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THE ROLE OF HUMOR AND DEPRESSION IN RESPONSES TO SOCIAL COMMENTS

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by

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Abstract

This study investigated how individuals respond to four different styles of social comments that were presented either with or without humor, or humorously by a depressed acquaintance. Using a brief scenario format, 264 participants completed questionnaires measuring their responses to these comments, as well as their own levels of depression, social interaction anxiety, and self-esteem. Results showed humor led to a higher willingness to interact in the future, and had other facilitative positive effects that were specific to each style of comments. Identifying the presenter as depressed hindered some of these facilitative effects of humor, had detrimental effects for self-defeating humorous comments; and had facilitative effects for affiliative humorous comments. Finally, the role of recipients' level of psychological well-being was minimal. Overall, these findings provide some support for the facilitative effects of humor on interpersonal interactions, and suggest certain characteristics of the presenter (i.e., depression level) may alter these effects.

Keywords: humor, depression, social comments, recipients, social responses, interpersonal interactions, interpersonal relationships, social anxiety, self-esteem.

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Introduction

Interpersonal relationships play an important role in individuals' lives and may serve many different functions. These relationships can provide emotional, instrumental, and informational support, and can also be a source of personal satisfaction and fulfillment. Moreover, researchers have proposed that individuals have a fundamental need to belong that motivates them to seek out social interactions and relationships with others (Baumeister & Leary, 1995).

One particular aspect of social interaction that has been found to be significantly related to psychological and social well-being is humor. Over the years, researchers have suggested that humor plays an important role in the formation, maintenance, and regulation of close interpersonal relationships. This is done through processes such as enhancing positive interactions, facilitating self-disclosure, defusing tension and conflict, and saving face (Martin, 2007). Consistent with these suggestions, early studies on the role of humor in interpersonal relationships found that the extent to which people use humor in everyday life situations is related positively to their level of self-esteem, intimacy, trust, and empathy, and also is negatively related to self-reported dysfunctional attitudes and feelings of social isolation (Hampes, 1992, 1994, 1999, 2001; Kuiper, Martin, & Olinger, 1993; Martin, 1996; Thorson, Powell, Sarmany-Schuller, & Hampes, 1997).

Other research has shown that individuals who use humor as a way to cope with life circumstances find their social interactions more pleasurable, feel more confident during the interactions, and spend more time with others (Nezlek & Derks, 2001). Moreover, recent research has found that individuals' use of humor is associated with

their competence in social skills. In particular, individuals who use humor in adaptive ways have been found to have a higher ability to initiate relationships and disclose personal information, whereas those who use self-defeating humor have more difficulty asserting their personal rights to others. Finally, those who use aggressive humor have more difficulty providing emotional support to others and managing interpersonal conflicts (Kuiper, Grimshaw, Leite, & Kirsh, 2004; Yip & Martin, 2006).

The present thesis provides a further exploration of the role of humor in social interactions. However, in contrast to most of the previous work in this area, the focus of the present investigation is on the recipient of humorous comments, rather than on the presenter. As described below, this work builds upon the humor styles model proposed by Rod Martin and his colleagues (Martin, Puhlik-Doris, Larsen, Gray, & Weir, 2003).

Adaptive and Maladaptive Humor Styles

Although the use of humor in interpersonal relationships may serve to increase the quality of these relationships, humor is not always used in a positive way and thus could be detrimental to relationships. For example, research has found that individuals who use high levels of negative humor, both in conflict and pleasant encounters with their romantic partners, report lower satisfaction with their relationship than those who use lower levels of negative humor in a conflict situation than in a pleasant encounter (Butzer & Kuiper, 2008).

Therefore, when considering the role of humor in interpersonal relationships it is important to consider that humor could be used in both an adaptive and a maladaptive manner. In light of this realization, researchers have recently conceptualized and measured the ways in which humor is typically expressed (both positively and

negatively) in social interactions. In particular, Martin and colleagues (2003) have identified four styles of humor: two adaptive ones that are thought to be beneficial to relationships and emotional well-being (affiliative and self-enhancing humor) and two maladaptive ones, which are considered to be potentially detrimental (aggressive and self-defeating humor). Self-enhancing humor refers to the relatively benign use of humor as a coping strategy to minimize negative emotions, while still maintaining a realistic perspective on life. Affiliative humor is seen as the use of humor to enhance one's relationships with others and raise group morale, identity, and cohesiveness by reducing conflicts and increasing others' feelings of well-being. Aggressive humor refers to the use of a variety of negative humor techniques. These include teasing, ridicule, sarcasm, and disparagement humor to enhance the self at the expense of denigrating and putting down others. Furthermore, this is done without regard for the negative impact on others. Finally self-defeating humor is the use of self-detrimental humor in order to gain the approval of others, and thus enhance interpersonal relationships, but at a high personal cost (Kuiper et al., 2004).

