, Luminet, Zech, & Philippot, 1998; Rimé, Mesquita, Boca, & Philippot, 1991; Rimé, Noël, & Philippot, 1991; Rimé, Philippot, Boca, & Mesquita, 1992). About sixty percent of the time, disclosure occurs within twenty four hours of the actual experience. Ninety percent of the time, people share their emotional episode with another person within a week of the experience. Usually, the more intense the emotional episode, the more people the speaker will tell (Rimé et al., 1992). Likewise, the more intense the listener's emotional reaction, the more people he or she will tell (Christophe & Rimé, 1997; Harber & Cohen, 2005).

Engaging in emotional disclosure generalizes across the valence of the experience itself, as well as the gender, age, educational and cultural background of the speaker. That is, people disclose episodes of fear, anger, and sadness as frequently as they do episodes of happiness and love (Finkenauer & Rimé, 1998). Contrary to gender stereotypes, men talk about their emotional experiences just as often as women (Rimé et al., 1992; 1998). Young people disclose as regularly as older adults (Rimé, 2009). People with a college degree are just as likely to talk about their feelings compared to people with an elementary school education (Curci, Rimé, Gisle, & Baruffol, 2008; Zech, Rimé, DeSoir, Versporten, & Van Oyen, 2008). This process has been found to occur to the same degree across individuals from a variety of countries including those in Europe (e.g., Belgium, France, the Netherlands, the Basque Country in Spain, Italy), Asia

(e.g., South Korea, Singapore, India, Japan; Singh-Manoux & Finkenauer, 2001; Yogo & Onoe, 1998) and North America (e.g., Rimé, Yogo, & Pennebaker, 1996).

Typically, though, this process only occurs among intimates, such as friends, parents, siblings, and significant others (Rimé et al., 1991a, 1991b, 1992; Rimé, Dozier, Vandenplas, & Declercq, 1996). People rarely (< 5% of the time) engage in emotional disclosure with strangers or professionals (e.g., priests, physicians, teachers, psychologists, etc.). For adolescents (12 to 18 years old) and young adults (18 to 33 years old), this process largely occurs among friends (Rimé, 2009). For example, Christophe and Rimé (1997) asked a sample of undergraduate students to recall a recent time when they had listened to someone else disclose an emotional episode. Researchers found that approximately 50 percent of the time the speaker was a friend. In comparison, roughly 25 percent of the time the speaker was a family member, 8 percent of the time the speaker was a romantic partner (this number may be due to the fact that participants were undergraduates and thus less likely to have a romantic partner), and 15 percent of the time the speaker was a non-close other. Thus, more often than not, people are engaging in emotional disclosure, with friends as opposed to strangers.

People share their emotional episodes with close others, such as friends, for a variety of reasons (Delfosse, Nils, Lasserre, & Rimé, 2004; Finkenauer & Rimé, 1996; Nils, Delfosse, & Rimé, 2005; Wetzer, Zeelenberg, & Pieters, 2005). For example, they often do so for the sake of gaining attention, support and validation, and arousing empathy (Rimé, 2009). Importantly, people also regularly disclose emotional information in order to strengthen their social bonds or degree of connectedness with other people. Rimé (2009, p. 72) writes: “As sharing targets are predominantly intimates, the [social sharing of emotion] thus appears to be an efficient tool for refreshing and consolidating intimacy”. Indeed, people often report sharing their emotional

episodes for the sake of, “being in touch, relating, escaping loneliness or the feeling of abandonment, strengthening social ties, decreasing interpersonal distance, [and] feeling closer to others” (Rimé, 2009, p. 77). In other words, one reason that people disclose emotional information, in particular, is to increase their own feelings of social connection.

In fact, engaging in emotional disclosure certainly does promote a sense of social connection. For instance, talking about emotional experiences more generally (Peters & Kashima, 2007) and positive events in particular, promotes feelings of closeness between the speaker and the listener (Gable, Reis, Impett, & Asher, 2004; Reis et al., 2010). Typically the more emotion that is disclosed, the more intimacy is generated (Laurenceau, Feldman-Barrett, & Pietromonaco, 1998). Engaging in emotional disclosure also stimulates subsequent conversations and connections with other people. In other words, because listeners tend to share the emotional narrative with additional others, doing so promotes a sense of connection with these individuals through such conversations (Archer & Berg, 1978; Christophe & Rimé, 1997). Disclosing one’s own emotional experiences and listening to other people’s emotional narratives consolidates bonds between group members (Christophe, Di Giacomo, & Amatulli, 2001), helping to further build and maintain interpersonal relationships (Curci & Bellelli, 2004).

On the other hand, disclosing and listening to other types of information, such as descriptive disclosure, may not promote the same degree of social connection. Descriptive self-disclosure involves sharing information, such as one’s thoughts or facts about oneself. In research directly comparing the effects of engaging in emotional and descriptive disclosure, participants were first asked to watch a disgust eliciting film. Afterward, they were asked to either (a) discuss the emotional aspects of the film, (b) discuss the technical aspects of the film, or (c) not engage in a discussion (Espitalier, Tcherkassoff, & Delmas, 2002). Researchers found

that the groups who discussed the technical aspects of the film and did not engage in a discussion at all were the least cohesive. Additional research indicates that that after taking into account the effects of engaging in emotional disclosure, engaging in descriptive disclosure did not increase feelings of closeness between the speaker and the listener (Laurenceau et al., 1998). Thus, it may not be disclosure in general, but engaging in emotional disclosure that increases feelings of social connection.

In sum, researchers have conducted numerous studies to investigate the disclosure process. Such studies have examined the types of information that people share with other people (Morton, 1978; Reis & Shaver, 1988), when and how frequently people disclose this information (Rimé, 2005; Rimé et al., 1991a; 1991b; 1992, 1998), who people typically tell this information to (Rimé et al., 1991a, 1991b, 1992; Rimé, Dozier, Vandenplas, & Declercq, 1996), and what motivates people to do so (Delfosse, Nils, Lasserre, & Rimé, 2004; Finkenauer & Rimé, 1996; Nils, Delfosse, & Rimé, 2005; Wetzler, Zeelenberg, & Pieters, 2005). To date, this work has largely examined self-disclosure from the perspective of the speaker. Disclosure, however, typically involves two people: a speaker *and* a listener. Therefore, a critical question to address is why do people listen to emotional disclosure, especially compared to other types of information, such as descriptive disclosure?

Why Listen to Emotional Disclosure?

Research on self-disclosure suggests at least five possible reasons for why people listen to emotional disclosure in particular. I refer to these reasons as the (1) interest, (2) belonging, (3) mood, (4) self-esteem, and (5) validation hypotheses. Below, I describe the rationale behind each of these hypotheses.

Interest

According to Rimé (2007, 2009), people listen to emotional disclosure because, “A fascination for emotional material literally permeates everyday life” (p. 71). For instance, “When driving by a traffic accident, drivers slow down to watch.” (Rimé, 2009, p. 71). Similarly, in the days following September 11, 2001, despite the negative emotions it evoked, people worldwide purchased pictures of the twin towers collapsing and books on the Taliban (Rimé, Delfosse, & Corsini, 2005). Rimé (2009) argues that people did so, in part, because they consider emotional information to be especially interesting. Indeed, Christophe and Rimé (1997) found a ceiling effect with regard to the degree of interest that listening to emotional disclosure elicits. In that when it came to rating interest experienced while listening to another person disclose emotional information, respondents’ level of interest was at the top of the scale. Accordingly, the **interest hypothesis** is that people listen to emotional disclosure because they expect emotional, especially more so than descriptive, information to be interesting.

Interest alone, however, may not *fully* account for why people listen. For instance, the interest hypothesis cannot explain why people listen to others repeatedly share their experiences, such as feeling frustrated about work or in love with their partner. Listening to such information will undoubtedly be less novel and therefore less interesting the second, third, fourth, or fifth time... yet people continue to listen nonetheless. This hypothesis also neglects the fact that people may listen because the act of listening, especially to emotional information, is a social, interactive, and intimate event. Recall, that people often disclose emotional information in order to increase their own feelings of social connectedness (Rimé, 2009). Likewise, people may listen for the same reason. Consequently, listening may be relevant to a fundamental motive – the need to belong.

Belonging

The need to belong is a fundamental “drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships” (Baumeister & Leary, 1995, p. 497). In his hierarchy of needs, Maslow (1968) ranked belongingness only second to physiological and safety needs, such as food, water, and security. In other words, feeling socially connected is essential to human functioning. The psychological and physical costs associated with a lack of belonging attest to its pervasiveness. People who don’t have frequent positive contact with others feel anxious (Baumeister & Tice, 1990; Leary, 1990), lonely (Peplau & Perlman, 1982), depressed (Leary, 1990), angry (Williams, Shore, & Grahe, 1998), have higher rates of psychopathology (Bloom, White, & Asher, 1979), are more likely to engage in self-destructive behavior (Twenge, Catanese, & Baumeister, 2002), and exhibit reduced immune functioning (Cacioppo, Hawkey, & Bernston, 2003).

People may listen to other people, such as their friends, share emotional information because doing so likely generates feelings of closeness for the listener, as well as for the speaker. In other words, people may listen to emotional disclosure because listening makes people feel more socially connected and in consequence contributes to the listener’s own need to belong. Prior work suggests that this effect may be specific to listening to emotional disclosure, and not extend to other types of self-disclosure, such as descriptive disclosure. Recall that emotional disclosure generates feelings of social connectedness whereas descriptive disclosure may not have this same effect (Espitalier, Tcherkassoff & Delmas, 2002; Laurenceau, Feldman-Barrett, & Pietromonaco, 1998). Thus, one hypothesis is the people may listen to emotional, but not descriptive, self-disclosure, because they expect that doing so will fulfill their need to belong.

Accordingly, the **belonging hypothesis** is that the need to belong motivates people to listen to their friends disclose emotional, but not descriptive, information because they expect

that doing so will increase closeness with others and reduce social distance. That is, as belonging needs increase, people are more likely to want to listen to their friends disclose emotional, but not descriptive, information. Because belongingness is vital (Baumeister & Leary, 1995) and social exclusion threatens the need to belong (Williams, 2007), people are especially motivated to reconnect with others after being socially excluded (Maner, DeWall, Baumeister, & Schaller, 2007). Social exclusion does in fact increase engagement in strategies, such as behavioral mimicry (Lakin & Chartrand, 2005; Lakin, Chartrand, & Arkin, 2008), which can increase liking (Chartrand & Bargh, 1999), trust (Maddux, Mullen, & Galinsky, 2008), and feelings of closeness (Ashton-James, van Baaren, Chartrand, Decety, & Karremans, 2007). If people listen to increase their own feelings of social connection, then when their need to belong is threatened, they may be especially motivated to listen to their friends share emotional, but not necessarily descriptive, information.

Moreover, this effect might occur because people *expect* listening to emotional disclosure to increase their own feelings of social connectedness. In other words, according to the belonging hypothesis the link between belonging and listening to emotional disclosure depends on the expectation that listening promotes a sense of closeness. As belonging needs increase, people are more likely to want to listen to their friends disclose emotional information, but only when people expect listening to increase their own feelings of social connectedness. If people were to expect that listening does not increase their own feelings of social connectedness, the effect of belonging on the desire to listen to emotional disclosure should be attenuated.

Mood and Self-Esteem

When people experience a lack of belonging, they also experience increases in negative mood and decreases in self-esteem (Blackhart, Nelson, Knowles, & Baumesiter, 2009; Zadro,

Williams, & Richardson, 2004). That is, a lack of belonging is typically associated with an increase in negative affect, such as feelings of anxiety (Baumeister & Tice, 1990), sadness (Leary, 1990), and anger (Williams, Shore, & Grahe, 1998), as well as a decrease in people's appraisals of their own self-worth (Zadro, Williams, & Richardson, 2004). Consequently, there are two alternative mechanisms that may explain why people listen in particular to emotional disclosure. Rather than belonging, negative feelings in general or about one's own self-worth may motivate people to listen.

According to the **mood hypothesis**, people's own mood, and not their belonging needs, may motivate them to listen to their friends disclose emotional information. When people feel negative they often engage in strategies to reduce their own negative feelings (e.g., see negative-state relief model of helping; Cialdini, Darby, & Vincent, 1973; Manucia, Baumann, & Cialdini, 1984). There are many ways by which listening to friends disclose emotional information could operate as a mood repair strategy. For example, hearing an uplifting story can serve as a reminder that things could get better, thereby improving people's mood. Likewise, hearing a depressing story may remind people that things could be worse, thus making them feel more positive. Listening is also a form of social support (Schwarzer & Knoll, 2007), and helping others is a common mood repair strategy (Cialdini, Darby, & Vincent, 1973; Manucia, Baumann, & Cialdini, 1984). If listening increases people's feelings of connectedness with others, this increased sense of connection is another way by which listening may help people repair their own negative feelings.

Similarly, the **self-esteem hypothesis** is that people's own self-esteem, and not their belonging needs, motivates them to listen to friends disclose emotional information. Because belonging is fundamental (Baumeister & Leary, 1995), people continually monitor their

interpersonal relationships, which includes their degree of social inclusion and acceptance (Leary, 1999; Leary & Baumeister, 2000; Leary & Downs, 1995). According to Sociometer Theory, state and trait self-esteem operate as feedback, providing people with a subjective index of the degree to which they feel socially included (Leary, 1999). People's self-esteem is often a reflection of how they think other people view them, and state self-esteem fluctuates as a function of acceptance (Leary, Haupt, Strausser, & Chokel, 1998; Leary, Tambor, Terdal, & Downs, 1995). Low self-esteem alerts the self that belonging needs are low, and in doing so motivates people to resolve this by reestablishing interpersonal connections. Because listening may allow people to reestablish such connections, self-esteem might motivate listening to emotional disclosure. In other words, when people feel poorly about themselves, they may strive to form connections via listening to others disclose emotional information in order to resolve these feelings.

Validation

A fifth, and final, possibility is that listening in and of itself may not be the key piece. A central aspect of listening is the ability to validate another person's experience. Validation plays a key role in why emotional disclosure promotes a sense of social connection more than other types of disclosure. Relative to descriptive disclosure, emotional disclosure involves disclosing information that is more central to a person's self-concept (Greenberg & Safran, 1987; Reis & Patrick, 1996). For this reason, it allows for greater listener validation and, "speakers are more likely to experience an interaction as intimate if they perceive their partner's response as understanding (i.e., accurately capturing the speaker's needs, feelings, and situation), validating (i.e., confirming that the speaker is an accepted and valued individual), and caring (i.e., showing affection and concern for the speaker)" (Laurenceau et al., 1998, p. 1239). Indeed, in prior

research the more emotion people disclosed, the more speakers felt validated, and the closer both people felt as a result of the interaction (Laurenceau et al., 1998).

An important issue to consider, therefore, is whether belonging, interest, mood, and/or self-esteem motivate the desire to listen to emotional disclosure, or alternatively whether these processes motivate the desire to validate another person's emotional experiences. Because emotional disclosure provides the listener more opportunity to validate the speaker (Reis & Shaver, 1988; Sullivan, 1953), another hypothesis is that people may want to listen to emotional disclosure because validating another person's emotional experiences fulfills belonging needs, provides for a particularly interesting conversation, and may also improve people's mood and increase their self-esteem. In other words, the key piece is validating, by way of listening.

Accordingly, the **validation hypothesis** is that belonging, interest, mood, and/or self-esteem motivate people to validate to their friends emotional, but not descriptive, disclosures. Finding that interest, belonging, mood, and/or self-esteem promote validation does not necessarily negate these hypotheses, for listening and validating may be inherently related. The validation hypothesis simply proposes that it may not be listening to emotional disclosure per se that is key, but instead the opportunity to validate the discloser that is driving these effects. If the key factor is validating, then belonging should mediate the effect of social exclusion on the desire to validate friends' emotional, but not descriptive, disclosures, and the desire to validate may, in turn, be related to the desire to listen.

In sum, much research has studied the disclosure process from the perspective of the speaker. Less research has studied disclosure from the perspective of the listener. This project addresses this gap in knowledge by investigating why people listen to their friends disclose emotional, especially compared to descriptive, information. It tests the central hypothesis that the

need to belong motivates people to listen to their friends disclose emotional, but not descriptive, information. I will argue that these effects occur because people expect listening to emotional disclosure to increase their own feelings of social connectedness, and that these effects exist above and beyond people's fascination with emotional material, and are not due to the desire to improve one's own mood or self-esteem. Lastly, I explore the possibility that listening is not the key element that promotes social connection, but rather is the means towards people's actual goal - the desire to validate one's friends.