Therefore, this model of humor styles posits that people may use humor in social situations to enhance the self in a way that is tolerant and non-detrimental to others (self-enhancing humor), or they may do it at the expense and detriment of their relationships with others (aggressive humor). In a similar fashion, people may use humor to enhance their relationships with others in a way that is relatively benign and self-accepting (affiliative humor), or they may do it at their own expense and detriment (self-defeating humor; Martin et al., 2003).

It is important to note that recent research has found that the four humor styles are differentially related to psychological well-being. In general, research has found that adaptive humor styles are positively related to psychological health and well-being, whereas maladaptive humor styles are negatively related to well-being (Kuiper et al., 2004; Martin et al., 2003). For example, the use of self-enhancing humor has been found to relate positively to higher levels of optimism. Also, individuals' use of affiliative and self-enhancing humor have been shown to relate negatively to measures of negative affect, anxiety, depression, loneliness, and positively to measures of positive affect, global self-esteem, and social self-esteem. In contrast, individuals' use of self-defeating humor has been shown to correlate positively with indices of depression, anxiety, hostility, aggression, and negatively with indices of self-esteem. Finally, individuals' use of aggressive humor has been found to be positively related to indices of hostility and aggression but, interestingly, is generally unrelated to other indices of psychological well-being (Çeçen, 2007; Kuiper et al., 2004; Martin et al., 2003).

Typical findings were reported in a recent study that looked at the relationship between humor styles and levels of depression and personal adjustment among adolescents (Erickson & Feldstein, 2007). In this study, researchers found that adolescents' high levels of affiliative and self-enhancing humor use were associated with low levels of depressive symptoms and with high levels of personal adjustment; whereas high levels of self-defeating and aggressive humor use showed the opposite pattern. Also, these investigators found that the use of self-defeating humor in adolescents was uniquely predictive of depressive symptoms, above and beyond the contributions of coping strategies and defense reactions.

The Role of Humor Use in Interpersonal Relationships

Researchers have also found that the style of humor people tend to use more in their interactions with others is significantly related to their experience in interpersonal relationships. For example, researchers have found that lower use of affiliative humor and higher use of self-defeating humor are associated with higher levels of shyness and feelings of loneliness (Hampes, 2005, 2006). Similarly, the use of self-defeating humor has been found to relate negatively with both satisfaction with social support and a perceived level of intimacy in relationships. In contrast, research has found that individuals' use of self-enhancing humor is positively related to satisfaction with the social support received from others, and that the use of affiliative and self-enhancing humor is positively related to greater perceived levels of intimacy in relationships (Martin et al., 2003). Therefore, research suggests that the style of humor people use is related to their experiences in interpersonal relationships. Much less is understood, however, about the impact different styles of humorous comments have on the recipients of these comments.

The Role of Humor in Recipients' Interpersonal Interactions

Some past research has looked at the relation between individuals' satisfaction with their relationships and the use of humor by others in the relationship. For example, early research suggested that humor is perceived by romantic couples to be an important component of their relationships. In particular, people's level of satisfaction with their romantic relationships is positively related to their perception of their partners' sense of humor (Bippus, 2000; Ziv & Gadish, 1989). The amount of humor being used in interactions with strangers also appears to affect individuals' experience of the

interaction. Here, research on the effect of a shared humorous experience on feelings of closeness between same-sex strangers found that social encounters involving humor resulted in enhanced feelings of closeness between strangers, when compared with equally enjoyable but non-humorous encounters (Fraley & Aron, 2004). Similarly, another study found that when strangers are described as being "above average" in sense of humor, they are rated more highly on socially desirable adjectives and lower on socially undesirable adjectives (Cann & Calhoun, 2001). In contrast, other research findings show that ridicule and teasing evoke negative emotional and behavioral responses (Bollmer, Harris, Milich, & Georgesen, 2003; Platt, 2008).

Effects of Humor Styles on Recipients

Recent research has investigated the effect humor use has on others by identifying the specific effect of using each of the four humor styles during interpersonal interactions. For example, in her doctoral dissertation, Puhlik-Doris (2004) studied the relation between humor styles and satisfaction with dating relationships and found that both high self-ratings and partner-ratings of affiliative and self-enhancing humor were associated with higher satisfaction with the relationship. In contrast, high levels of both self-ratings and partner-ratings of aggressive humor were associated with lower satisfaction with the dating relationship. In a similar fashion, humor can also affect individuals' satisfaction with their same-sex friendships. Here, Ward (2004) found that individuals who reported using more affiliative and less aggressive humor were rated by their friends as being more enjoyable to interact with and fulfilling more positive friendship functions, such as companionship, intimacy, emotional security, and affection. Another study that addressed the effect of humor use on couples' discussions found that

when a partner used more affiliative and less aggressive humor during a discussion, the other partner reported feeling more satisfied with his or her relationship, less distressed, felt that the discussion helped resolve their differences, and reported feeling closer to his or her partner after the discussion (Campbell, Martin, & Ward, 2008).

In summary, there is some evidence for the important role of humor in the formation, maintenance, and regulation of close interpersonal relationships. Furthermore, the effect of humor on the experience of interpersonal relationships seems to depend on the style of humor being used. As described previously, Martin and colleagues (2003) have identified four styles of humor that are typically expressed in social interactions: two adaptive ones that are thought to be beneficial to relationships and emotional well-being (affiliative and self-enhancing), and two maladaptive ones which are considered to be potentially detrimental (aggressive and self-defeating humor). In general, research has found support for this model, showing that adaptive humor styles are positively related to various indices of psychological well-being, and maladaptive humor styles are negatively related to these indices. Moreover, recent research has found some initial support for the differential effect of adaptive and maladaptive styles of humor on interpersonal relationships.

As described previously, research supports the relationship between self- and other-ratings of humor use and level of satisfaction with interpersonal relationships. However, the means whereby the use of adaptive and maladaptive styles of humor affects interpersonal relationships are not well understood. One possibility here is that the use of humor in interpersonal interactions evokes certain responses in others that significantly affect their motivation to foster and maintain or to avoid interpersonal relationships. This

idea is supported by a preliminary study of the effect of a friend's use of humor on adolescents conducted by Kirsh and Kuiper (2003). This study found that adolescents receiving adaptive humorous comments had a greater desire to continue interacting with a friend and felt more positive and less negative about the self. In contrast, adolescents receiving maladaptive humorous comments had less desire to continue interacting with a friend and felt less positive and more negative about the self. Responses to the two maladaptive humor styles were found to differ as well; those receiving self-defeating humorous comments had a stronger desire to continue interacting with their friend than those who received aggressive humor.

Despite the contribution of this preliminary study to the understanding of individuals' responses to adaptive and maladaptive humorous comments, there are still many things that remain unknown about people's reactions to humor in a social context. In particular, it is still not clear how the different styles of humorous comments make recipients feel about both the self and the presenter of the comments. Moreover, it is still not clear whether recipient's responses to humorous comments are immediate or future-oriented, or whether different styles of comments elicit different types of responses. Therefore, the present study sought to address these issues in more detail by assessing how participants (the recipients of the comments) would feel and respond to each of four styles of humorous comments presented by a casual acquaintance in a school setting.

With respect to feelings about the self, five different feelings were included: pleased/upset, encouraged/discouraged, competent/incompetent, accepted/rejected, and comfortable/uncomfortable. Feelings about the acquaintance were measured more globally (positive/negative). The potential behavioral responses to humorous comments

were conceptualized as being either immediate (behaviors that could occur during the described interaction with the acquaintance) or delayed (behaviors that could occur in future encounters with the acquaintance). Moreover, these responses were also conceptualized as being approach-oriented, confrontational, or avoidance-oriented. When evaluating immediate responses, three potential responses were assessed: laughing (an expected approach-oriented response to a pleasant humorous comment), asking the acquaintance to stop making similar styles of comments (an expected confrontational response to an unpleasant humorous comment), and trying to ignore the comments by changing the topic or doing something else (an expected avoidance-oriented response to an unpleasant humorous comment).

The measure of future responses included two approach-oriented responses and an avoidance-oriented response. One of the approach-oriented responses assessed the extent to which the comments would make respondents interested in continuing interactions with the acquaintance in the future, whereas the other approach-oriented response assessed respondents' interest in becoming closer friends with the acquaintance, based on the received comments. Finally, the avoidance-oriented future response assessed the extent to which respondents wanted to avoid the acquaintance in the future based on the received comments. Overall, the present study sought to empirically investigate the effects of each of the four humor styles on the recipient's feelings about the self and the presenter of the comments, as well as on their motivation to maintain or avoid current and possible future interactions with the presenter.