Overview

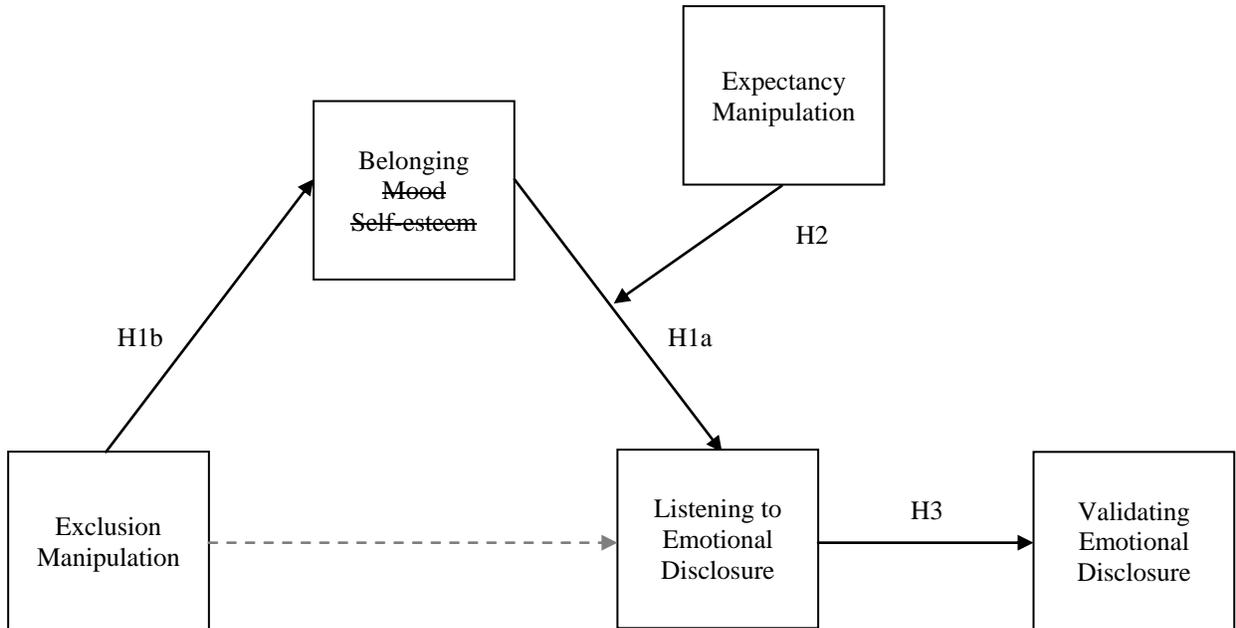
Figure 1 displays the various hypotheses. To test them, I conducted four studies. Study 1 examines the central hypothesis that belonging needs, and not mood or self-esteem, is associated with wanting to listen to friends disclose emotional, but not descriptive, information (see H1 in Figure 1 on page 14). In addition, it was conducted to develop a reliable means to assess the desire to listen to friends disclose emotional versus descriptive information. Because this study was an initial test of the hypotheses, I began by collecting correlational data. Thus, this study cannot establish causation.

Studies 2, 3, and 4 extend this work by manipulating the need to belong, to examine whether increasing belonging needs increases how much people want to listen to other people disclose emotional, but not descriptive, information. These studies also test the boundary conditions of this phenomenon, as well as the mechanisms. Study 2 specifically manipulated the need to belong via a social exclusion manipulation (see H1b in Figure 1). It then tests whether belonging, but not mood or self-esteem, mediates the effect of social exclusion on the desire to listen to friends disclose emotional, but not descriptive, information (H1a/b).

Study 3 builds upon this work in four ways. First, Study 3 examines the boundary

Figure 1.

Model proposed.



conditions of this effect. Specifically, whether the effect of belonging on listening to emotional disclosure is specific to listening to friends, or also extends to listening to strangers. Second, it tests one of the mechanisms. Specifically, it examines whether the effect of belonging on listening to emotional disclosure depends on expectations about listening (H2). If people listen because they expect doing so will increase their own feelings of social connectedness, the effect of belonging on listening should be attenuated if people expect listening will not increase their own feelings of social connectedness. Third, Study 3 examined whether the above effects exist above and beyond how interesting people expect listening to be. If belonging is motivating listening to emotional disclosure, this effect should remain when controlling for people's degree of interest in the information disclosed. Fourth and lastly, this study improved the measure of listening to emotional disclosure, by examining whether these effects replicate when assessing

behavioral intentions to listen to a specific person, rather than measuring people's desire to listen to others in general.

Study 4 builds upon these results in five additional ways. First, instead of examining listening to strangers, this study returns to examining listening to friends. Second, Study 4 measured, rather than manipulated, the degree to which people expect listening to emotional disclosure to increase their own feeling of social connectedness, in order to still examine whether such expectations operate as a moderator (H2). Third, Study 4 addressed the role of listening to versus validating the discloser. If belonging motivates listening, then belonging should mediate the effect of social exclusion on intentions to listen, which in turn may be related to intentions to validate (H3). But if belonging motivates validating, then belonging should mediate the effect of social exclusion on intentions to validate, which in turn may be related to intentions to listen. Fourth, Study 4 examined whether these effects exist above and beyond how interesting people expect listening to be. Lastly, this study examined if these effects replicate using a different manipulation of the need to belong and state measures of belonging, mood, and self-esteem.

Study 1

Study 1 was conducted to develop a reliable means to assess the desire to listen to friends disclose emotional versus descriptive information, and to test whether individual differences in the need to belong positively predicts how much people generally want to listen to their friends disclose emotional, but not descriptive, information. Mood and self-esteem also were assessed to assure that it is the need to belong, rather than mood or self-esteem that drives these effects.

Method

Participants

One hundred and seventy-six undergraduate students (78.4% female, age $M = 18.86$, $SD = 3.08$) participated in the study for research credit.

Procedure and Materials

After providing demographic information, participants completed the mood measure. They rated how positive (i.e., *positive, cheerful, enthusiastic, happy, joyous, pleasant*; $\alpha = .94$), and negative (i.e., *negative, depressed, down, low, sad, unpleasant*; $\alpha = .93$) they felt on a scale ranging from 1 (*not at all*) to 5 (*extremely*). To create a single index of mood, I reverse scored the positive items and averaged across all 12 items ($\alpha = .94$), such that higher numbers indicate more negative mood states.

Participants then reported on a 12 item scale how much they generally want to listen to their friends disclose emotional and descriptive information (see Table 1 for items). Items were developed to measure the degree to which people (a) felt motivated to listen (e.g., 8 items: “I feel especially motivated to listen when friends talk about their emotions” and “I don’t really care about listening to friends talk about their thoughts”), (b) expressed interest in an ongoing dialog (i.e., Items 6 and 12 “I try hard to express interest when friends talk about an emotional event/their thoughts” based on work by Chen, Minson, & Tormala, 2010), and (c) were motivated to listen by maintaining active engagement in the conversation (2 items: “My mind wanders when friends talk about their thoughts/an emotional event”, that were adapted from a measure of narrative engagement, see Busselle, & Bilandzic, 2009).

Belonging needs were measured using the need to belong scale (NTBS; Leary, Kelly, Cottrell, & Schreindorfer, 2008; $\alpha = .81$), which assesses the extent to which people are concerned about belonging (e.g., “I want other people to accept me,” “I have a strong ‘need to belong’”) and upset by instances that reflect a lack of belonging (e.g., “My feelings are easily

hurt when I feel that others do not accept me,” “It bothers me a great deal when I am not included in other people’s plans”). This scale measures the strength of an individual’s need to belong that is discernible from associated constructs, such as the desire for affiliation, loneliness, social anxiety, and rejection sensitivity (Leary et al., 2008). To differentiate the need to belong from self-esteem, I included a common measure of self-esteem (Rosenberg, 1965; $\alpha = .92$) (see Appendix A for study materials).

Results

Exploratory Factor Analysis. First, I examined whether listening to emotional versus descriptive disclosure could be differentiated from one another, or if the measure reflected a general tendency to listen. A principal components analysis using promax rotation on the 12 listening items revealed two factors with eigenvalues greater than 1 that together explained 54.86% of the variance (see Table 1 on page 18 for items and loadings). One item from each factor (Items 6 and 12) had low factor loadings (-0.22 & -0.22, respectively), possibly because they measured expressing interest, rather than wanting to listen. These two poor fitting items were dropped, and the five remaining items for each factor were averaged to create two measures: listening to friends’ emotional disclosures ($\alpha = .83$) and listening to friends’ descriptive disclosures ($\alpha = .77$).

Descriptive Data. I then computed bivariate correlations between all measured constructs and demographic variables to examine proposed hypotheses and alternative explanations (see Table 2 on page 19).¹ First, listening to emotional disclosure correlated with listening to descriptive disclosure ($r = .67, p < .001$). Consistent with the belongingness hypothesis, NTBS correlated with the desire to listen to friends’ emotional ($r = .19, p = .01$), but

¹ I standardized all variables before examining bivariate correlations, computing regression analyses, and when testing for mediation throughout.

Table 1
Exploratory Factor Analysis (Study 1)

Item	Standardized Estimates	
	Factor 1	Factor 2
Factor 1. Listening to Friends' Emotional Disclosures		
1. I feel especially motivated to listen when friends talk about their emotions.	0.83	
4. I don't really care about listening to friends talk about their emotions.	-0.82	
3. I consider listening to friends talk about their feelings really important.	0.81	
8. It doesn't matter whether I listen when friends talk about their feelings.	-0.74	
11. My mind wanders when friends talk about an emotional event.	-0.61	
6. I try hard to express interest when friends talk about an emotional event.	-	
Factor 2. Listening to Friends' Descriptive Disclosures		
9. I consider listening to friends talk about their thoughts really important.		0.78
10. I don't really care about listening to friends talk about their thoughts.		-0.78
5. My mind wanders when friends talk about their thoughts.		-0.73
2. It doesn't matter whether I listen when friends talk about their thoughts.		-0.67
7. I feel especially motivated to listen when friends talk about their thoughts.		0.63
12. I try hard to express interest when friends talk about their thoughts.		-
Eigenvalue	4.41	4.04
% of Variance	41.87	12.99
Cronbach's Alpha	.83	.77

Note. Items with factor loadings below .40 were dropped.

not descriptive, disclosures ($r = .12, p = .11$). In other words, the greater the need to belong, the more people wanted to listen to their friends disclose emotional, but not descriptive, information. Also, in contrast to the mood and self-esteem hypotheses, neither mood nor self-esteem correlated with listening to either type of disclosure. Lastly, women reported a stronger desire to listen to their friends' emotional disclosures ($r = .22, p = .003$) and also a stronger need to belong ($r = .21, p = .004$) than men.

Listening. To learn more about the degree to which NTBS was associated with listening,

Table 2
Bivariate Correlations, Means, and Standard Deviations (Study 1)

Variable	1	2	3	4	5	6	7
1. Listening to Emo.	1.00						
2. Listening to Desc.	.67***	1.00					
3. Belonging	.19**	.12	1.00				
4. Mood	-.03	-.05	-.05	1.00			
5. Self-esteem	.07	.05	-.25***	.23**	1.00		
6. Gender	.22**	.08	.21**	.01	-.13	1.00	
7. Age	-.08	-.07	-.13	.04	.02	-.09	1.00
Mean	4.29	4.13	3.67	3.49	2.20	-	18.86
Standard Deviation	0.69	0.65	0.63	0.86	0.57	-	3.08

Note. Emo. = Emotional Disclosure; Desc. = Descriptive Disclosure; Gender was coded as 0 = male, 1 = female.

* $p < .05$, ** $p < .01$, *** $p < .001$

I then examined whether the association between NTBS and listening to emotional, but not descriptive, disclosure held, when mood and self-esteem were taken into account. To investigate this issue, I conducted two regression analyses. The first analysis examined whether the NTBS predicted listening to emotional disclosure, while controlling for listening to descriptive disclosure, mood, and self-esteem. The second analysis examined whether NTBS predicted listening to descriptive disclosure, while controlling for listening to emotional disclosure, mood, and self-esteem. In both analyses, I controlled for the other type of disclosure to make sure that the dependent variable reflected a desire to listen specifically to either emotional or descriptive disclosure, rather than a general desire to listen.

As predicted, the desire to listen to emotional disclosure was positively related to the need to belong, $B = 0.13$, $t(170) = 2.24$, $p = .03$, and the desire to listen to descriptive disclosure, $B = 0.65$, $t(170) = 11.37$, $p < .001$. Neither mood, $B = -0.01$, $t(170) < 1$, $p = .87$, nor self-esteem, $B = 0.07$, $t(170) = 1.12$, $p = .26$, emerged as significant predictors. Also, as predicted, the desire

to listen to descriptive disclosure was not related to the need to belong, $B = -0.01$, $t(170) < 1$, $p = .93$, mood, $B = -0.03$, $t(170) < 1$, $p = .63$, or self-esteem, $B = 0.01$, $t(170) < 1$, $p = .82$. It was only associated with the desire to listen to emotional disclosure, $B = 0.67$, $t(170) = 11.37$, $p < .001$. Thus, increased belonging needs were associated with an increased desire to listen to friends' emotional, but not descriptive, self-disclosures.

Discussion

Study 1 provides initial support for the belonging hypothesis. Specifically, the greater the need to belong, the more people wanted to listen to their friends disclose emotional, but not descriptive, information. The need to belong was not associated with a general desire to listen. It was only associated with a desire to listen to friends disclose emotional information. In addition, the data suggest that neither people's mood nor their self-esteem influenced their desire to listen to either type of disclosure. Because these data are correlational, we do not know if the need to belong motivates listening to friends' emotional disclosures, or whether wanting to listen to friends' emotional disclosures affects the need to belong. Study 2 builds upon this work by manipulating, rather than merely measuring, the need to belong.

Study 2

Study 2 investigated the hypothesis that increasing the need to belong increases how much people want to listen to their friends disclose emotional, but not descriptive, information. The study again tests the important prediction that it is belonging, and not mood nor self-esteem, driving these effects. As before, I measured mood and self-esteem. In addition, I included a both a manipulation of the need to belong (an exclusion manipulation) and a negative control condition (a failure manipulation) to further assure that it was belonging, and not mood or self-esteem that could account for the results. To manipulate the need to belong, mood, and self-

esteem, participants recalled and wrote about a time when they felt intensely socially excluded, experienced intense academic failure, or felt neutral and indifferent.

Based on prior research (Gardner, Pickett, & Brewer, 2000; Pickett, Gardner, & Knowles, 2004), I predicted that reliving social exclusion would increase belonging needs more than reliving academic failure or a neutral event. I predicted that increasing belonging needs would, in turn, be related to an increased desire to listen to emotional, but not descriptive, disclosure. That is, I predicted belonging would mediate the effect of the exclusion manipulation on the desire to listen to friends disclose emotional, but not descriptive, information. Following Gardner et al. (2004), I predicted that reliving social exclusion and failure would increase negative mood and decrease self-esteem more than reliving a neutral event. If the underlying mechanism driving these effects is mood and self-esteem, and not belonging, increasing negative mood and decreasing self-esteem should be related to an increased desire to listen to emotional, but not descriptive, disclosure. In other words, if these two hypotheses are correct mood or self-esteem would mediate the effect of the social exclusion manipulation on listening to friends disclose emotional, but not descriptive, information.

Method

Participants

Seventy eight undergraduate students (35.9% female; age $M = 18.85$, $SD = 0.84$) participated in the experiment examining people's perceptions of events for research credit.²

Procedure and Materials

² Data were dropped for three participants who reported having already participated in ten experiments that semester, $M_{dropped} = 10.00$, $SD = 0$ vs. $M_{overall} = 5.32$, $SD = 1.89$. Because their prior participation likely increased suspicion regarding the cover story and decreased motivation to be involved in another experiment, these participants were not included. The remaining sample consisted of 75 undergraduate students (34.70% female; age $M = 18.81$, $SD = 0.83$).

Exclusion Manipulation. Participants spent five minutes writing about a recent event in which they felt intensely socially excluded, experienced intense academic failure, or felt neutral and indifferent (see Appendix B for study materials).³

Materials. Afterward, participants rated how positive (i.e., *positive, cheerful, enthusiastic, happy, joyous, pleasant*; $\alpha = .94$) and negative (i.e., *negative, depressed, down, low, sad, unpleasant*; $\alpha = .92$) they felt on a scale ranging from 1 (*not at all*) to 5 (*extremely*). I reverse scored the positive items and averaged across all 12 items to create a single index of mood ($\alpha = .93$). Participants also rated their belonging needs (NTBS; Leary et al., 2008; $\alpha = .82$), self-esteem (Rosenberg, 1965; $\alpha = .92$), and how much they generally want to listen to their friends disclose emotional ($\alpha = .86$) and descriptive information ($\alpha = .71$).

Results

Descriptive Data. To address proposed hypotheses and alternative explanations, I computed bivariate correlations amongst the key variables (see Table 4 on page 23). As found in Study 1, NTBS correlated with the desire to listen to friends' emotional ($r = .27, p = .02$), but not descriptive ($r = .00, p = .99$), disclosures. As before, the desire to listen to either type of information was not related to the listener's mood ($r = .07$ and $-.14, p = .54$ and $.24$, for emotional and descriptive disclosure, respectively) or self-esteem ($r = .09$ and $.11, p = .46$ and $.40$, for emotional and descriptive disclosure, respectively). Lastly, women reported wanting to listen to their friends disclose emotional ($r = .45, p < .001$) and descriptive ($r = .31, p = .009$) more than men.

Belonging, Mood, and Self-Esteem. To test the effect of the Exclusion manipulation on

³ Two participants did not follow instructions for the exclusion manipulation. One participant in the failure condition wrote about an instance of rejection and lack of acceptance. One participant in the exclusion condition wrote about a time when s/he had experienced academic failure. To retain power, data for both participants were recoded to the appropriate experimental condition.

Table 3
Bivariate Correlations, Means, and Standard Deviations (Study 2)

Variable	1	2	3	4	5	6	7
1. Listening to Emo.	1.00						
2. Listening to Desc.	.65***	1.00					
3. Belonging	.27*	-.00	1.00				
4. Mood	.07	-.14	.33**	1.00			
5. Self-esteem	.09	.10	-.44***	-.54***	1.00		
6. Gender	.45***	.31**	.10	.17	-.19	1.00	
7. Age	-.10	-.05	-.07	.10	-.00	-.17	1.00
Mean	4.07	3.89	3.34	2.56	2.27	-	18.81
Standard Deviation	0.80	0.68	0.70	0.79	0.62	-	0.83

Note. Emo. = Emotional Disclosure; Desc. = Descriptive Disclosure; Gender was coded as 0 = male, 1 = female.