The present study also sought to address another limitation of the current literature on the role of humor in interpersonal relationships, namely, the limited

understanding of the function of making comments in a humorous manner. Researchers have suggested that humor is associated with particular characteristics that make it a unique form of communication. In particular, researchers have found that humorous comments are inherently ambiguous, incongruent, unusual or unexpected, and that they somehow communicate a lack of seriousness or importance of the idea being communicated. Therefore, it has been argued that humor may be a particularly useful way to communicate certain ideas or topics in situations where a more direct and serious way of saying these things would be potentially embarrassing or risky (Keltner, Capps, Kring, Young, & Heerey, 2001; Keltner, Young, Heerey, Oemig, & Monarch, 1998; Martin, 2007). Researchers have also proposed that the feelings of mirth and the laughter that generally accompany humor may serve to regulate relationships by inducing feelings of happiness and wellbeing, by reducing negative feelings such as anxiety, depression and anger, and by evoking feelings of group cohesion and group identity (Bachorowski & Owren, 2001; Fraley & Aron, 2004; Fredrickson, 2001; Martin, 2007).

Despite these suggestions, very little research has disentangled the humorous aspect of humorous comments from their underlying function or purpose. In particular, researchers have not yet investigated whether making a particular style of comment in a humorous way affects others differently than making the same style of comment in a non-humorous manner. For example, researchers have suggested that making offensive comments in a humorous way may allow the presenters of these comments to "save face" (Keltner et al., 1998, 2001; Martin, 2007). This suggestion assumes that the humorous nature of the comments makes the recipients interpret these comments as being more ambiguous or less threatening. Therefore, it would be expected that aggressive

comments made in a humorous way would result in a less negative response by the recipients of these comments, than if the same aggressive comments were made in a non-humorous fashion. This expectation is consistent with past research showing that recipients of teasing were more likely to respond positively when they perceived a humorous intent, and were more likely to respond negatively when they perceived a serious intent (Alberts, Kellar-Guenther, & Corman, 1996). However, whether recipients respond differently to humorous versus non-humorous aggressive comments has not been empirically investigated yet. Similarly, it is still largely unknown whether adaptive comments made in a humorous way induce more feelings of wellbeing in the recipients, than if the same comments were made in a non-humorous fashion.

Therefore, one of the main goals of the present study was to compare responses to each of four styles of humorous comments (affiliative, self-enhancing, self-defeating, and aggressive) with responses to the same style of comments presented in a non-humorous way. To that end, the present study included a comparison condition in which some participants were presented with a description of the same four styles of comments included in the humor condition, retaining the description of the characteristic function of each style of comment, but without describing these comments as being funny or humorous. Responses to these two presentation conditions were compared to assess the effect of adding humor to each of the four styles of comments on recipients' feelings and potential responses.

A further limitation in the current literature on the effects of humor in interpersonal relationships is the limited understanding of the extent to which the characteristics of the presenter of humorous comments affect recipients' responses to

these comments. As such, the present study sought to investigate the potential role of one particular characteristic, namely, the level of depression of the person making the comment. This characteristic was of particular interest because of the substantial amount of research linking depression to both interpersonal difficulties and humor use. As such, the following section considers how current research findings link depression to these two areas.

Depression and Social Interactions

Depression has been frequently related to difficulties in interpersonal relationships. For example, research has found that individuals with major depressive disorder are significantly more distressed by interpersonal problems than normative samples (Barrett & Barber, 2007). In a similar way, research has found that, compared with non-depressed individuals, depressed individuals enjoy their social interactions less and find them to be less intimate (Nezlek, Hampton, & Shean, 2000). Research conducted with college students found that those who were depressed engaged less in social contact with their roommates and both the depressed students and their roommates enjoyed these social contacts less (Hokanson, Rubert, Welker, Hollander, & Hedeen, 1989). Similarly, other researchers have found that individuals with high levels of depressive symptoms had less rewarding social interactions with same-sex friends and depressed women, in particular, also found interactions with opposite sex partners to be less rewarding (Nezlek, Imbrie, & Shean, 1994).

Recently, researchers have tried to understand the factors involved in this decreased quality of interpersonal experience among depressed people. According to interpersonal theories of depression, depressed individuals play a role in creating the

negative social environments that contribute to their interpersonal difficulties. Although there is some variability among proponents of the interpersonal perspective, the model generally includes two central tenets. First, depressed individuals engage in a distinctive pattern of socially inappropriate behaviour, such as excessive reassurance seeking (Coyne, 1976; Joiner, Metalsky, Katz, & Beach, 1999; Star & Davila, 2008; Haeffel, Voelz, & Joiner, 2007), self-disclosure (Gibbons, 1987), negative comments (Gotlib & Robinson, 1982), and negative self-evaluation (Hautzinger, Linden, & Hoffman, 1982). Second, these inappropriate interpersonal behaviors elicit rejection and unfavorable reactions from interaction partners (Coyne, 1976; Star & Davila, 2008).

A substantial amount of research has found support for the high level of rejection experienced by depressed individuals. For example, in 1986 Michael Gurtman published a review of ten studies that had examined the social consequences of depression in the laboratory and found that the majority of these studies obtained significant rejection effects when assessing rejection with both questionnaires and behavioral measures. Moreover, these studies found evidence for the rejection effect in a variety of situations, regardless of whether the depressed individual is an inpatient, an outpatient, a student, a dissimulator, or a hypothetical person. Since then, the majority of studies investigating this phenomenon have also found support for the interpersonal rejection of both clinically depressed individuals and individuals with high levels of depressive symptoms (Howes & Hokanson, 1979; Joiner, Alfano, & Metalsky, 1992; Joiner & Metalsky, 1995; Joiner et al., 1999; Segrin & Dillard, 1992; Starr & Davila, 2008).

Interestingly, past research has consistently found that depressed individuals use humor in a negative fashion. Therefore, it is possible this detrimental use of humor by

depressed individuals evokes negative responses and rejection from others. The following is a summary of past research findings that have investigated the relationship between individuals' level of depression and their typical style of humor use.

Depression and Humor

Research has found that depression is related to the use of humor in particular ways. For example, researchers have found that lower use of coping humor (using humor to deal with stressful problems) is related to higher levels of depressed mood and feelings of hopelessness in both psychiatric and non-psychiatric populations (Freiheit, Overholser, & Lehnert, 1998). With respect to the four humor styles identified by Martin and colleagues (2003), research has consistently found that higher depression levels are associated with higher use of self-defeating humor and lower use of affiliative and self-enhancing humor (Frewen, Brinker, Martin, & Dozois, 2008; Kuiper et al., 2004; Martin et al., 2003). Furthermore, when looking at the relationship between personality vulnerabilities to depression and humor, researchers have found that sociotropy (defined as the extent to which one's self worth is based exclusively on one's perceived likableness) is positively associated with self-defeating humor style; whereas need for control (an autonomy dimension) is positively associated with the use of aggressive humor (Frewen et al., 2008). Moreover, researchers have found that the combination of low affiliative and/or self-enhancing humor and high rumination led to substantially higher levels of dysphoria than any other combination of rumination and the various humor styles (Olson, Hugelshofer, Kwon, & Reff, 2005).

In summary, a substantial amount of research shows that individuals with higher levels of depression utilize more self-defeating humor and engage less in affiliative and

self-enhancing humor. Considering previously discussed findings showing that people respond more negatively to maladaptive humor than to adaptive humor, it is possible that this characteristic detrimental use of humor among depressed individuals may contribute to the factors that make others more likely to reject them during interpersonal interactions. Furthermore, it is also possible that people respond differently to humorous comments when they know the presenter of the comments is depressed. As mentioned earlier, the extent to which certain characteristics of the person making humorous comments (such as level of depression) affects others' responses to the comments is still unknown.

Therefore, one of the remaining goals of the present study was to compare recipients' responses to humorous comments made by an acquaintance not known to be depressed to responses to the same style of humorous comments made by an acquaintance known to be depressed. This was accomplished by assigning some participants to a humorous condition in which the description of the four humorous comments (representing each of the four humor styles identified by Martin et al., 2003) were preceded by a description of the acquaintance presenting these comments as being depressed. Responses to these comments were compared to responses to humorous comments that were not preceded by any description of the presenter. Any significant differences in responses to these two conditions can then be interpreted as an effect of the depression level of the presenter of humorous comments on the recipient's feelings and potential responses to these comments.

Finally, when looking at the effects of humorous comments on the recipients of these comments, it may be important to also consider relevant characteristics of the

<u>recipients</u> that may also affect the way they respond to these comments. For example, past research found that individuals who are agreeable, low in neuroticism, or less open to experience tend to react more negatively to teasing, compared with individuals with other personality traits (Bollmer et al., 2003). The present study sought to investigate the relationship between recipient's levels of depression, self-esteem and social interaction anxiety with their responses to the four styles of social comments (affiliative, self-enhancing, self-defeating, and aggressive) presented in each of the three presentation conditions included in the present study (non-humorous, humorous, and humorous by a presenter known to be depressed). The following is a description of the current understanding of the role of some of these factors in individuals' responses to social interactions.