* $p < .05$, ** $p < .01$, *** $p < .001$

NTBS, mood, and self-esteem I ran a multivariate ANOVA with Exclusion condition (Exclusion, Failure, Neutral) as a between-subjects factor. As predicted the manipulations differentially altered belonging, such that participants in the Exclusion condition, $M_{\text{Exclusion}} = 3.65$, $SD = 0.66$, reported greater NTBS than participants in the Failure, $M_{\text{Failure}} = 3.25$, $SD = 0.52$, $p = .03$, and in the Neutral condition, $M_{\text{Neutral}} = 3.08$, $SD = 0.77$, $p = .003$, Main effect, $F(2,72) = 5.12$, $p = .008$, $\eta_p^2 = 0.13$.

Participants in the Exclusion condition also felt more negative, $M_{\text{Exclusion}} = 2.79$, $SD = 0.93$, than participants in the Neutral condition, $M_{\text{Neutral}} = 2.34$, $SD = 0.60$, contrast, $p = .04$.

However, participants in the Failure condition, $M_{\text{Failure}} = 2.53$, $SD = 0.70$, did not vary from the other conditions, contrast, $p = .22$ and $.40$, for the Exclusion and the Neutral conditions, respectively, Main effect, $F(2,72) = 2.64$, $p = .11$, $\eta_p^2 = 0.06$.

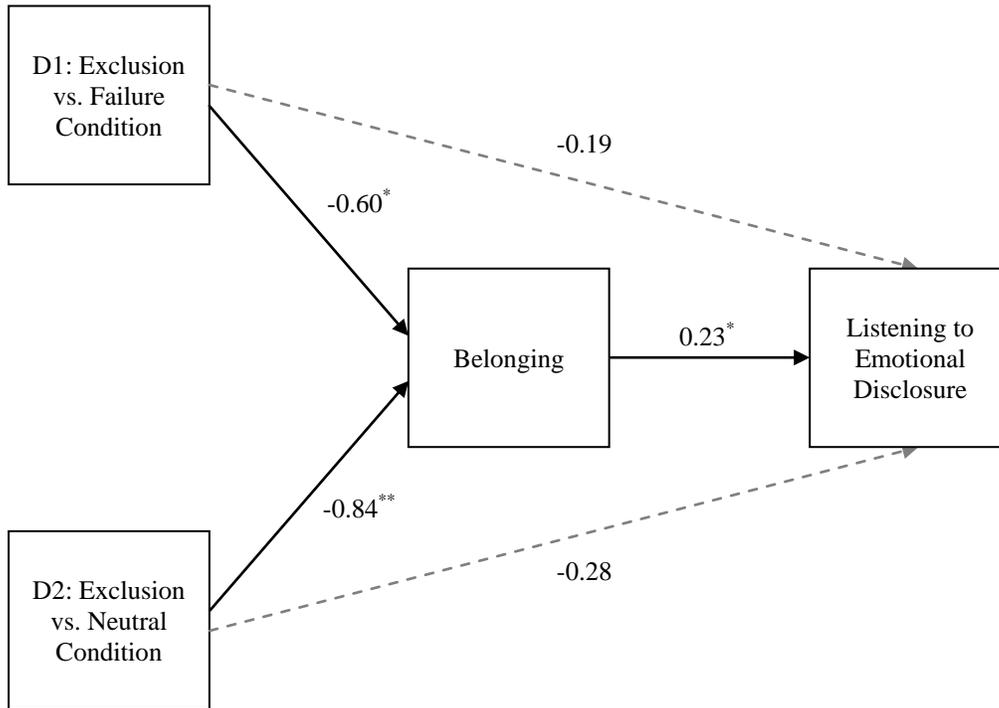
No significant effects emerged with regard to self-esteem, indicating that the manipulation did not differentially alter self-esteem ($M_{\text{Exclusion}} = 2.20$, $M_{\text{Failure}} = 2.37$, and $M_{\text{Neutral}} = 2.28$, $SDs = 0.64$, 0.57 , and 0.63), $F(2,72) = 1.87$, $p = .16$, $\eta_p^2 = 0.05$.

Listening to Emotional Disclosure. I then examined whether increasing belonging needs, increased the desire to listen to emotional disclosure. To test this, I used a mediation macro that allows for a multicategorical predictor (Hayes & Preacher, 2011). Because the exclusion manipulation involved three levels, two dummy variables were created (D1 and D2). The variables were coded as: D1 as: Exclusion = 0, Failure = 1, Neutral = 0, and D2 as: Exclusion = 0, Failure = 0, Neutral = 1. Thus, D1 examined the effect of the Exclusion relative to the Failure condition, and D2 examined the effect of the Exclusion relative to the Neutral condition. NTBS was entered into the macro as the mediator, and listening to friends' emotional disclosures as the outcome. As in Study 1, listening to friends' descriptive disclosures was included as a covariate to ensure that the dependent variable reflected a desire to listen to friends' emotional disclosures, and not a desire to listen to friends in general. For D1 and D2 the Exclusion condition was numerically less than the Failure and Neutral conditions, respectively. Thus, a negative relationship between D1, D2, and NTBS reflects an increase in NTBS.

As shown in Figure 2, NTBS was greater in the Exclusion relative to both the Failure, D1: $B = -0.60$, $t(67) = 2.13$, $p = .04$, and the Neutral condition, D2: $B = -0.84$, $t(67) = 2.98$, $p = .004$. As NTBS increased, so did the desire to listen to emotional disclosure, $B = 0.23$, $t(66) = 2.48$, $p = .02$. The indirect effect of the exclusion manipulation on listening to emotional disclosure was significant, as evidenced by the fact that the 95% CI does not include zero (D1: indirect effect = -0.14 , $SE = 0.07$, 95% CI $[-0.27, -0.01]$, D2: indirect effect = -0.19 , $SE = 0.10$, 95% CI $[-0.42, -0.03]$). Thus, the exclusion manipulation indirectly increased the desire to listen

Figure 2.

Belonging Mediates the Effect of the Exclusion Manipulation on Listening to Friends' Emotional Disclosures (Study 2). Unstandardized coefficients reported. * $p < .05$, ** $p < .01$, *** $p < .001$.



to emotional disclosure, by increasing NTBS. The total effect of the exclusion manipulation on listening was not significant, $B = -0.19$, $t(66) < 1$, $p = .39$, and, $B = -0.28$, $t(70) = 1.24$, $p = .22$, for D1 and D1, respectively. However, this is not necessary for mediation to occur (Hayes, 2009, 2012). Listening to descriptive disclosure was a significant covariate, $B = 0.62$, $t(66) = 6.90$, $p < .001$.

Listening to Descriptive Disclosure. Next, I examined whether increasing belonging needs, increased the desire to listen to descriptive disclosure. I re-ran the model entering listening to friends' descriptive disclosures as the outcome and listening to friends' emotional disclosures as a covariate. NTBS tended to be greater in the Exclusion relative to the Failure condition, D1:

$B = -0.48$, $t(67) = 1.70$, $p = .09$, and was significantly greater in the Exclusion compared to the Neutral condition, D2: $B = -0.65$, $t(67) = 2.27$, $p = .03$. NTBS and the desire to listen to friends' descriptive disclosures were related, $B = -0.21$, $t(66) = 2.12$, $p = .04$, but in an unexpected direction. Specifically, as NTBS increased, the desire to listen to friends' descriptive disclosures *decreased*. Neither the indirect nor the total effects of D1 or D1 on listening to descriptive disclosure were significant (D1: indirect effect = 0.10, $SE = 0.07$, 95% CI [-0.01, 0.27], total effect = -0.10, $t(66) < 1$, $p = .68$; D2: indirect effect = 0.14, $SE = 0.09$, 95% CI [-0.01, 0.36], total effect = -0.17, $t(66) < 1$, $p = .48$). Listening to friends' emotional disclosures was a significant covariate, $B = 0.68$, $t(70) = 6.90$, $p < .001$.

Mood and Self-Esteem. Lastly, mood did not mediate the effect of the exclusion manipulation on listening to friends' emotional, D1: indirect effect = -0.06, $SE = 0.07$, 95% CI [-0.23, 0.05], D2: indirect effect = -0.09, $SE = 0.09$, 95% CI [-0.29, 0.07], or descriptive, D1: indirect effect = 0.09, $SE = 0.08$, 95% CI [-0.04, 0.25], D2: indirect effect = 0.13, $SE = 0.08$, 95% CI [-0.01, 0.32], disclosures. Self-esteem also did not mediate the effect of the exclusion manipulation on listening to friends' emotional, D1: indirect effect = 0.04, $SE = 0.07$, 95% CI [-0.10, 0.20], D2: indirect effect = 0.03, $SE = 0.06$, 95% CI [-0.10, 0.16], or descriptive, D1: indirect effect = 0.03, $SE = 0.07$, 95% CI [-0.14, 0.17], D2: indirect effect = 0.02, $SE = 0.06$, 95% CI [-0.10, 0.16], disclosures.

Discussion

The data in Study 2 provide experimental support for the belonging hypothesis. As predicted, reliving social exclusion increased belonging needs more than reliving failure or a neutral event. Increased belonging needs, in turn, were related to an increased desire to listen to friends disclose emotional information. This effect did not occur when increased desire to listen

to descriptive information was the dependent variable. Moreover, the data indicate that it is belonging, not mood or self esteem, which accounts for these effects. Reliving exclusion did increase negative mood more than reliving a neutral event. Although, neither mood nor self-esteem operated as a mediator with regard to listening to friends disclose either type of information. Self-esteem, however, did not vary by exclusion condition, thus because it was not manipulated it may not have operated as a mediator.

Interestingly, even though belonging needs did not mediate the effect of the exclusion manipulation on listening to descriptive disclosure, increased belonging needs were related to a *decreased* desire to listen to friends disclose descriptive information. This effect might have occurred because the more concerned people were with social connection – the higher they scored on the NTBS – the more people may have viewed listening to their friends disclose emotional information as relatively more important, than listening to their friends disclose descriptive information. Therefore, their desire to listen to their friends’ emotional disclosures increased, but their desire to listen to their friends’ descriptive disclosures decreased.

Study 3

Study 3 builds upon this work in four ways. First, Study 3 examines whether the previous effects are specific to listening to friends, or if they extend to listening to strangers. Prior work indicates that people are listening primarily to friends disclose emotional information. For example, Christophe and Rimé (1997) asked a sample of undergraduate students to recall a recent time when they had listened to someone else disclose an emotional episode. They found that approximately 50 percent of the time the speaker was a friend. In comparison, 25 percent of the time the speaker was a family member, 8 percent of the time the speaker was a romantic partner, and 15 percent of the time the speaker was a non-close other. Because emotional

disclosure most often takes place amongst intimates (Rimé et al., 1991a, 1991b, 1992; Rimé, Dozier, Vandenplas, & Declercq, 1996), belonging may only motivate listening to intimates, and not non-close others, such as strangers, disclose emotional information.

Work on social exclusion and the need to belong, however, indicates that people are especially motivated to form new relationships after being socially excluded (Maner, DeWall, Baumeister, & Schaller, 2007). For instance, Maner et al. (2007) found that reliving social exclusion increased people's self-reported interest in meeting new friends. Telling people they would end up alone in life increased their preferences for working on task in collaboration with strangers. Being excluded by several confederates prompted people to evaluate unknown others as more sociable. Furthermore, behavioral mimicry, which can increase liking (Chartrand & Bargh, 1999), trust (Maddux, Mullen, & Galinsky, 2008), and feelings of closeness (Ashton-James, van Baaren, Chartrand, Decety, & Karremans, 2007), increases following social exclusion (Lakin, Chartrand, & Arkin, 2008). This process has been found to occur among strangers (e.g., Chartrand & Bargh, 1996; 1999). Therefore, it is possible that belonging may motivate listening to intimates, and also strangers, disclose emotional information. Thus, one purpose of Study 3 is to examine whether these effects extend to strangers. If the effects from the previous studies extend to strangers, I predict that increasing belonging needs will increase behavioral intentions to listen to a stranger disclose emotional, but not descriptive, information.

Second, by examining whether these effects extend to strangers, Study 3 is able to investigate expectations about listening. The results from the previous studies suggest that people expect listening to emotional disclosure to fulfill their own need to belong. In other words, people's motives for listening to emotional disclosure appear to depend on the expectation that it will increase their own feelings of social connectedness. Accordingly, if people were to expect

that listening to another person disclose emotional information will *not* increase their own feelings of social connectedness, the effect of belonging on listening to emotional disclosure should be attenuated. One route to testing this hypothesis is to manipulate people's expectations about listening. Although when it comes to listening to intimates, such as friends, people for the most part expect that the interaction will increase their own feelings of social connectedness. Consequently, manipulating expectations about listening to a friend may be difficult and perhaps even ethically questionable to do. This would not be the case when it comes to strangers. Thus, in Study 3 participants were told they would listen to a person, whom they have never met. To manipulate expectations about whether listening would or would *not* promote social connection, participants received information about this person suggesting that he or she was or was *not* open to increasing his or her own interpersonal ties. I predict that expectations about listening will moderate the effect of belonging on listening. When participants expect that listening will increase their own feelings of social connectedness, I predict that increasing belonging needs would increase intentions to listen to a stranger disclose emotional information. However, when participants expect listening will *not* increase their own feelings of social connectedness, I predict that the effect of belonging on listening would be attenuated.

Third, Study 3 examines whether the previous effects exist above and beyond how interesting people expect the dialog to be. According to Rimé (2007; 2009), people listen to emotional disclosure because they consider emotional information to be especially interesting. Assuming that people consider emotional disclosure to be more interesting than the descriptive disclosure, this could explain why increased belonging needs increased the desire to listen to emotional, but not descriptive, disclosure. In other words, an alternative explanation for the previous results is that increasing the need to belong increased the desire to listen to an

interesting topic and decreased the desire to listen to an uninteresting topic. While I do not believe this to be the case, Study 3 was designed to test whether belonging still motivates listening to emotional disclosure when controlling for how interesting participants expect the information to be.

Fourth and lastly, Study 3 extends the previous work by examining whether the results from the previous studies replicate when measuring people's behavioral intentions to listen to a specific person, as opposed to people's self-reported desire to listen to others in general. It may be that people's inclinations to listen in general do not translate into their actual intentions to listen to a particular person. Thus, belonging needs may predict people's desire to listen to emotional disclosure in general, but such needs may not predict people's momentary intentions to listen to another person disclose emotional information about him or herself. While I do not believe this is the case, in order to examine this, in Study 3 participants were lead to believe that they would listen to another person share emotional or descriptive information about him or herself. After which, I assessed participants' behavioral intentions for listening to this specific person disclose emotional and descriptive information.

Method

Participants

Eighty one undergraduate students (67.90% female; age $M = 18.43$, $SD = 0.74$) participated in a study on impression formation for research credit.

Procedure and Materials

Exclusion Manipulation. After completing a background questionnaire (see Appendix C for study materials), participants completed part 1 of the study, in which they spent five minutes

writing about a recent event in which they felt either intensely socially excluded or neutral and indifferent (see Study 2).

Mood, Belonging, and Self-Esteem. Participants then rated how positive (i.e., *positive, cheerful, happy*; $\alpha = .88$) and negative (i.e., *negative, depressed, sad*; $\alpha = .80$) they felt on a scale ranging from 1 (*not at all*) to 5 (*extremely*). As before, the positive items were reverse scored to create a single index of mood ($\alpha = .81$), such that higher numbers indicated more negative affect. Participants also rated their belonging needs (NTBS; Leary et al., 2008; $\alpha = .86$) and self-esteem (Rosenberg, 1965; $\alpha = .88$).

Expectancy Manipulation. Next, participants learned that they would complete the remainder of the study, parts two and three, with another participant located at a nearby branch campus. To rule out any effect of romantic interest on the study manipulations and/or measures, female participants were told that the participant they have been paired with is female and male participants were told that the participant they have been paired with is male. Participants were told that for part two of the study, they would listen to him or her disclose emotional or descriptive information about him or herself. For part three, they would chat with this person online and afterward answer questions about their impression of him or her. Participants were told that they would interact with this person to maximize their degree of engagement in the listening activity. Then, participants were randomly assigned to one of two different expectancy conditions.

To manipulate participants expectations about listening, following Yoo et al. (2011), participants in the listening will increase social connectedness condition were told that parts two and three of the study examine “how people form new relationships based on impressions and a short laboratory interaction” (p. 236). They read that the other person is “planning to transfer to

the University Park campus” and thus, participating in the study to “meet new people” and to “make new friends”. The participant’s personality was described as: open, friendly, warm, and personable.

Participants in the listening will not increase social connectedness condition were told that parts two and three of the study examine “how strangers interact with each other based on impressions” (Yoo et al., 2011, p. 236). They read that the other person is not planning on transferring and participating in the study only for “research credit”. Participants were not provided with any information about this person’s personality.

Behavioral Intentions to Listen. Participants then completed the *behavioral intention to listen to disclosure* measure, in which they rated how much they wanted to listen to this person disclose emotional ($\alpha = .72$) and descriptive ($\alpha = .52$) information. I used the same scale as in Studies 1 and 2, but modified it so that it did not refer to listening in general, but rather focused on the specific person that participants expected to listen to (e.g., I feel especially motivated to listen when he/she talks about his/her emotions; see Appendix C for study materials).

Expectancy Manipulation Check and Interest. Participants completed several more measures, rated on a 1 (*not at all*) to 9 (*very much so*) scale. To assure that the expectancy manipulation was effective, participants rated the extent to which they expected listening to emotional and descriptive disclosure to increase feelings of closeness between themselves and the other person (i.e., *close, connected, intimate*; $\alpha = .85$ and $.88$, respectively). Participants also rated the degree to which they expected listening to both types of information be interesting (i.e., *interesting, entertaining, boring*; $\alpha = .56$ and $.64$, for emotional and descriptive disclosure, respectively).

Afterward, participants were informed of network problems precluding them from completing the remainder of the study. Participants were fully debriefed and thanked for their participation.