The Role of Depression, Self-esteem, and Social Anxiety in Responses to Social Interactions

As discussed previously, research shows that depressed individuals find interpersonal interactions to be less rewarding and are generally less satisfied with their relationships. It is likely that depressed individuals' poor interpersonal skills, such as excessive reassurance seeking, contribute significantly to the lower quality of their relationships. In addition, depressed individuals' characteristic self-focused attention may also contribute to the low quality of their relationships, since it may result in less attention being available to concentrate on what others say (Tse & Bond, 2004). Also, researchers have found that depressed individuals are more likely to attend to negative events that fit their negative worldview. This has been explained by the self-verification theory, which proposes that depressed individuals tend to seek unfavorable information

about themselves and tend to favor being with others who provide this negative feedback, as this gives them a perception of control and interpersonal coherence (Giesler, Josephs, & Swann, 1996; Swann, Hixon, Stein-Seroussi, & Gilbert, 1990). Alternatively, researchers have suggested that fear of rejection is common among individuals with high levels of depression. Therefore, they may be more attentive to any information that may indicate a rejecting tone, making them less likely to perceive care from others and more likely to feel rejected by others and perceive others as more hostile, less caring and less friendly (Dobson, 1989; Hokanson, Hummer, & Butler, 1991; Marcus & Askari, 1999; Tse & Bond, 2004). Finally, numerous studies have found that low self-esteem is a strong risk factor for depression (Kernis et al., 1998; Orth, Robins, & Roberts, 2008; Roberts & Monroe, 1994), and is related to depressed individuals' poor social functioning (Nezlek, Kowalski, Leary, Blevins, & Holgate, 1997).

Also, research shows that individuals with anxiety, and in particular social anxiety, may experience emotional discomfort, fear, and worry when involved in social situations because they fear negative evaluation by others. In particular, social anxiety makes individuals more sensitive to negative feedback, more likely to interpret ambiguous feedback in a negative way, and more likely to construe others' reactions to them as negative (Amir, Beard, & Bower, 2005; Huppert, Pasupuleti, Foa, & Mathews, 2007; Pozo, Carver, Wellens, & Scheier, 1991).

Therefore, given the role of psychological well-being of the person responding to social interactions on their responses to these interactions, the present study sought to investigate whether the levels of depression, self-esteem, and social interaction anxiety of

recipients were related to their responses to the four different styles of social comments, for each of the three presentation conditions.

Goals of the Present Study

The present study had four main goals: a) to investigate the way recipients of affiliative, self-enhancing, self-defeating, and aggressive humorous comments respond to these comments; b) to compare these responses with responses to the same style of comments presented in a non-humorous fashion; c) to evaluate whether responses to humorous comments differ when these comments are made by a depressed presenter; and d) to investigate whether recipients' own levels of depression, self-esteem, and social interaction anxiety are related to their responses to these comments, for each of the three presentation conditions.

Expected Results

Previous preliminary research (Kirsh & Kuiper, 2003) found that adaptive humorous comments led to adolescents receiving these comments feeling more positive and less negative about the self, and having a stronger desire to continue interacting with the friend. In contrast, maladaptive humorous comments led to recipients feeling more negative and less positive about the self, and having less desire to continue interacting with the friend (with aggressive humor leading to an even lower desire to continue interacting with the friend; Kirsh & Kuiper, 2003). Thus, based on the theoretical conceptualizations of the four humor styles and these previous results, it was expected that adaptive humorous comments would result in more positive feelings about the self and the acquaintance presenting the comments; in more approach-oriented responses (i.e., laugh, continue interacting, become closer friends); and in less confrontational (i.e., ask

to stop making the comments) and avoidance-oriented (i.e., ignore the comments, avoid the presenter in the future) responses, compared with maladaptive humorous comments.

Moreover, the facilitative effects of adaptive humorous comments were expected to be higher for affiliative than for self-enhancing humorous comments. This difference was expected based on the theoretical understanding that affiliative humor serves to enhance one's relationship with others (in a self-accepting way); whereas self-enhancing humor serves to enhance the self (in a way that is non-detrimental to others; Martin et al., 2003). Similarly, the detrimental effects of maladaptive humorous comments were expected to be higher for aggressive than for self-defeating humorous comments. Again, this difference was expected based on the theoretical understanding that self-defeating humor serves to enhance one's relationship with others (in a self-detrimental way); whereas aggressive humor serves to enhance the self (in a way that is detrimental to others; Martin et al., 2003).

When comparing the impact of the four styles of comments for the non-humorous presentation and for the humorous presentation by a depressed presenter, the same pattern of differential responses was expected. Namely, recipients were expected to respond more positively to adaptive than to maladaptive comments. Also, within adaptive comments, recipients were expected to respond more positively to affiliative than to self-enhancing comments and, within maladaptive comments, recipients were expected to respond more negatively to aggressive than to self-defeating comments.