Results

Descriptive Data. First, I computed bivariate correlations between all measured constructs and demographic variables (see Table 4 on page 34). Contradictory with prior findings, NTBS did not correlate with behavioral intentions to listen to strangers engage in either emotional ($r = .01, p = .95$), or descriptive, ($r = -.05, p = .67$) disclosure.⁴ This lack of replication may be because this measure now examined listening to strangers, as opposed to friends. Although, replicating Study 1 and Study 2, intentions to listen to both types of disclosure were related ($r = .74, p < .001$). Consistent with the hypothesis that expectations may be associated with intentions to listen, self-reported expectations about increased closeness correlated with behavioral intentions to listen to emotional ($r = .32, p = .004$), and descriptive ($r = .32, p = .004$), disclosure. In other words, the more participants expected listening to increase feelings of closeness between themselves and the speaker, the more they intended to listen.

Consistent with the interest hypothesis, interest in descriptive disclosure correlated with intentions to listen to descriptive disclosure ($r = .30, p = .007$). However, inconsistent with this hypothesis, interest in emotional disclosure did not correlate with intentions to listen emotional disclosure ($r = .13, p = .25$). In contrast to the hypotheses that mood and self-esteem motivate

⁴To further examine the relationship between belonging and listening to strangers, I ran the same two regression analyses described in Study 1. Inconsistent with Study 1, participants' intentions to listen to a stranger disclose emotional information was not related to their belonging needs, $B = 0.04, t(76) < 1, p = .64$. Nor were such intentions related to participants' mood, $B = 0.00, t(76) < 1, p = .99$, or self-esteem, $B = -0.01, t(76) < 1, p = .88$. Although, as before, intentions to listen to both types of disclosure were related, $B = 0.74, t(76) = 9.55, p < .001$. Also replicating Study 1, participants' intentions to listen to a stranger disclose descriptive information was not associated with belonging, $B = -0.03, t(76) < 1, p = .70$, mood, $B = 0.07, t(76) < 1, p = .46$, or self-esteem, $B = 0.09, t(76) < 1, p = .34$. It was only related to intentions to listen to emotional disclosure, $B = 0.73, t(76) = 9.55, p < .001$.

Table 4
Bivariate Correlations, Means, and Standard Deviations (Study 3)

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Listening to Emo. (stranger)	1.00										
2. Listening to Desc. (stranger)	.74***	1.00									
3. Belonging	.01	-.05	1.00								
4. Mood	.06	.06	.15	1.00							
5. Self-esteem	.05	.10	-.35***	-.50***	1.00						
6. Expectations about Emo. (stranger)	.32**	.26*	.04	-.02	.13	1.00					
7. Expectations about Desc. (stranger)	.33**	.32**	.14	.01	.02	.85***	1.00				
8. Interest in Emo. (stranger)	.13	.17	.10	-.11	.10	.06	.14	1.00			
9. Interest in Desc. (stranger)	.21	.30**	.11	-.18	.13	.19	.31**	.80***	1.00		
10. Gender	.21	.13	.34**	-.02	.01	.08	.02	-.05	-.02	1.00	
11. Age	.03	.17	-.22*	.15	-.08	-.13	-.12	.11	.07	-.28*	1.00
Mean	3.78	3.73	3.47	2.59	2.27	4.91	4.80	5.91	6.04	-	18.43
Standard Deviation	0.63	0.59	0.73	0.67	0.45	1.75	1.83	1.11	1.26	-	0.74

Note. Emo. = Emotional Disclosure; Desc. = Descriptive Disclosure; Gender was coded as 0 = male, 1 = female.

* $p < .05$, ** $p < .01$, *** $p < .001$

listening, neither mood nor self-esteem correlated with expectations about increased closeness, interest in the information, or behavioral intentions for listening. As before, women reported a stronger need to belong ($r = .34, p = .002$) than men.

Belonging, Mood, and Self-Esteem. To test the effect of the Exclusion manipulation on NTBS, mood, and self-esteem, I ran a multivariate ANOVA with Exclusion condition (Exclusion vs. Neutral) as a between-subjects factor. Participants in the Exclusion condition, $M_{\text{Exclusion}} = 3.62, SD = 0.63$, tended to report greater NTBS than participants in the Neutral condition, $M_{\text{Neutral}} = 3.32, SD = 0.81$, Main effect, $F(1,79) = 3.60, p = .06, \eta_p^2 = .04$. Replicating Study 2, participants in the Exclusion condition, $M_{\text{Exclusion}} = 2.79, SD = 0.65$, felt more negative than participants in the Neutral condition, $M_{\text{Neutral}} = 2.40, SD = 0.63$, Main effect, $F(1,79) = 7.64, p = .007, \eta_p^2 = .09$. As in Study 2, self-esteem did not vary between the Exclusion, $M_{\text{Exclusion}} = 2.26, SD = 0.45$, and Neutral conditions, $M_{\text{Neutral}} = 2.28, SD = 0.45, F(1,79) < 1, p = .88, \eta_p^2 = .00$.

Expectancy Manipulation Check. To test the effectiveness of the Expectancy manipulation, I ran a repeated measures ANOVA with Disclosure Type (Expectations about Emotional vs. Descriptive disclosure) as a within-subjects factor and Exclusion condition (Exclusion vs. Neutral) and Expectancy condition (Listening will increase social connectedness vs. Listening will not increase social connectedness) as between-subjects factors. The manipulation did not appear to be effective, for no significant effects emerged. Participants in both Expectancy conditions expected listening to generate the same degree of closeness, $M_{\text{Will}} = 5.06, M_{\text{WillNot}} = 4.64, SDs = 1.53$ and $1.89, F(1,77) = 1.22, p = .27, \eta_p^2 = .02$. Inconsistent with the notion that emotional disclosure increases closeness more than descriptive disclosure, participants expected listening to both types of information to generate the same degree of

closeness, $M_{\text{Emotional}} = 4.91$, $M_{\text{Descriptive}} = 4.80$, $SDs = 1.75$ and 1.83 , $F(1,77) = 1.11$, $p = .30$, $\eta_p^2 = .01$.

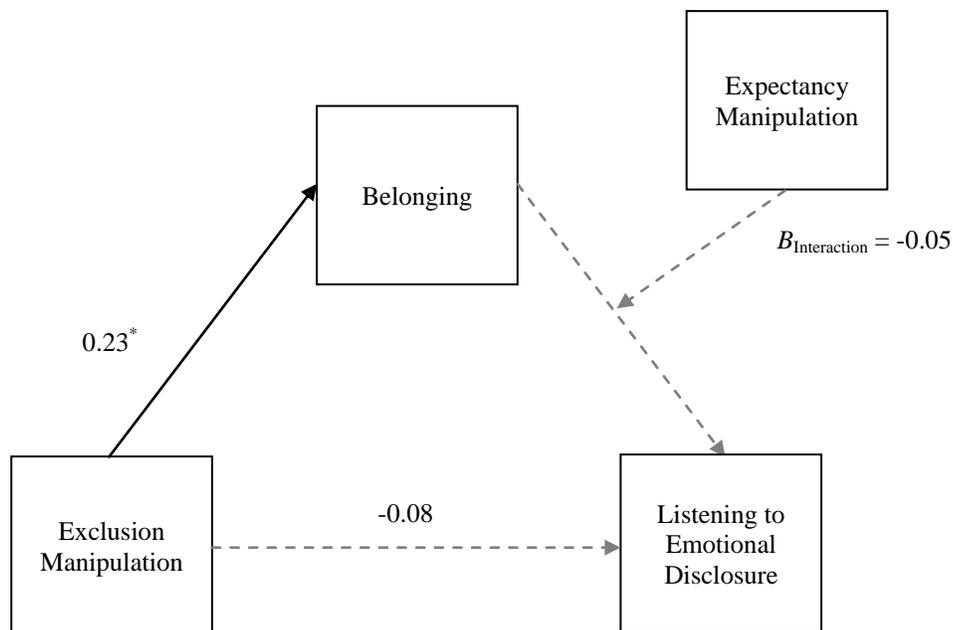
Interest. To test the effect of the Exclusion and the Expectancy manipulations on how interesting participants expected listening to emotional and descriptive disclosure to be, I ran the same analysis on interest ratings. There was a significant between-subjects effect for Expectancy condition, $F(1,77) = 12.87$, $p < .001$, $\eta_p^2 = .14$. Specifically, participants in the Listening will increase social connectedness condition, $M_{\text{Will}} = 6.39$, $SD = 1.04$, expected listening to this person to be more interesting overall than participants in the Listening will not increase social connectedness condition, $M_{\text{WillNot}} = 5.55$, $SD = 1.06$. In contrast to the hypothesis that listening to emotional disclosure is particularly interesting, participants instead expected listening to emotional and descriptive disclosure to be equally as interesting, $M_{\text{Emotional}} = 5.91$, $M_{\text{Descriptive}} = 6.04$, $SDs = 1.11$ and 1.26 , Main effect, $F(1,77) = 2.09$, $p = .15$, $\eta_p^2 = .03$.

Behavioral Intentions to Listen to Emotional Disclosure. I then tested whether the effect of belonging on behavioral intentions to listen to emotional disclosure, depended on the expectation that listening will versus will not increase one's own feelings of social connectedness. Using a macro allowing me to test for moderated mediation (Hayes, 2012), I entered Exclusion condition (coded as -1 = Neutral, 1 = Exclusion) as the predictor. NTBS was entered as the mediator, behavioral intentions to listen to emotional disclosure as the outcome, and Expectancy condition (coded as -1 = Listening will increase social connectedness, 1 = Listening will not increase social connectedness) as the moderator variable. Intentions to listen to descriptive disclosure, and interest ratings with regard to emotional and to descriptive disclosure were entered as covariates.

As shown in Figure 3 and found also in Study 2, Exclusion increased NTBS, $B = 0.23$, $t(76) = 1.99$, $p = .05$. Although, the effect of NTBS on behavioral intentions to listen to emotional disclosure, did not depend on participants' expectations about listening, interaction term: $B = -0.05$, $t(73) < 1$, $p = .60$. Nor was the main effect of NTBS, $B = 0.06$, $t(73) < 1$, $p = .48$, or Expectancy condition, $B = -0.06$, $t(73) < 1$, $p = .51$, on intentions to listen to emotional disclosure significant. The only significant predictor that emerged was intentions to listen to descriptive disclosure, $B = 0.78$, $t(73) = 9.15$, $p < .001$. To examine whether controlling for interest in emotional and descriptive disclosure contributed to this null model, I re-ran the model excluding these two variables as covariates. The results were the same, in that Exclusion increased NTBS, $B = 0.23$, $t(78) = 2.03$, $p = .05$, but NTBS did not interact with Expectancy

Figure 3.

Expectancy Manipulation Does Not Moderate the Effect of Belonging on Listening to Strangers' Emotional Disclosures (Study 3). Unstandardized coefficients reported. * $p < .05$, ** $p < .01$, *** $p < .001$.



condition to alter intentions to listen to emotional disclosure, interaction term: $B = -0.04$, $t(75) < 1$, $p = .65$. Again, neither NTBS, $B = 0.05$, $t(75) < 1$, $p = .51$, nor the Expectancy manipulation, $B = -0.05$, $t(75) < 1$, $p = .50$, predicted intentions to listen to emotional disclosure.

Behavioral Intentions to Listen to Descriptive Disclosure. I then examined whether the expectations about listening moderated the effect of belonging on behavioral intentions to listen to descriptive disclosure. I re-ran the model entering behavioral intentions to listen to descriptive disclosure as the outcome. Intentions to listen to emotional disclosure, as well as interest ratings with regard to emotional and descriptive disclosure were entered as covariates. Exclusion tended to increase NTBS, $B = 0.20$, $t(76) = 1.80$, $p = .08$. However, NTBS did not interact with the Expectancy manipulation to predict intentions to listen to descriptive disclosure, interaction term: $B = 0.07$, $t(73) < 1$, $p = .41$. The main effect of NTBS, $B = -0.10$, $t(73) = 1.27$, $p = .21$, and the Expectancy manipulation, $B = 0.07$, $t(73) < 1$, $p = .37$, were also not significant.

The total effect of the Exclusion manipulation on intentions to listen to descriptive information was significant, $B = 0.16$, $t(73) = 2.06$, $p = .04$, such that participants in the Exclusion condition intended to listen to descriptive disclosure more than participants in the Neutral condition. This result is interesting, but it does not contradict the hypothesis that NTBS predicts listening to emotional, but not descriptive, disclosures. For in this analysis NTBS did not operate as a mediator. Intentions to listen to emotional disclosure, $B = 0.69$, $t(73) = 9.15$, $p < .001$, and interest ratings with regard to descriptive disclosure, $B = 0.23$, $t(73) = 2.28$, $p = .03$, were significant covariates, indicating that interest predicted intentions to listen to descriptive disclosure.

Mood and Self-Esteem. As in Study 2, mood did not operate as a mediator. Mood also did not interact with the expectancy manipulation to alter intentions to listen to either emotional,

Listening will condition indirect effect = 0.01, $SE = 0.05$, 95% CI [-0.08, 0.14] and Listening will not condition indirect effect = 0.02, $SE = 0.03$, 95% CI [-0.03, 0.11], or descriptive, Listening will condition indirect effect = -0.01, $SE = 0.05$, 95% CI [-0.11, 0.08], and Listening will not condition indirect effect = 0.00, $SE = 0.03$, 95% CI [-0.07, 0.06], disclosure. Also replicating Study 2, self-esteem did not operate as a mediator. Nor did self-esteem interact with the expectancy manipulation to alter intentions to listen to emotional, Listening will condition indirect effect = 0.00, $SE = 0.02$, 95% CI [-0.04, 0.04], and Listening will not condition indirect effect = 0.00, $SE = 0.01$, 95% CI [-0.01, 0.05], or descriptive, Listening will condition indirect effect = 0.00, $SE = 0.01$, 95% CI [-0.02, 0.04] and Listening will not condition indirect effect = 0.00, $SE = 0.02$, 95% CI [-0.06, 0.02], disclosure.

Discussion

Study 3 examined whether the previous findings on listening to friends, extend also to listening to strangers. It furthermore tested the hypothesis that the effect of belonging on listening depends on the expectation that listening to emotional disclosure increases the degree to which the listener feels social connected. Lastly, it examined whether belonging is motivating listening to emotional disclosure above and beyond people's fascination with emotional material. The results indicate that the previous effects do not extend to listening to strangers, for people high in the need to belong do not show increased behavioral intentions to listen to a stranger disclose emotional information. Listening to a stranger also did not depend on the expectation that doing so would increase the listener's feelings of connectedness. Finally, in this particular context, interest did not appear to be motivating listening to a stranger disclose emotional information about him or herself.

Replicating Study 2, reliving social exclusion increased belonging needs more than reliving a neutral event. The effect of belonging needs on behavioral intentions to listen to emotional disclosure, however, did not depend on the expectation that listening will or will not increase one's own feelings of social connectedness. In fact, in Study 3 regardless of people's expectations, belonging needs did not predict intentions to listen to a stranger disclose either type of information. As in Study 2, reliving exclusion increased negative mood more than reliving a neutral event. Although as found before, neither mood nor self-esteem operated as a mediator or interacted with expectations to predict intentions to listen to emotional or descriptive disclosure. Lastly, it was not the case that the more interesting participants expected the emotional material to be the more they intended to listen. For, in contrast to the interest hypothesis, interest in emotional disclosure did not predict people's behavioral intentions to listen to this type of information. Also opposing the interest hypothesis, participants expected listening to a stranger disclose emotional information to be just as interesting as listening to this person disclose descriptive information about him or herself.

There are at least three explanations as to why, in Study 3, increasing belonging needs did not increase behavioral intentions to listen to emotional disclosure. First, while Study 1 and 2 examined listening to friends, Study 3 examined listening to a stranger. As previously mentioned, these results suggest that belonging might increase the desire to listen to friends, but not strangers, disclose emotional information. Second, whereas the previous studies measured people's general desire to listen, Study 3 assessed behavioral intentions for listening. This change might also explain why belonging did not predict listening to emotional disclosure, although this is not likely. A third possibility has to do with the failed expectancy manipulation. Regardless of whether participants anticipated listening to someone who is either very much or

less so interested in becoming friends, participants expected listening to both persons to generate the same degree of closeness. However, in neither expectancy condition did belonging needs predict behavioral intentions to listen to emotional disclosure, so there is still the initial issue that belonging needs did not predict people's intentions to listen to a stranger engage in emotional disclosure.

Study 4

Study 4 builds upon this work in four ways. First, instead of looking at strangers, I return to examining listening to friends disclose emotional information. Emotional disclosure occurs most often amongst intimates (Rimé et al., 1991a, 1991b, 1992; Rimé, Dozier, Vandenas, & Declercq, 1996), and in Study 3, people's belonging needs did not predict their behavioral intentions to listen to a stranger. While people do sometimes listen to non-close others disclose emotional information (e.g., ~15% of the time; Christophe & Rimé, 1997), the results from Study 3 suggest that people's motives for listening to close versus non-close others share such information varies. Belonging may be motivating listening to friends' emotional disclosures, but other motives appear to underlie listening to strangers share the same type of information. For the purpose of focusing on the primary question this project addresses - why do people listen to their friends disclose emotional information - Study 4 once again examines listening to friends.

Second, in order to address the hypothesis that people want to listen to emotional disclosure, because they expect listening to emotional disclosure to increase the degree to which they feel social connected, Study 4 measured such expectations rather than manipulated them. I did this because it would be rather difficult, and perhaps even ethically questionable, to make half of the participants believe that listening to a friend of theirs would not make them feel closer to him or her. Thus, in Study 4, participants were told that they would listen to a friend of theirs

share emotional or descriptive information about his or her transition from high school to college. After which, I assessed participants' behavioral intentions for listening to this specific friend disclose emotional and descriptive information. I then assessed the extent to which participants expected listening to their friend disclose emotional and descriptive information to increase their own feelings of social connectedness.

Third, Study 4 examines listening, and simultaneously the role of validating the discloser. Because emotional disclosure is more central to the self than descriptive disclosure (Reis & Shaver, 1988; Sullivan, 1953), listening to emotional disclosure provides a greater opportunity for the listener to validate the speaker than descriptive disclosure. Indeed, in prior research the more emotion people disclosed, the more speakers felt validated, and the closer both people felt as a result of the interaction (Laurenceau et al., 1998). Accordingly, the validation hypothesis is that the need to belong motivates people to validate their friends' emotional experiences, and the desire to validate predicts people's desire to listen. The validation hypothesis does not necessarily negate the interest, belonging, mood, or self-esteem hypotheses, but rather emphasizes validating, as opposed to listening, as the key piece that increases people's own feelings of social connectedness.

To test these hypotheses, in Study 4, I assessed the degree to which people intended to listen, and also to validate, their friends' emotional and descriptive disclosures. I then tested four separate path models to investigate the belonging and validation hypotheses in particular. To examine the belonging hypothesis, I first tested whether belonging mediated the effect of the social exclusion manipulation on intentions to listen to emotional disclosure, and whether intentions to listen, in turn, predicted intentions to validate. In a second model, I tested whether the same effects held for descriptive disclosure by re-running the model with descriptive

disclosure as the outcome and emotional disclosure as a covariate. Next, to examine the validation hypothesis, in a third model I tested whether belonging mediated the effect of the social exclusion manipulation on intentions to validate emotional disclosure, and whether intentions to validate subsequently predicted intentions to listen. Fourth and lastly, I re-ran this model with descriptive disclosure as the outcome and emotional disclosure as a covariate, in order to examine whether these effects extend to descriptive disclosure as well.

Lastly, in Study 4, I changed the exclusion manipulation and collected state measures of belonging, mood, and self-esteem. This was done to address two potential issues. First, in neither of the previous studies did the reliving task differentially alter self-esteem, as measured by the Rosenberg Self-Esteem scale (Rosenberg, 1965). This might explain why self-esteem did not operate as a mediator. Thus, I changed the exclusion manipulation to one that has been shown to increase state belonging needs, decrease self-esteem (Zadro, Williams, & Richardson, 2004), and tends to increase negative mood (Lakin, Chartrand, & Arkin, 2008). Second, while responses to social exclusion have been assessed using the NTBS (e.g., Gardner, Pickett, & Brewer, 2000; Pickett, Gardner, & Knowles, 2004), this is a measure of a trait belonging needs. Participants also reported their general desire to listen. Thus, it is possible that NTBS operated as a mediator, whereas mood did not, because NTBS and listening were measured at the trait level, and mood was measured at the state level. To address these issues, in Study 4, I measured all variables at the state level.

In sum, Study 4 tested the hypothesis that increasing people's need to belong, increases their behavioral intentions to listen to a friend disclose emotional, but not descriptive, information. It moreover examined the hypothesis that this effect depends on people's expectation that listening to emotional disclosure increases their own feelings of social

connectedness. As with Study 3, this study addresses whether these effects exist above and beyond people's interest in emotional material. Lastly, Study 4 investigates whether belonging directly alters people's intentions to listen to, or validate, their friends' emotional experiences. To manipulate the need to belong, participants were either excluded or included by other participants in an on-line ball tossing game (Williams, Cheung, & Choi, 2000). Afterward, they learned that they would call a friend and listen to this person disclose emotional or descriptive information about him or herself.

I predict that exclusion, more than inclusion, will increase people's belonging needs. In terms of the effect of such needs on listening to and validating the discloser, there are several possible outcomes. First, increasing belonging needs may increase behavioral intentions to listen to emotional, but not descriptive, disclosure. Second, increasing belonging needs may increase intentions to validate friends' emotional, but not descriptive, disclosures, and once the desire to validate is taken into account, there is little effect of increased belonging needs on intentions to listen to emotional disclosure. Furthermore, I predict that expectations regarding emotional disclosure will operate as a moderator. That is, I predict that the effect of belonging on people's intentions will diminish, and possibly even be attenuated, the more people expect emotional disclosure will *not* increase their own feelings of social connectedness. Finally, to the extent that people listen for reasons beyond interest in the material, I predict these effects will remain when controlling for participants' degree of interest.

Method

Participants

Fifty one undergraduate students (52.90% female, age $M = 19.20$, $SD = 1.46$) participated in a study examining people's mental visualization skills for research credit.

Procedure and Materials

Exclusion Manipulation. Participants learned that they would complete a series of exercises to first practice and then assess their mental visualizations skills. The first exercise manipulated exclusion. In it, participants were either excluded or included while playing an on-line ball tossing game. As in Zadro, Williams, and Richardson (2004), participants in the exclusion condition were thrown the ball four times at the beginning of the game and then did not receive the ball again. Participants in the inclusion condition were thrown the ball roughly an equal number of times as the other players throughout the game.

Exclusion Manipulation Check, Belonging, Self-Esteem, and Mood. Afterward, participants completed several measures adapted from Zadro et al. (2004). All measures were rated on a 1 (*not at all*) to 9 (*very much so*) scale, unless otherwise noted (see Appendix D for study materials).

To assure that the exclusion manipulation was effective, participants reported the extent to which they were included in the game, how accepted vs. rejected they felt, and estimated what percentage of throws they had received. Then, participants rated their state levels of belonging (9-items: e.g., I felt like an outsider during the Cyberball game; $\alpha = .93$) and self-esteem (3-items: e.g., During the Cyberball game, I felt good about myself; $\alpha = .77$).⁵ Participants also reported how positive (i.e., *happy, positive, cheerful*; $\alpha = .90$) and negative (i.e., *sad, negative, depressed, angry, mad, irritated*; $\alpha = .89$) they felt on a scale ranging from 1 (*not at all*) to 5

⁵ I included items theoretically intended to measure belonging (3-items: e.g., I felt poorly accepted by the other participants; $\alpha = .79$), control (3-items: e.g., I felt in control during the Cyberball game; $\alpha = .81$), meaningful existence (3-items: e.g., I felt non-existent during the Cyberball game; $\alpha = .75$), and self-esteem (3-items: e.g., I felt somewhat inadequate during the Cyberball game; $\alpha = .77$). In the data, however, belonging, control, and meaningful existence were highly related, $r_s(49) < .87$ and $> .84$, $p_s < .001$. Each also individually mediated the effect of the exclusion manipulation on listening to emotional disclosure. Self-esteem was less so related, $r_s(49) < -.80$ and $> -.71$, $p_s < .001$, and did not operate as a mediator. For the sake of parsimony, I averaged across the nine items measuring belonging, control, and meaningful existence items to create a single index of belonging ($\alpha = .93$). I separately averaged across the three items reflecting feelings of self-worth to create an index of self-esteem ($\alpha = .77$).

(*extremely*). As with the previous studies, these scores were combined to form a mood index, in which higher scores indicated more negative affect ($\alpha = .88$).

Behavioral Intentions to Listen. Next, participants learned that they would engage in a second task designed to assess their mental visualization skills. Specifically, they would call a friend and listen to this friend talk about either emotional or descriptive information about him or herself. After providing demographic information about the friend they intended to call, participants completed the behavioral intention to listen to disclosure measure. Using a 1 (*strongly disagree*) to 9 (*strongly agree*) scale, they rated how much they wanted to listen to their friend disclose emotional ($\alpha = .87$) and descriptive information ($\alpha = .83$). As in Study 3, I used the same items as in Studies 1 and 2, but modified them so that instead of referring to listening in general, the items focused on the particular friend that the person wanted to call.

Expectations about Increased Closeness and Reduced Distance. Participants then completed several additional measures using a 1 (*not at all*) to 9 (*very much so*) scale. Participants rated the extent to which they expected listening to emotional ($\alpha = .50$) and descriptive ($\alpha = .74$) information to increase feelings of closeness and reduce feelings of distance between themselves and their friend (i.e., *close, connected, distant*). In the data, expectations about emotional disclosure increasing closeness did not correlate with expectations about emotional disclosure reducing distance ($r = .14, p = .35$; see Table 5 on page 49). For this reason, I separately analyzed expectations about emotional ($\alpha = .66$) and descriptive ($\alpha = .85$) disclosure increasing feelings of closeness (i.e., *close, connected*), and expectations about emotional and descriptive disclosure reducing feelings of distance.

Interest. Participants also rated the degree to which they expected listening to be interesting (i.e., *interesting, entertaining, boring*; $\alpha = .81$ and $.79$, for emotional and descriptive disclosure, respectively).

Behavioral Intentions to Validate. Lastly, they rated the extent to which they wanted to listen in order to make their friend feel validated (i.e., *valued as a person, understood, cared for*; $\alpha = .98$ and $.96$, for emotional and descriptive disclosure, respectively). Participants were then debriefed and thanked for their participation.

Results

Descriptive Data. Table 5 (on page 48) depicts the bivariate correlations between all study measures and demographic variables. Unlike Studies 1 and 2, the correlation between belonging and behavioral intentions to listen to emotional disclosure was not significant ($r = .06$, $p = .66$). Although, as before, belonging did not correlate with intentions to listen to descriptive disclosure ($r = -.22$, $p = .13$). As found in the previous studies, however, the more participants intended to listen to emotional disclosure, the more they also intended to listen to descriptive disclosure ($r = .72$, $p < .001$).⁶

Replicating Study 3 and consistent with the hypothesis that expectations may be associated with intentions to listen, the more participants expected listening to increase closeness

⁶ To further examine the relationship between belonging and listening to friends, I ran two regression analyses similar to those described in Study 1. The first analysis examined whether belonging predicted listening to friends' emotional disclosures, while controlling for listening to friends' descriptive disclosures. The second analysis examined whether belonging predicted listening to friends' descriptive disclosures, while controlling for listening to friends' emotional disclosures. Replicating Study 1, intentions to listen to friends' emotional disclosures was positively related to belonging, $B = 0.23$, $t(48) = 2.36$, $p = .02$, and intentions to listen to friends' descriptive disclosures, $B = 0.77$, $t(48) = 7.93$, $p < .001$. Also replicating previous findings, intentions to listen to friends' descriptive disclosures was negatively related to belonging, $B = -0.26$, $t(48) = 2.82$, $p = .007$. That is, increased belonging needs were associated with *decreased* intentions to listen to friends disclose descriptive information. Intentions to listen to friends' descriptive disclosures was also positively associated with intentions to listen to friends' emotional disclosures, $B = 0.74$, $t(48) = 7.93$, $p < .001$.

Table 5
Bivariate Correlations, Means, and Standard Deviations (Study 4)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Listening to Emo.	1.00														
2. Listening to Desc.	.72 ^{***}	1.00													
3. Belonging	.06	-.22	1.00												
4. Mood	.04	-.20	.77 ^{***}	1.00											
5. Self-esteem	-.03	.20	-.79 ^{***}	-.74 ^{***}	1.00										
6. Exp. about Emo. (closeness)	.57 ^{***}	.60 ^{***}	-.13	.00	-.04	1.00									
7. Exp. about Emo. (distance)	.30 [*]	.22	-.01	-.16	.15	.14	1.00								
8. Exp. about Desc. (closeness)	.56 ^{***}	.72 ^{***}	-.10	-.13	-.01	.75 ^{***}	.13	1.00							
9. Exp. about Desc. (distance)	.46 ^{***}	.42 ^{**}	-.07	-.14	.06	.32 [*]	.39 ^{**}	.38 ^{**}	1.00						
10. Interest in Emo.	.66 ^{***}	.58 ^{***}	-.10	-.10	.09	.50 ^{***}	.17	.61 ^{***}	.27 [*]	1.00					
11. Interest in Desc.	.56 ^{***}	.58 ^{***}	-.13	-.17	.14	.50 ^{***}	.25	.60 ^{***}	.40 ^{**}	.71 ^{***}	1.00				
12. Validating Emo.	.70 ^{***}	.70 ^{***}	.01	.08	-.04	.63	.10	.62 ^{***}	.12	.49 ^{***}	.58 ^{***}	1.00			
13. Validating Desc.	.64 ^{***}	.77 ^{***}	-.02	-.03	-.00	.60 ^{***}	.13	.69 ^{***}	.14	.47 ^{***}	.55 ^{***}	.82 ^{***}	1.00		
14. Gender	.52 ^{***}	.56 ^{***}	-.02	-.11	-.00	.33 [*]	.33 [*]	.36	.25	.29 [*]	.44 ^{***}	.58 ^{***}	.60 ^{***}	1.00	
15. Age	-.13	-.11	-.07	-.20	.09	-.41 ^{**}	-.02	-.24	-.14	-.05	-.00	-.21	-.16	-.31 [*]	1.00
Mean	7.10	7.25	5.80	2.62	5.14	7.22	7.75	6.88	7.63	6.71	6.82	6.87	6.56	-	19.20
Standard Deviation	1.56	1.34	2.17	0.82	2.06	1.42	1.44	1.53	1.44	1.50	1.43	2.12	1.92	-	1.46

Note. Emo. = Emotional Disclosure; Desc. = Descriptive Disclosure; Exp. = Expectations; Closeness = listening increasing feelings of closeness; Distance = listening reducing feelings of distance; Gender was coded as 0 = male, 1=female.

* $p < .05$, ** $p < .01$, *** $p < .001$

and reduce distance between themselves and their friend, the greater their intentions for listening. That is, expectations about listening increasing closeness correlated with intentions to listen to emotional ($r = .57, p < .001$), and descriptive ($r = .72, p < .001$), disclosure. Expectations about listening reducing distance correlated with intentions to listen to emotional ($r = .30, p = .03$), and descriptive ($r = .42, p = .002$), disclosure. However, as previously mentioned, expectations about emotional disclosure increasing closeness did not correlate with expectations about emotional disclosure reducing distance ($r = .14, p = .35$). Although, expectations about descriptive disclosure increasing closeness did correlate with expectations about descriptive disclosure reducing distance ($r = .38, p = .006$).

As predicted by the interest hypothesis, interest ratings correlated with intentions to listen. In other words, replicating Study 3 the more participants expected listening to descriptive information to be interesting the more they intended to listen to this type of information ($r = .59, p < .001$). Whereas Study 3 found that interest in emotional material did not predict intentions to listen to a stranger disclose emotional information, in this study the more participants expected listening to a friend disclose emotional information to be interesting the more they intended to listen to him or her ($r = .66, p < .001$).

In line with the validation hypothesis, which emphasized the association between validating and listening, intentions to validate the discloser correlated with intentions to listen to him or her disclose emotional ($r = .70, p < .001$) and descriptive ($r = .77, p < .001$), information. Consistently found throughout this investigation, neither mood nor self-esteem correlated with intentions to listen to or validate either type of information, expectations about increased closeness/reduced distance, or interest in the information being disclosed. As before, women

reported stronger intentions to listen to their friend disclose emotional ($r = .52, p < .001$) and descriptive ($r = .56, p < .001$) information than men.

Exclusion Manipulation Checks. To test the effectiveness of the exclusion manipulation, I ran a multivariate ANOVA with Exclusion condition (Exclusion vs. Inclusion) as a between-subjects factor on ratings of inclusion. The manipulation was successful, for participants in the Exclusion condition felt less included by other participants, $M_{\text{Exclusion}} = 2.00$, $M_{\text{Inclusion}} = 5.80$, $SDs = 0.28$ and 1.96 , more rejected vs. accepted, $M_{\text{Exclusion}} = 1.65$, $M_{\text{Inclusion}} = 6.08$, $SDs = 1.06$ and 1.89 , and reported receiving a fewer percentage of throws during the game, $M_{\text{Exclusion}} = 9.42$, $M_{\text{Inclusion}} = 44.48$, $SDs = 9.58$ and 15.42 , than participants in the Inclusion condition, $F_s(1, 49) > 95.91$, $ps < .001$, $\eta_p^2s > .66$.

Belonging, Mood, and Self-Esteem. I then ran the same ANOVA discussed above, but with belonging, mood, and self-esteem as dependent variables. As predicted, participants in the Exclusion condition reported greater belonging needs, $M_{\text{Exclusion}} = 7.33$, $M_{\text{Inclusion}} = 4.21$, $SDs = 1.32$ and 1.69 , felt more negative, $M_{\text{Exclusion}} = 3.07$, $M_{\text{Inclusion}} = 2.16$, $SDs = 0.74$ and 0.62 , and reported lower self-esteem, $M_{\text{Exclusion}} = 3.91$, $M_{\text{Inclusion}} = 6.41$, $SDs = 1.77$ and 1.50 , than participants in the Inclusion condition, $F_s(1, 49) > 22.46$, $ps < .001$, $\eta_p^2s > .31$.

Expectations about Increased Closeness and Reduced Distance. I predicted that expectations, about listening to emotional disclosure in particular, would operate as the moderator in a moderated mediation model. It is possible, however, that the Exclusion manipulation (i.e., the proposed predictor) altered not only belonging (i.e., the proposed mediator), but also expectations (i.e., the proposed moderator). To test for this, I ran a repeated measures ANOVA with Disclosure Type (Expectations about Emotional vs. Descriptive

Disclosure) and Expectations Type (Expectations about Closeness vs. Distance) as within-subjects factors, and Exclusion condition (Exclusion vs. Inclusion) as a between-subjects factor.

The Exclusion manipulation however did not alter such expectations, indicating that one does not need to be concerned about expectations being altered by manipulations of exclusion. Consistent with the idea that emotional disclosure may promote social connection more than descriptive disclosure, participants tended to expect that listening to their friend disclose emotional, $M_{\text{Emotional}} = 7.49$, $SD = 1.12$, more than descriptive, $M_{\text{Descriptive}} = 7.26$, $SD = 1.28$, information to greater increase closeness and reduce distance, $F(1,49) = 2.55$, $p = .12$, $\eta_p^2 = .05$. Participants also expected listening in general to reduce feelings of distance, $M_{\text{Distance}} = 7.69$, $SD = 1.20$, more than increase feelings of closeness, $M_{\text{Closeness}} = 7.05$, $SD = 1.38$, between themselves and their friend, $F(1,49) = 8.74$, $p = .005$, $\eta_p^2 = .15$.