When comparing recipients' responses to a humorous versus non-humorous presentation of comments, a facilitative effect of a humor was expected. Namely, it was expected that, compared to a non-humorous presentation, a humorous presentation of

adaptive comments would result in recipients feeling more positive about the self and the presenter, being more willing to engage in approach-oriented responses, and less willing to engage in confrontational or avoidance-oriented responses. Similarly, it was expected that, compared to a non-humorous presentation, a humorous presentation of maladaptive comments would result in recipients feeling less negative about the self and the presenter, being more willing to engage in approach-oriented responses, and less willing to engage in confrontational and avoidance-oriented responses. These expectations were based on previous research on the positive effect of adaptive humor styles on relationship satisfaction, as well as on the idea that the use of humor may allow maladaptive comments to be taken more ambiguously and less seriously by recipients.

Also, based on the perspective that depressed individuals are more rejected when they engage in socially inappropriate behavior (i.e., negative self-evaluation), it was predicted that maladaptive humorous comments (particularly self-defeating humorous comments) by a depressed presenter would result in more negative responses by the recipient, compared with the same comments by a non-depressed presenter. Given the lack of previous research on the effect of depressed individuals' positive social behavior on others' responses, no specific predictions were made regarding the effect of depression level of the presenter of adaptive humorous comments on recipients' responses to these comments. However, a facilitative effect on recipients' feelings and potential behaviors was considered a possibility. Since adaptive humorous comments reflect a positive outlook on life (self-enhancing humor style) or an interest to amuse others (affiliative humor style), a presentation of this style of comments by a depressed

individual could signify an improvement from their expected mood and behavior, and thus receive a more positive reception.

Finally, given results from previous studies showing that individuals with higher levels of depression and social anxiety perceive interpersonal interactions more negatively, it was expected that recipients' higher levels of depression and social interaction anxiety, and lower levels of self-esteem, would be associated with more negative feelings about the self and the presenter in response to maladaptive comments, and with less positive feelings about the self and the presenter in response to adaptive comments. These associations were expected to be stronger for the non-humorous presentation, compared with the two humorous presentations, since, presumably, there is much less room for ambiguity when comments are made in a non-humorous fashion. No other specific predictions were made regarding the relationship between these indices of psychological well-being and potential immediate or future responses to social comments.

<div align="center">Method</div>

Participants

Two hundred and seventy one students enrolled in an introductory psychology course were recruited to participate in this study, using the psychology department research participation pool. Before analyses were conducted, results from 7 participants were removed from the data set, due to many missing responses. Therefore, the analyses were performed using the remaining 264 participants (173 females and 91 males). These participants ranged in age from 17 to 55 ($M = 18.77$, $sd = 2.53$). Seventy five percent of

the participants were European Canadian, 9.8% were Asian Canadian, 7.6% were south

Asian Canadian, and the remainder reported other ethnicities.

Procedure

Ethics approval was obtained from the Department of Psychology at the

University of Western Ontario (Appendix A). Participants were tested in small groups

(of no more than 20 participants) in seminar rooms in the psychology department of the

Social Science Centre at the University of Western Ontario. The duration of testing was

less than one hour and participants received one research credit for participation. Upon

arrival, participants were given an information sheet and an informed consent sheet to

read and sign (Appendix B).

Participants were then given the Reactions to Social Comments Inventory (RSCI;

as described in detail below), which assessed their reactions to each of four styles of

comments; affiliative, self-enhancing, self-defeating, and aggressive comments. There

were three versions of this measure, which varied the presentation format of these

comments (non-humorous, humorous, or humorous presented by a depressed

acquaintance). Also, for each version, there were two orders of presentation of the

comments (self-defeating, affiliative, aggressive and self-enhancing; or self-enhancing,

aggressive, affiliative, and self-defeating). Through randomized assignment, each

participant received only one of the three versions of this measure, where comments were

presented in one of the two orders. Following the completion of the RSCI, participants

responded to a set of questionnaires assessing their current level of depression, self-

esteem, and social interaction anxiety. The order in which these questionnaires were

presented varied randomly. Upon completion of the booklets, participants were handed a

debriefing form (Appendix C) that described the purpose of the study, and how they had assisted the researcher.

Measures

    Reactions to Social Comments Inventory (RSCI; Appendix D). The RSCI was developed specifically for use in the present study to assess individuals' reactions to different styles and presentation formats of social comments. In particular, the RSCI consisted of a description of four hypothetical scenarios taking place in a classroom, on the first day of a new class. These scenarios described a conversation with a casual acquaintance and two other students about a common concern with the difficulty level of the course. Each scenario described the exact same social situation, except that each one described a different style of comments made by the casual acquaintance, corresponding to the four humor styles identified by Martin and colleagues (2003; affiliative, self-enhancing, self-defeating, and aggressive). Also, there were three different versions of these scenarios. One version described the four comments without mentioning they were humorous; the second version described the four comments as humorous by labeling them as "humorous comments" or "jokes"; finally, the third version also described the four comments as humorous, and it also identified the presenter of the comments as feeling depressed (see Appendix D for examples of the three versions of the RSCI).