Interest. I predicted that these effects would remain when controlling for participants' degree of interest in the material. However, it is possible that the Exclusion manipulation (i.e., the proposed predictor), altered such ratings (i.e., the proposed covariates). To test for this, I ran a repeated measures ANOVA with Disclosure Type (Interest in Emotional vs. Descriptive Disclosure) as within-subjects factor, and Exclusion condition (Exclusion vs. Inclusion) as a between-subjects factor. The Exclusion manipulation did not alter such ratings. In addition, replicating Study 2, the within-subjects main effect of Disclosure Type was not significant. That is, in contrast to the interest hypothesis which proposes that people consider emotional information to be more interesting than descriptive information, participants expected listening to their friend disclose both types of information to be equally as interesting, $M_{\text{Emotional}} = 6.71$, $M_{\text{Descriptive}} = 6.82$, $SDs = 1.50$ and 1.43 , $F(1,49) < 1$, $p = .45$, $\eta_p^2 = .01$.

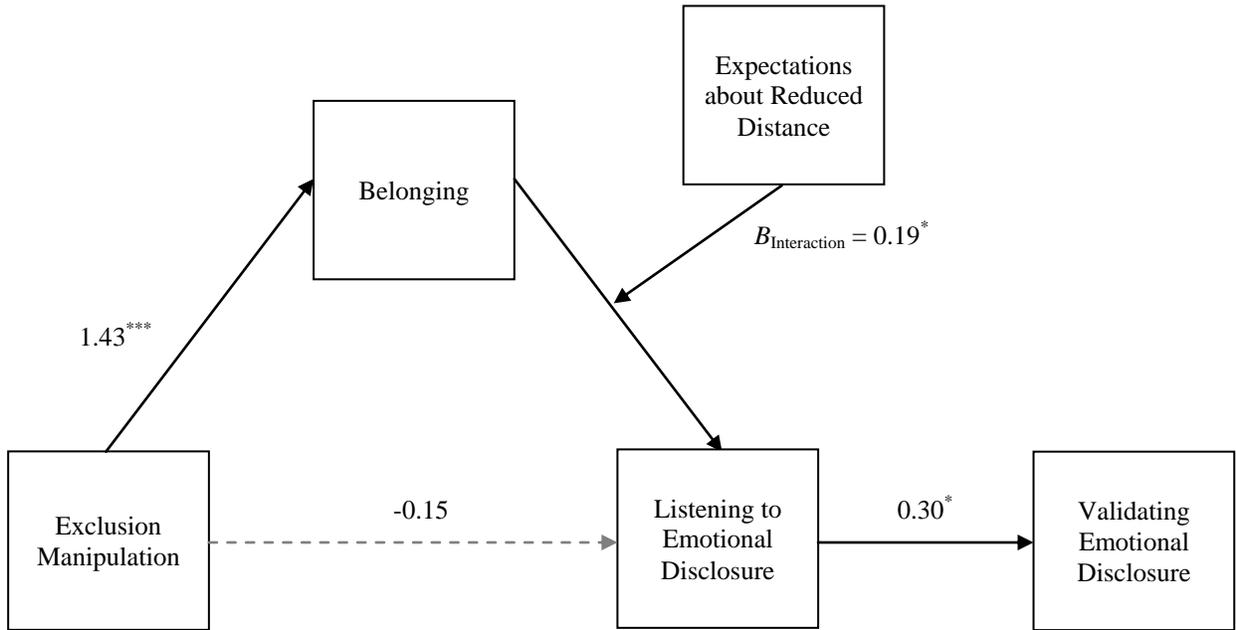
Validating. Next, I ran the same analysis to test the direct effect of the Exclusion manipulation on the degree which participants wanted to listen to their friend, because they wanted to make him or her feel validated and also to compare the desire to validate both types of disclosure (i.e., the within-subjects main effect of Disclosure Type). Consistent with the notion that emotional disclosure provides more opportunity for validation than descriptive disclosure, participants tended to report that they wanted to listen to emotional, $M_{\text{Emotional}} = 6.87$, $SD = 2.12$, more than descriptive, $M_{\text{Descriptive}} = 6.58$, $SD = 1.92$, information because they wanted to make the speaker feel validated, $F(1,49) = 2.91$, $p = .10$, $\eta_p^2 = .06$.

Behavioral Intentions to Listen to Emotional Disclosure. I tested my hypotheses using AMOS 20.0 and a macro designed to probe interactions between two continuous variables (Hayes & Matthes, 2009). In the first model I tested, Exclusion condition (-1 = Inclusion, 1 = Exclusion) predicted belonging and behavioral intentions to listen to and validate emotional disclosure (see Appendix E for AMOS model). Belonging, expectations about reduced distance, and the interaction between these two variables predicted intentions to listen to emotional disclosure. Intentions to listen to emotional disclosure, in turn predicted intentions to validate emotional disclosure. Intentions listen to and validate descriptive disclosure and interest ratings with regard to both types of disclosure were included as covariates. Because they were all highly related, I allowed all of the covariates to correlate.

As illustrated in Figure 4 and according to cut-off criteria recommended by Hu and Bentler (1999), the model fit the data well, $\chi^2 = 20.78$, $df = 20$, $p = .30$, RMSEA = .05, 90% CI [0.00, 0.14], CFI = .99. The chi-square was nonsignificant, the RMSEA was below .06, and the CFI for the model was above .90. Replicating previous studies, the exclusion manipulation increased belonging needs, $B = 1.43$, $p < .001$. Unlike Study 3, the effect of belonging on

Figure 4.

Listening to and Validating Friends' Emotional Disclosures (Study 4). Unstandardized coefficients reported. * $p < .05$, ** $p < .01$, *** $p < .001$.



behavioral intentions to listen to emotional disclosure did depend on the expectation that listening reduces distance, interaction term: $B = 0.19$, $p = .03$.⁷ Intentions to listen to emotional disclosure, in turn, predicted intentions to validate emotional disclosure, $B = 0.30$, $p = .01$. Moreover, the exclusion manipulation indirectly increased intentions to listen to, $B = 0.29$, $p = .05$, but not validate, $B = 0.04$, $p = .48$, emotional disclosure. In other words, belonging mediated the effect of the exclusion manipulation on the desire to listen to, but not validate, emotional disclosure. These results indicate that, in contrast to the validation hypothesis, the effect of belonging is specific to the desire to listen, and cannot be explained by the desire to validate.

⁷ In a separate model, I examined whether the effect of belonging on behavioral intentions to listen to emotional disclosure, depended on expectations about increased closeness. This effect, however, was not significant, interaction term: $B = -0.12$, $p = .19$.

To diagnose the interactive effect of expectations about reduced distance and belonging on listening to emotional disclosure, I used a macro designed to probe continuous interactions (Hayes & Matthes, 2009). I entered belonging as the focal predictor, behavioral intentions to listen to emotional disclosure as the outcome variable, and expectations about reduced distance as the moderator variable. To remain consistent with the model estimated in AMOS, Exclusion condition, and all previously included covariates were included as covariates into the macro. I used the Johnson-Neyman technique to test for regions of significance.

The results were the same regardless of whether all variables were standardized versus not. In order to increase the interpretability of the results, the following are the results with regard to non-standardized variables. The data indicate that increasing belonging only increased behavioral intentions to listen to emotional disclosure, when participants expected listening to their friend disclose emotional information would reduce distance between themselves and their friend ($B = .19, t(51) = 2.02, p = .05$). However, the more participants expected listening would *not* reduce distance between themselves and their friend, belonging needs no longer predicted intentions to listen to emotional disclosure ($B = .15, t(51) = 1.62, p = .11$).

In the path model I tested (see Appendix E for AMOS model), all four covariates were significantly related, $Bs < .76$ and $> .46, ps < .003$. In terms of the association between these variables and all others included in the model, replicating previous findings, intentions to listen to emotional and descriptive disclosure were related, $B = 0.41, p = .003$. Intentions to validate emotional and descriptive disclosure were also related, $B = 0.59, p < .001$. As found before and consistent with the interest hypothesis, interest in emotional disclosure predicted intentions to listen to emotional disclosure, $B = 0.45, p < .001$, such that the more interesting participants expected listening to be the more they intended to listen.

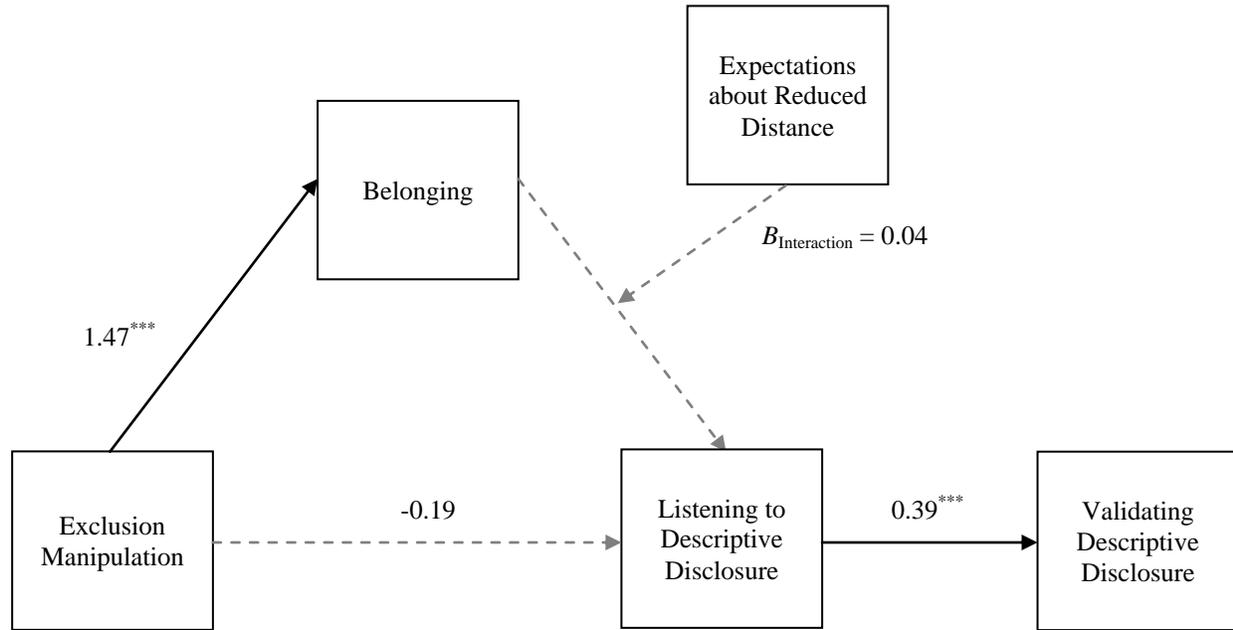
Behavioral Intentions to Listen to Descriptive Disclosure. I then examined whether the same results held with regard to behavioral intentions to listen to and validate descriptive disclosure. In the second model I tested, exclusion condition predicted belonging, as well as intentions to listen to and validate descriptive disclosure (see Appendix E for AMOS model). Belonging, expectations about reduced distance, and the interaction between these two variables predicted intentions to listen to descriptive disclosure.⁸ Intentions to listen to descriptive disclosure, in turn, predicted intentions to validate descriptive disclosure. Intentions to listen to and validate emotional disclosure were included in the model as covariates, as well as interest ratings with regard to both types of disclosure.

As illustrated in Figure 5, the model was less than satisfactory, $\chi^2 = 43.43$, $df = 20$, $p = .002$, RMSEA = .15, 90% CI [0.09, 0.22], CFI = .92, because the chi-square was significant and the RMSEA was greater than the standard cut-off criteria (Hu & Bentler, 1999). As before, the exclusion manipulation increased belonging needs, $B = 1.47$, $p < .001$. The effect of belonging on behavioral intentions to listen to descriptive disclosure, however, did not depend on expectations about listening reducing feelings of distance, interaction term: $B = 0.04$, $p = .55$.⁸ Although the more participants expected listening to descriptive disclosure to reduce distance between themselves and their friend, the greater participants' intentions to listen to their friend disclose descriptive information, $B = 0.23$, $p = .03$. Intentions to listen to descriptive disclosure, in turn, predicted intentions to validate descriptive disclosure, $B = 0.39$, $p = .001$. However, consistent with the hypothesis that belonging explains listening to emotional, but not, descriptive self-disclosures, the exclusion manipulation did not directly, $B = -0.19$, $p = .41$, or indirectly, $B = -0.21$, $p = .31$, alter intentions to listen to descriptive disclosure. Nor did the exclusion

⁸ I also separately examined whether the effect of belonging on behavioral intentions to listen to descriptive disclosure, depended on expectations about increased closeness. This effect was not significant, interaction term: $B = 0.12$, $p = .18$.

Figure 5.

Listening to and Validating Friends' Descriptive Disclosures (Study 4). Unstandardized coefficients reported. * $p < .05$, ** $p < .01$, *** $p < .001$.



manipulation directly, $B = -0.08$, $p = .61$, or indirectly, $B = -0.16$, $p = .06$, alter intentions to validate descriptive disclosure. Thus, exclusion does not alter intentions to listen to or validate a friend disclose descriptive information.

Behavioral Intentions to Validate Emotional and Descriptive Disclosure. Next, I tested two separate models to examine whether increasing belonging needs increased people's behavioral intentions to *validate* their friends' emotional, but not descriptive, disclosures. That is, what happens if validating and listening were switched in the models? It may be that people want to validate the other person's emotions, which in turn, promotes listening. In the first model examining emotional disclosure, exclusion condition predicted belonging, and intentions to validate and listen to emotional disclosure (see Appendix E for AMOS model). Belonging, expectations about reduced distance, and the interaction between these two variables predicted

intentions to validate to emotional disclosure.⁹ Intentions to validate emotional disclosure, in turn predicted intentions to listen to emotional disclosure. In accordance with previous models, all other variables were included as covariates.

Casting doubt upon the validation hypothesis, the model did not fit the data well, $\chi^2 = 34.17$, $df = 20$, $p = .03$, RMSEA = .12, 90% CI [0.05, 0.19], CFI = .95. As found previously, the exclusion manipulation increased belonging needs, $B = 1.47$, $p < .001$. Although in contrast to the validation hypothesis, such needs did not predict participants' intentions to validate their friends emotional disclosures, $B = -0.02$, $p = .87$. Nor did the expectation that emotional disclosure reduces distance, $B = -0.04$, $p = .64$, or the interaction between such expectations and participants' belonging needs, $B = 0.00$, $p = .99$, predict their intentions to validate their friends emotional disclosures. According to these results, while listening and validating may be related, increasing the need to belong only increases people's intentions to listen, and not to validate, their friends' emotional disclosures.

In the second model, I tested whether the same effects replicated with regard to descriptive disclosure. To examine this, I re-ran the model specifying intentions to validate and listen to descriptive disclosure as outcomes and intentions to validate and listen to emotional disclosure as covariates (see Appendix E for AMOS model). All other elements in the model were the same.¹⁰ As with the previous model, this model also did not fit the data well, $\chi^2 = 47.75$, $df = 20$, $p < .001$, RMSEA = .17, 90% CI [0.11, 0.23], CFI = .90. As before, the exclusion manipulation increased belonging needs, $B = 1.47$, $p < .001$. However, belonging did not predict

⁹ In a separate model, I examined whether the effect of belonging on behavioral intentions to validate emotional disclosure, depended on expectations about increased closeness. This effect, however, was not significant, interaction term: $B = 0.06$, $p = .45$.

¹⁰ I also separately examined whether the effect of belonging on behavioral intentions to validate descriptive disclosure, depended on expectations about increased closeness. Although this effect was not significant, interaction term: $B = -0.07$, $p = .40$.

participants' intentions to validate their friends descriptive disclosures, $B = -0.02$, $p = .87$. The expectation that descriptive disclosure reduces distance, $B = -0.05$, $p = .64$, nor the interaction between these expectations and participants' belonging needs, $B = -0.05$, $p = .51$, also did not predict intentions to validate friends' descriptive disclosures.

Mood and Self-Esteem. Lastly, I tested eight additional models to examine whether mood or self-esteem mediated the effect of the exclusion manipulation on participants' intentions to listen to or validate their friends' emotional, or descriptive, disclosures. Replicating Study 2, mood did not mediate the effect of the of the exclusion manipulation on intentions to listen to friends' disclose emotional, indirect effect: $B = 0.15$, $p = .13$, or descriptive, indirect effect: $B = -0.15$, $p = .14$, information. Mood also did not operate as a mediator with regard to intentions to *validate* emotional, indirect effect: $B = 0.14$, $p = .33$, or descriptive, indirect effect: $B = -0.01$, $p = .91$, disclosure. Also replicating Study 2, self-esteem did not mediate the effect of the exclusion manipulation on intentions to listen to friends disclose emotional, indirect effect: $B = 0.16$, $p = .19$, or descriptive, indirect effect: $B = -0.16$, $p = .28$, information. Nor did self-esteem operate as a mediator with regard to intentions to *validate* friends' emotional, indirect effect: $B = 0.04$, $p = .75$, or descriptive, indirect effect: $B = 0.11$, $p = .30$, disclosures.

General Discussion

People are constantly telling their friends, for example, about good news they received or a stressful event they encountered. Much research has examined the disclosure process from the perspective of the speaker. Such research has demonstrated that sharing emotional information generates greater feelings of social connection than sharing other types of information, such descriptive information including one's thoughts or facts about oneself (Espitalier, Tcherkassoff & Delmas, 2002; Laurenceau, Feldman-Barrett, & Pietromonaco, 1998). In contrast to this work,

this project examined disclosure from the perspective of the listener. In particular, it examined why people listen to their friends' emotional, especially more so than their descriptive, disclosures. While there are many explanations for this phenomenon, in this project I focused on five possible explanations, which I refer to as the (1) interest, (2) belonging, (3) mood, (4) self-esteem, and (5) validation hypotheses.

People often disclose their own emotional experiences with close others, such as friends, as a means to increase their own feelings of social connectedness. According to the **belonging hypothesis** people listen to emotional disclosure for the very same reason – to increase their own feelings of social connectedness. Indeed, I found that the greater the need to belong, the greater the desire to listen to friends disclose emotional, but not descriptive, information. This result is interesting, for increasing the need to belong does not increase the desire to listen to anything per se. But rather, it increases the desire to listen to emotional disclosure – disclosure that is much more likely to promote feelings of closeness than descriptive disclosure (Laurenceau et al., 1998). Indeed, in the present investigation people tended to expect that listening to a friend disclose emotional information to both increase closeness and reduce distance more than listening to descriptive information.

In Study 1, the more concerned people were with social connection – as measured by the NTBS – the more they wanted to listen to friends disclose emotional, but not descriptive, information. Studies 2 and 4 manipulated such concerns using two different social exclusion paradigms (Pickett, Gardner, & Knowles, 2004; Williams, Cheung, & Choi, 2000). They demonstrated that increasing people's need to belong increased the degree to which they wanted, and also intended, to listen to their friends disclose emotional information. Increasing belonging, however, had no effect people's desire or their intentions listen to a friend disclose descriptive

information. The data indicate that it is indeed belonging driving this effect, for belonging mediated the effect of the exclusion manipulation on listening to emotional, but not descriptive, disclosure. These results could not be explained by people's concurrent feelings or their appraisals of their own self-worth, for neither mood nor self-esteem operated as a mediator. Therefore, in contrast to the **mood and self-esteem hypotheses**, it was belonging, but not mood or self-esteem, motivating listening to emotional disclosure.

Study 3 tested the boundary conditions of this phenomenon, by examining whether these effects with regard to listening to friends extend to listening to strangers. In doing so it was able to examine the hypothesis that effect of belonging on listening to emotional disclosure, depends on expectations about listening. That is, Study 3 involved manipulating people's expectations about the likelihood of listening to a stranger increasing their own feelings of social connectedness. First, this manipulation was not successful for people expected listening, regardless of the target or type of disclosure, to increase closeness to the same extent. Second, however, in neither experimental condition did belonging predict people's intentions to listen to a stranger disclose emotional information, nor did it predict intentions to listen this person disclose descriptive information. These results suggest that while belonging motivates people to listen to their friends' emotional disclosures, other factors may be influencing the motivation to listen to strangers disclose such information. For example, such factors may include social norms about listening to strangers and feelings of obligation to listen because another person has decided to share personal information about him or herself.

Study 4 explored the mechanisms involved, by returning to examining listening to friends. For this reason it involved measuring, rather than manipulating, the degree to which people expected listening to emotional disclosure to increase their own feeling of social

connectedness, in order to examine whether such expectations operate as a moderator. Indeed, the effect of the people's belonging needs on their intentions to listen to a friend disclose emotional information, depended on their expectations about listening. Increasing belonging only increased intentions to listen to emotional disclosure, when people expected listening to their friend disclose emotional information would reduce distance between themselves and their friend. However, the more participants expected listening would *not* reduce distance between them and their friend, belonging needs no longer predicted intentions to listen to emotional disclosure. These effects were not found with regard to descriptive disclosure, further emphasizing that the association between belonging and listening, is specific to listening to emotional disclosure.

The data, moreover, indicate that these effects exist above and beyond people's fascination with emotional material. Proposed by Rimé (2007; 2009), the **interest hypothesis** is that people listen to emotional disclosure because they expect the material, especially emotional information, to be interesting. Contrasting this idea, regardless of whether people anticipated listening to someone they had never met before (Study 3) or a specific friend of theirs (Study 4), people expected listening to emotional and descriptive disclosure to be equally as interesting. Furthermore, in Study 3 people's level of interest in listening to a stranger disclose emotional information was not related to their intentions to listen to this person. Although in Study 4, the more interesting people expected a friend's emotional and descriptive disclosures to be, the more they intended to listen to him or her share emotional and descriptive information, respectively. When controlling for this, however, increasing people's belonging needs still increased their intentions to listen to their friends' emotional, but not descriptive, disclosures. In other words, interest in emotional material is related to people's intentions to listen to friends disclose

emotional information. But even when this interest is taken into account, belonging motivates people to listen to friends' emotional, but not descriptive, disclosures.

The data also indicate that the need to belong motivates listening to friends' emotional disclosures, and listening in turn predicts the motivation to validate such disclosures. It was not that the need to belong motivates validating friends' emotional disclosures, and the desire to validate explains people's motives for listening to this type of information. Validation may play a key role in why listening to emotional disclosure generates feelings of social connectedness, whereas listening to descriptive disclosure may not (Reis & Shaver, 1988; Sullivan, 1953).

Accordingly, the **validation hypothesis** is that the need to belong motivates people to validate to their friends emotional, but not descriptive, disclosures. Contrasting this hypothesis, in Study 4, belonging was neither related to nor did it operate as a mediator with regard to people's intentions to validate their friends' emotional disclosures. It was only that the greater people's intentions to listen to emotional disclosure, the greater their intentions to validate the speaker. The exclusion manipulation also indirectly increased intentions to listen to, but not validate, emotional disclosure. Thus, these findings demonstrate that belonging motivates listening in particular, and not validating per se.

In terms of the effect of the need to belong on validating and listening to friends' disclose descriptive information, in Study 4 increasing belonging did not increase people's intentions to validate their friends' descriptive disclosures. Nor did increasing belonging increase people's intentions to listen to their friends disclose this type of information. Moreover, in Study 4 the exclusion manipulation neither directly nor indirectly altered people's intentions to validate or listen to friends' descriptive disclosures. Although, as with emotional disclosure, validating and listening to descriptive disclosure were related. Specially, the more people intended to listen to

their friend disclose descriptive information about him or herself, the more they intended to validate him or her. Thus, these results further emphasize the finding that the effect of belonging is specific with regard to emotional disclosure, and does not extend to other types of information, such as descriptive disclosure.

Limitations

This investigation focused on belonging as an initial premise for understanding why people listen to their friends' emotional disclosures. Although in the same way that people disclose emotional information for many different reasons (see Rimé, 2007, 2009), people likely listen to their friends share such information for reasons beyond the ones studied in this project. For example, people may listen to their friends out of concern for the speaker's well-being (Crocker, 2011), to obtain useful information, or to increase the likelihood that the speaker will listen to them in the future. People may also be especially motivated listen to, as opposed to disclose, emotional information following social exclusion because listening may involve less risk for future rejection and reduce people's own self-awareness. Consistent with this idea, Lakin, Chartrand, and Arkin (2008) proposed that behavioral mimicry increases following social exclusion, because it is a low-risk route to reestablishing belonging needs. Indeed, people sometimes decrease their own self-awareness in an attempt to buffer the effects of social exclusion (Twenge, Catanese, & Baumeister, 2003).

Second, this project examined listening to emotional disclosure more generally, because people typically talk about positive emotional episodes just as frequently as they do negative emotional episodes (Finkenauer & Rimé, 1998). By implication, people are listening to positive and negative disclosure just as often. However, listening to positive compared to negative disclosure is likely to have a different impact on the listener. For example, listening to others

share positive events increases positive affect and feelings of closeness between the speaker and the listener (Gable, Reis, Impett, & Asher, 2004; Reis et al., 2010). Listening to other share negative events, on the other hand, may increase negative affect (Archer & Berg, 1978; Lazarus, Opton, Monikos, & Rankin, 1965; Shortt & Pennebaker, 1992; Strack & Coyne, 1983). Negative affect has been found to facilitate social distance (Forgas, Levinger, & Moylan, 1994), although it has also been found to increase the desire for social connectedness within the context of a loss (Gray, Ishii, & Ambady, 2011). Consequently, people's motives for listening to positive versus negative experiences may vary. While I do not believe that the need to belong motivates listening to positive, but not negative emotional information or vice versa, there might be some nuanced and complex associations that should be investigated in future research.

Third, this investigation does not establish that listening to emotional disclosure actually has an effect on the listener's belonging needs, and that this effect is unique from, or possibly does not extend to, listening to another person share descriptive information about him or herself. Prior work indicates that emotional, more than descriptive, disclosure facilitates social bonds (Espitalier, Tcherkassoff & Delmas, 2002), and promotes closeness in the context of ongoing relationships (Laurenceau, Feldman-Barrett, & Pietromonaco, 1998). In combination with the findings from this investigation, these results suggest that listening to emotional, but not descriptive, disclosure may actually repair belonging needs threatened by social exclusion. In other words, listening to another person disclose emotional information may decrease belonging needs. Whereas listening to descriptive disclosure may not have this same effect. The data do not test this hypothesis, for they only reveal that the need to belong promotes the desire to listen, not the effect of listening on belonging. However, this is an interesting possibility that should be examined in future research.

Implications and Future Directions

These findings have several potential implications. First, people who are especially concerned with social connection might be particularly good at listening to emotional disclosure. In other words, assuming that the desire to listen translates into being a better listener, social exclusion may actually increase people's ability to listen to others share emotional information. Building on this possibility, speakers may benefit more from disclosing this particular type of information to a listener high in the need to belong than disclosing the same information to listener low in the need to belong. While the current research focused on the degree to which people were motivated to listen to other share emotional and descriptive information, future studies should examine whether these findings extend to people's actual listening skills. For example, such research could test whether social exclusion increases people's attentiveness to the conversation, their ability to recall information from the dialog, and so forth.

Second, the expectation that listening to emotional disclosure promotes feelings of social connectedness plays a key role in this process. For the effect of the need to belong on listening to emotional disclosure depended on the expectation that listening reduces distance between the speaker and the listener. Whether such expectations are trait like, person specific, and vary by gender is an empirical question. It is possible that some people expect listening to their friends engage in emotional disclosure will make them feel especially close, whereas others expect doing so will only slightly amplify feelings of closeness. It is also likely that people expect listening to some friends, but not others, will increase their own feelings of social connectedness. Moreover, because of differences in gender norms regarding emotion expressivity people may expect listening to women, more so than men, talk about their feelings to promote closeness between the speaker and the listener.

Third and lastly, an interesting question is whether the findings from the present investigation with regard to listening to one's real life friends, also extend to media characters. "Parasocial interaction is defined as the emotions, thoughts, and actions (i.e., speech) that occur during exposure to a media performer and that are geared toward that performer (Cohen, 2009, p. 227). People form parasocial relationships, for example with fictional characters in narratives and persona on television shows, and such relationships progress very similarly to other social relationships. For instance, as people become more familiar with soap opera characters, they feel more confident in predicting characters' emotional reactions (Perse & Rubin, 1989). The anxiety elicited at the conclusion of a parasocial relationship (e.g., the ending of a television series), is similar to the anxiety felt following a relationship breakup (Eyal & Cohen, 2006). Moreover, the effects of parasocial relationships mimic that of social relationships, for instance in reducing stereotyping and prejudice (Schiappa, Gregg, and Hewes, 2005; 2006) in the same way that social relationships do (Allport, 1954).

Thus, the parallels between social and parasocial relationships suggest that the present findings may very well extend to media characters. First, in the same way that the need to belong motivates listening to friends, belonging may motivate listening to media characters disclose emotional, but not descriptive, information. Second, listening to media characters disclose emotional, but not descriptive, information may address belonging needs threatened by social exclusion. In other words, listening to a media character disclose emotional information about him or herself may be a means by which people can reestablish feelings of belonging after being rejected or excluded by others. Whereas, listening to the same character disclose descriptive information may not be as effective in reestablishing feelings of social connectedness. These possibilities should be tested in future research, for such work could add to our understanding of

why people listen to emotional disclosure in particular. As such, it may also reveal ways in which parasocial relationships contribute to people's fundamental need to belong.

Conclusion

In sum, the data provide initial evidence for the belonging hypothesis, which is that the need to belong motivates people to listen to their friends disclose emotional, but not descriptive, information as a means to increase their own feelings of social connection. Indeed, across multiple studies, as the need to belong increased, so too did the desire to listen to friends disclose emotional, but not descriptive, information. This research extends prior work by focusing not on how speakers benefit from disclosure, but on how listeners may benefit from it. The data indicate that people who listen to emotional disclosure with "all ears" may do so because they expect that listening to this particular type of information will help them fulfill their own need to belong.

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Appendix A: Study 1 Materials

Mood

Instructions: Rate the extent to which the following emotions describe how you feel right now, using the scale below.

- 1 = Not at all
- 2 = A little
- 3 = Moderately
- 4 = Quite a bit
- 5 = Extremely

- | | |
|-----------------|----------------|
| 1. Cheerful | 7. Depressed |
| 2. Enthusiastic | 8. Down |
| 3. Happy | 9. Low |
| 4. Joyous | 10. Negative |
| 5. Pleasant | 11. Sad |
| 6. Positive | 12. Unpleasant |

Listening

Instructions: The following are some statements about listening to other people. Although some of the following statements may seem similar to one another, they differ in important ways. Feelings and emotions refer to affective experiences such as feeling happy, sad, angry, nervous, or proud. Thoughts refer to reflections, ideas, or beliefs such as reflections on day to day experiences, ideas for weekend activities, and opinions on human rights issues. There are no right or wrong answers. Be sure to read each item carefully and indicate the degree to which you agree or disagree with each statement using the scale below:

- 1 = Strongly disagree
- 2 = Moderately disagree
- 3 = Neither agree nor disagree
- 4 = Moderately agree
- 5 = Strongly agree

1. I feel especially motivated to listen when friends talk about their emotions.
2. It doesn't matter whether I listen when friends talk about their thoughts. (r)
3. I consider listening to friends talk about their feelings really important.
4. I don't really care about listening to friends talk about their emotions. (r)
5. My mind wanders when friends talk about their thoughts. (r)
6. I try hard to express interest when friends talk about an emotional event.
7. I feel especially motivated to listen when friends talk about their thoughts.
8. It doesn't matter whether I listen when friends talk about their feelings. (r)
9. I consider listening to friends talk about their thoughts really important.

10. I don't really care about listening to friends talk about their thoughts. (r)
11. My mind wanders when friends talk about an emotional event. (r)
12. I try hard to express interest when friends talk about their thoughts.

Need to Belong Scale (Leary, Kelly, Cottrell, & Schreindorfer, 2008)

Instructions: For each of the statements below, indicate the degree to which you agree or disagree with the statement by writing a number in the space beside the question using the scale below:

- 1 = Strongly disagree
- 2 = Moderately disagree
- 3 = Neither agree nor disagree
- 4 = Moderately agree
- 5 = Strongly agree

1. If other people don't seem to accept me, I don't let it bother me. (r)
2. I try hard not to do things that will make other people avoid or reject me.
3. I seldom worry about whether other people care about me. (r)
4. I need to feel that there are people I can turn to in times of need.
5. I want other people to accept me.
6. I do not like being alone.
7. Being apart from my friends for long periods of time does not bother me. (r)
8. I have a strong need to belong.
9. It bothers me a great deal when I am not included in other people's plans.
10. My feelings are easily hurt when I feel that others do not accept me.

Self-Esteem (Rosenberg, 1965)

Instructions: Below is a list of statements dealing with your general feelings about yourself. Please indicate the degree to which you agree with each statement using the scale below:

- 0 = strongly disagree
- 1 = disagree
- 2 = agree
- 3 = strongly agree

1. At times, I think I am no good at all. (r)
2. I take a positive view of myself.
3. All in all, I am inclined to feel that I am a failure. (r)
4. I wish I could have more respect for myself. (r)
5. I certainly feel useless at times. (r)
6. I feel that I'm a person of worth, at least on an equal plane with others.
7. On the whole, I am satisfied with myself.

8. I feel I do not have much to be proud of. (r)
9. I feel that I have a number of good qualities.
10. I am able to do things as well as most other people.

Appendix B: Study 2 Materials

Excluded Condition (Picket, Gardner, & Knowles, 2004)

Please think about the last few months. What *recent* event made you feel **intensely rejected or socially excluded?** Please do not write about any event that you do not wish to share or re-experience. If such an event comes to mind, please think of a different event or move onto the next exercise. Please take time to imagine what the event was like, and try to relive it again in your mind's eye. Then describe what made you feel this way as vividly and in as much detail as you can. Please write the event such that a person reading it may experience what it is that you experienced.

The following questions may help you with this task: What were you feeling? What made you feel that way? What was important for you? What led up to that feeling? Did that event set off some chain of thoughts or fantasies that enhanced your feelings? What were they?

Please describe the event and your feelings as vividly and in as much detail as you can. You will be given about 15 minutes.

Failure Condition (Picket, Gardner, & Knowles, 2004)

Please think about the last few months. When have you *recently* experienced **intense academic failure?** Please do not write about any event that you do not wish to share or re-experience. If such an event comes to mind, please think of a different event or move onto the next exercise. Please take time to imagine what the event was like, and try to relive it again in your mind's eye. Then describe what made you feel this way as vividly and in as much detail as you can. Please write the event such that a person reading it may experience what it is that you experienced.

The following questions may help you with this task: What were you feeling? What made you feel that way? What was important for you? What led up to that feeling? Did that event set off some chain of thoughts or fantasies that enhanced your feelings? What were they?

Please describe the event and your feelings as vividly and in as much detail as you can. You will be given about 15 minutes.

Neutral Condition

Please think about the last few months. What *recent* event made you feel really **neutral, indifferent, and not feel strongly one way or the other (i.e., positive or negative)?** Please do not write about any event that you do not wish to share or re-experience. If such an event comes to mind, please think of a different event or move onto the next exercise. Please take time to imagine what the event was like, and try to relive it again in your mind's eye. Then describe what made you feel this way as vividly and in as much detail as you can. Please write the event such that a person reading it may experience what it is that you experienced.

The following questions may help you with this task: What were you feeling? What made you feel that way? What was important for you? What led up to that feeling? Did that event set off some chain of thoughts or fantasies that enhanced your feelings? What were they?

Please describe the event and your feelings as vividly and in as much detail as you can. You will be given about 15 minutes.

Appendix C: Study 3 Materials

Background Questionnaire

Gender

- Female
- Male

Where are you currently registered?

- Altoona campus and planning to transfer to University Park
- Altoona campus and not planning to transfer to University Park
- University Park campus

What are your reasons for participating in today's study? (indicate Yes or No)

Yes No

- To earn research credit
- To make money
- To meet new people
- To make new friends
- To gain a new experience
- No particular reason

*Questions below the dashed line
were only completed by participants
in the listening will increase social
connectedness condition.*

Please list three or four adjectives that best describe your personality.

Listening will increase social connectedness condition

Background Questionnaire

Gender

- Female
 Male

Where are you currently registered?

- Altoona campus and planning to transfer to University Park
 Altoona campus and not planning to transfer to University Park
 University Park campus

What are your reasons for participating in today's study? (indicate Yes or No)

Yes No

- To earn research credit
 To make money
 To meet new people
 To make new friends
 To gain a new experience
 No particular reason

Please list three or four adjectives that best describe your personality.

open, friendly, warm, and personable

Listening will not increase social connectedness condition

Background Questionnaire

Gender

- Female
 Male

Where are you currently registered?

- Altoona campus and planning to transfer to University Park
 Altoona campus and not planning to transfer to University Park
 University Park campus

What are your reasons for participating in today's study? (indicate Yes or No)

Yes No

- To earn research credit

Listening

Instructions: The following statements may seem similar to one another; however, they differ in important ways. Feelings and emotions refer to affective experiences such as feeling happy, sad, angry, nervous, or proud. Thoughts refer to reflections, ideas, or beliefs such as reflections on day to day experiences, ideas for weekend activities, and opinions on human rights issues. There are no right or wrong answers. Be sure to read each item carefully and indicate the degree to which you agree or disagree with each statement using the scale below:

- 1 = Strongly disagree
2 = Moderately disagree
3 = Neither agree nor disagree
4 = Moderately agree
5 = Strongly agree

1. I feel especially motivated to listen when he/she talks about his/her emotions.
2. It doesn't matter whether I listen when he/she talks about his/her thoughts. (r)
3. I consider listening to him/her talk about his/her feelings really important.
4. I don't really care about listening to him/her talk about his/her emotions. (r)
5. I feel especially motivated to listen when he/she talks about his/her thoughts.
6. It doesn't matter whether I listen when he/she talks about his/her feelings. (r)
7. I consider listening to him/her talk about his/her thoughts really important.
8. I don't really care about listening to him/her talk about his/her thoughts. (r)

Manipulation Check (Expectations about Increased Closeness)

Instructions: How much do you think listening to him/her talk about his/her emotions/thoughts will make you feel _____?

1	2	3	4	5	6	7	8	9
Not at all				Some- what				Very much

1. close
2. connected
3. intimate

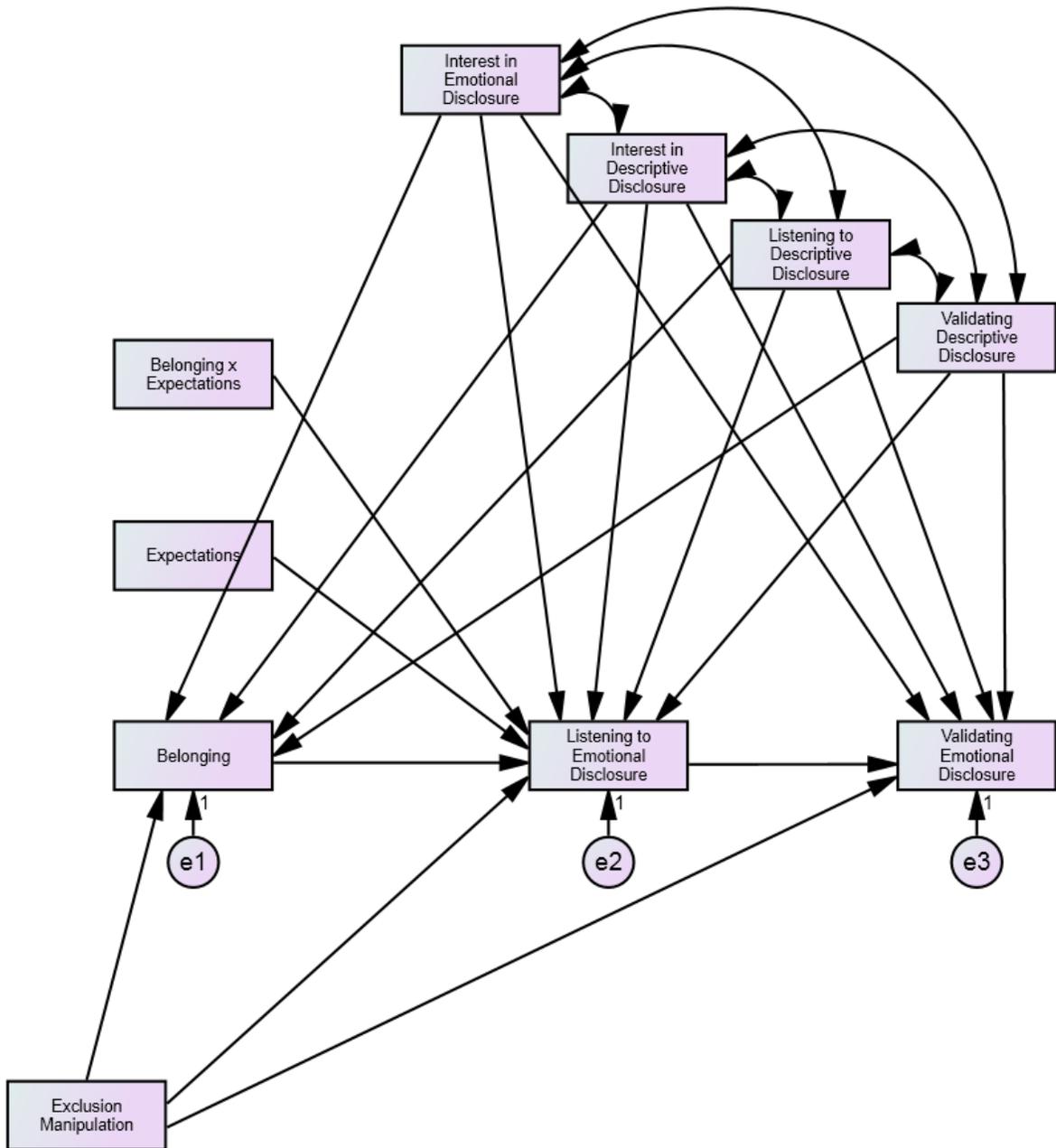
Interest

Instructions: How much do you think listening to him/her talk about his/her emotions/thoughts will be _____?

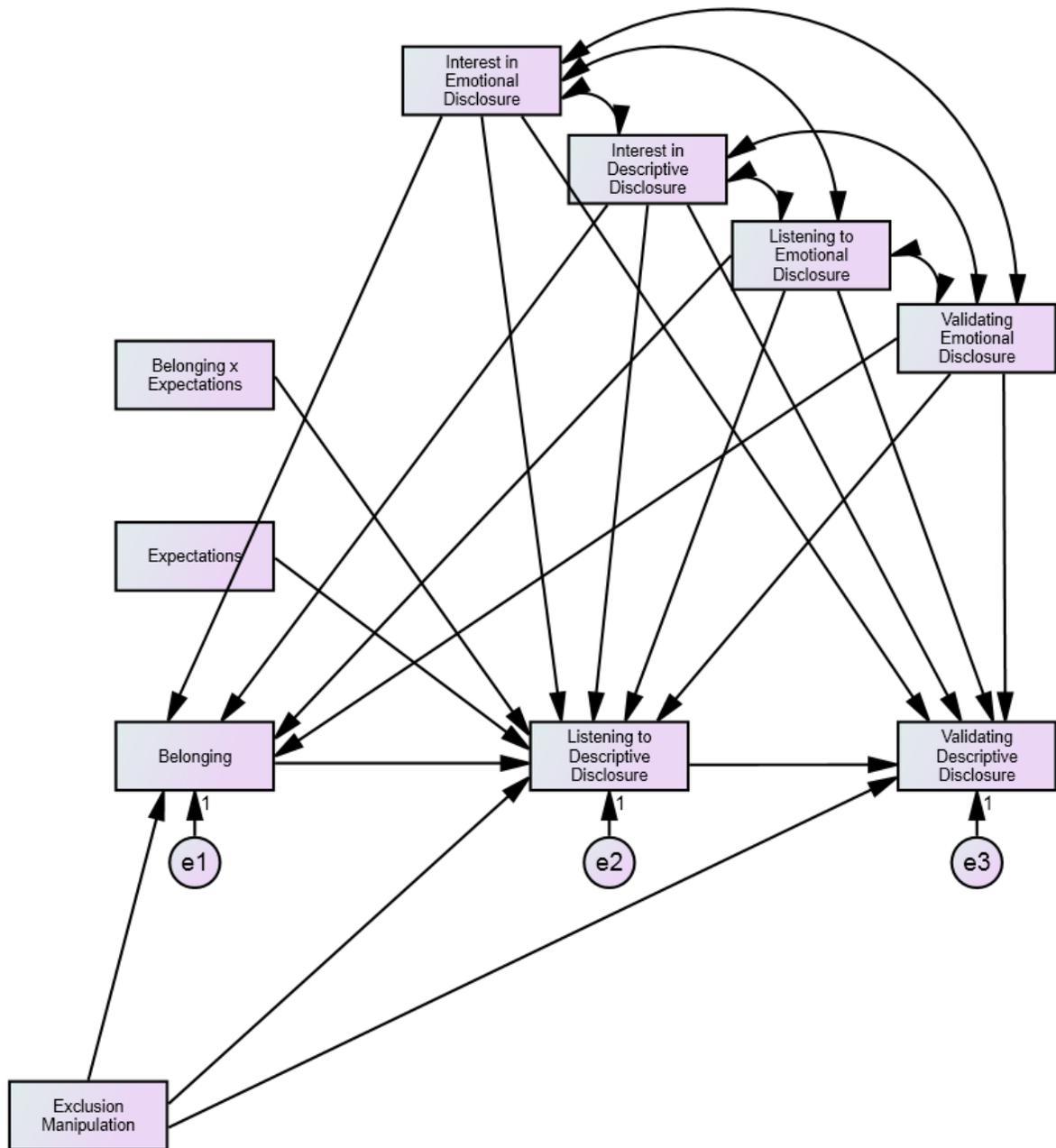
1	2	3	4	5	6	7	8	9
Not at all				Some- what				Very much

1. interesting
2. entertaining
3. boring (r)

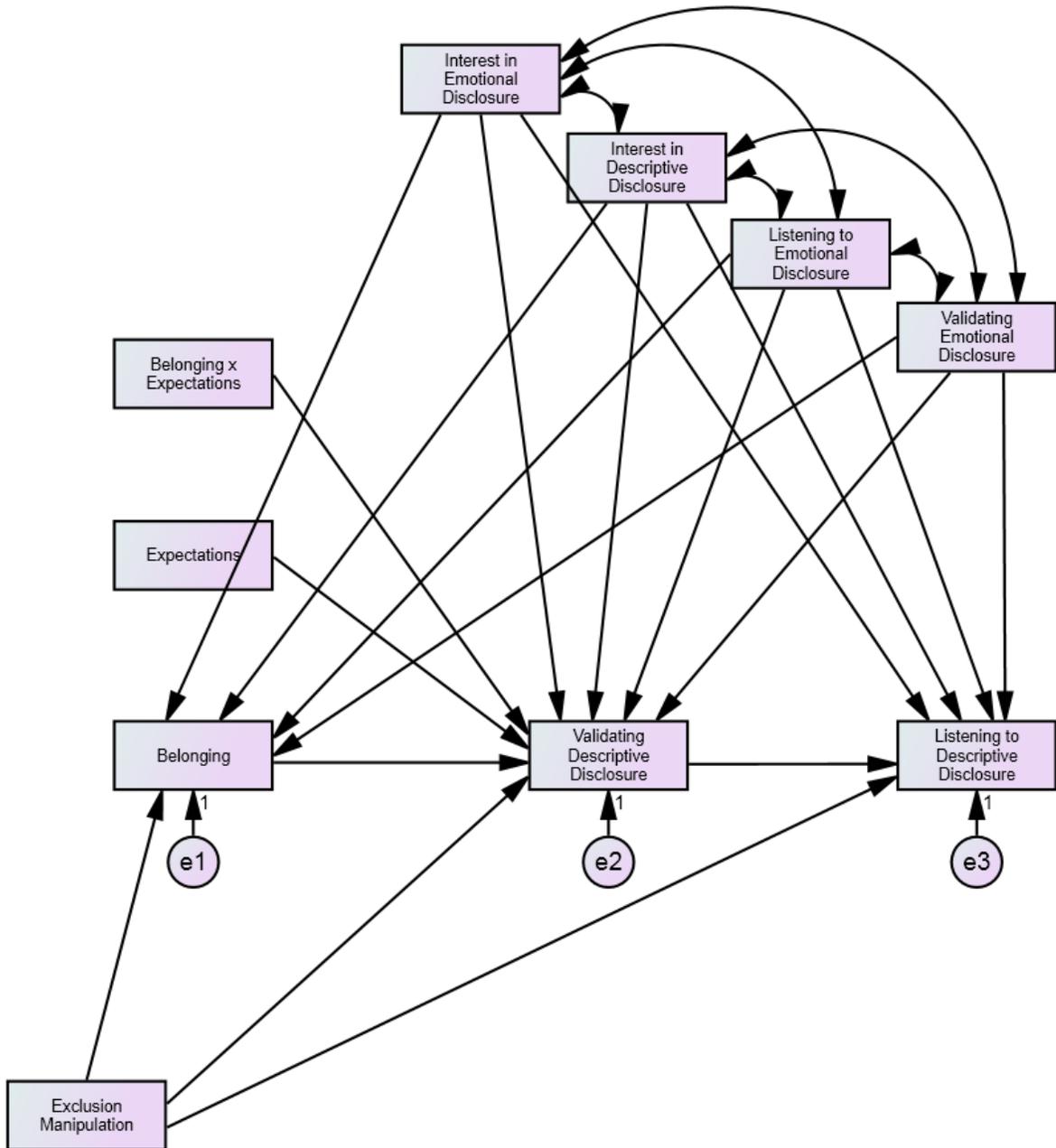
Appendix E: Models Tested in AMOS
 Belonging Mediates the Effect of the Exclusion Manipulation on *Listening to Friends' Emotional Disclosures*



Belonging Does Not Mediate the Effect of the Exclusion Manipulation on *Listening to Friends' Descriptive Disclosures*



Belonging Does Not Mediate the Effect of the Exclusion Manipulation on *Validating Friends' Descriptive Disclosures*



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EDUCATION

- 2012 Ph.D. The Pennsylvania State University (Psychology, statistics minor).
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PUBLICATIONS

- Hackenbracht, J., & Gasper, K. (in press). Feeling More and Feeling Close: Affect Intensity Influences Judgments of Interpersonal Closeness. *Social Cognition*.
- Hackenbracht, J., & Gasper, K. (2012). I'm All Ears: The Need to Belong Motivates Listening to Emotional Disclosure. Manuscript under review at *Journal of Experimental Social Psychology*.
- Yu, E., Muzi, M., Hackenbracht, J., Rezvani, B., Link, J., Etzioni, E., Montgomery, R., Higano, C., Eary, J., & Mankoff, D. (2011). C11-Acetate and F-18 FDG PET for Men with Prostate Cancer Bone Metastases: Relative Findings and Response to Therapy. *Clinical Nuclear Medicine*, 36, 192-198.
- Hackenbracht, J., & Tamir, M. (2010). Preferences for Sadness when Eliciting Help: Instrumental Motives in Sadness Regulation. *Motivation and Emotion*, 34, 306-315.

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- Hackenbracht, J., & Gasper, K. (2012). *I'm All Ears: Listening to Emotional Disclosure to Satisfy Belonging*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, San Diego, CA.
- Hackenbracht, J., & Woolley, J. (2011). *Why Debbie Downer Enjoys a Tear-Jerker: The Role of Narrative Understanding*. Paper presented at the annual convention of the National Communication Association, New Orleans, LA.
- Hackenbracht, J., & Gasper, K. (2011). *Friends or Acquaintances? Intensity as Social Information*. Poster presented at the annual convention of the Association for Psychological Science, Washington, DC.
- Kegerise, A., Schmierbach, M., Ash, E., Hackenbracht, J., Limperos, A., & Woolley, J. (2010). *Disposition Dissonance: The Impact of Character Disposition Formation and Outcome on Video Game Enjoyment*. Paper presented at the annual meeting of the International Society for the Empirical Study of Literature and Media, Utrecht, Netherlands.
- Hackenbracht, J., & Tamir, M. (2010). *Eliciting Help: Instrumental Motives in Sadness Regulation*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Las Vegas, NV.
- Hackenbracht, J., & Tamir, M. (2009). *Preferences for Sadness When Eliciting Help: Recovery vs. Advancement*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Tampa, FL.