    For all three conditions, each description of the scenario was followed by a set of questions measuring participants' feelings about the self and the presenter, as well as their immediate and future potential responses. First, participants were asked to rate "how would these comments make you feel about yourself?" This question was followed by five bipolar adjective pairs (pleased/upset, encouraged/discouraged,

competent/incompetent, accepted/rejected, and comfortable/uncomfortable). These adjective pairs were rated on a 5-point scale, with the 1 anchored on the positive adjective and the 5 anchored on the negative adjective. Second, participants were asked "how would these comments make you feel about this casual acquaintance?" This item was also rated on a 5-point scale, ranging from "more positive" to "more negative". Third, participants were asked "to what extent would you react to these comments by:", and this question was followed by three items; the first one consisted of an immediate approach-oriented response ("laughing"), the second one consisted of an immediate confrontational response ("asking this person to stop making this type of comments"), and the third consisted of an immediate avoidance-oriented response ("trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline"). Finally, participants were asked "to what extent would these comments make you want to:", and this question was followed by three items, the first two consisted of future approach-oriented responses ("continue interacting with this casual acquaintance in the future?" and "become a closer friend of this casual acquaintance in the future?"), and the third question consisted of a future avoidance-oriented response ("avoid this casual acquaintance in the future?"). All of these questions were rated on a 5-point scale ranging from "not at all" to "very much".

Depression, Anxiety, and Stress Scale (DASS: Lovibond & Lovibond, 1995). The DASS is a 42-item self-report scale assessing levels of depression, anxiety and stress over the past week. The present study utilized the depression scale of this measure. This scale contains 14 items that utilize a four-point Likert response scale, with 0 being "did not apply to me at all" and 3 being "applied to me very much, or most of the time". One

example of an item in the depression scale is "I found it difficult to work up the initiative to do things". To assess the DASS's psychometric properties, Lovibond and Lovibond (1995) administered the measure to a large non-clinical sample. It was found that reliability, assessed using Cronbach's alpha, was adequate for all scales and particularly high for the depression scale (.91). With respect to the convergent and discriminant validity of the depression scale, these authors found that the Beck Depression Inventory (BDI) and DASS depression subscale were highly correlated ($r = .74$); whereas the correlation between the DASS depression scale and the Beck Anxiety Inventory (BAI) was substantially lower ($r = .54$). In the present study, the Cronbach' alpha coefficient of the DASS depression scale was .93.

Rosenberg Self-Esteem Inventory (RSEI: Rosenberg, 1965). The RSEI is a 10-item instrument assessing an individual's perception of their individual abilities and feelings of self-worth and is a very well-established measure of self-esteem. The RSEI is a self-report scale in which participants rate the degree to which they agree with each statement on a 4-point Likert scale, ranging from "strongly agree" (1) to "strongly disagree" (4). Examples of items are "I feel that I have a number of good qualities" and "At times I think I am no good at all" (a reverse-scored item). Previous studies have reported a high internal consistency for this measure. For example, Gray-Little, Williams and Hancock (1997) reported a Cronbach's alpha of .88 and a more recent study found even higher estimates of internal consistency (ranging from .88 to .90; Robins, Hendin, & Trzesniewski, 2001). Fleming and Courtney (1984) reported a high test-retest reliability estimate of .82 after a one-week period. Furthermore, recent studies have supported the

global conceptualization of self-esteem (Corwyn, 2000; Gray-Little, et al., 1997; Robins, et al., 2001). In the present study, the Cronbach's alpha coefficient of this scale was .88.

Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1998). The SIAS is one of the most often used self-report measures of social anxiety. It consists of 20 items that measure anxiety regarding social interactions in dyads and groups. Individuals rate each item based on the extent to which they are characteristic of them, utilizing a scale ranging from 1 (not at all) to 5 (extremely). Examples from the SIAS include "I have difficulty talking with other people" and "I am nervous mixing with people I don't know well". Mattick and colleagues (1998) reported high estimates of internal consistency in a variety of clinical and non-clinical samples, ranging from .88 to .94. These authors reported a high estimate of test-retest reliability (.92) after 4-weeks and 12-weeks periods. With respect to validity, Mattick and colleagues (1998) reported that the SIAS is correlated in the expected direction with other anxiety measures, such as the State Trait Anxiety Scale, Fear Questionnaire, and Fear of Negative Evaluation Scale. In the present study, the Cronbach's alpha coefficient for this scale was .90.

Results

This research investigated the effect of two independent variables: style of comments and presentation format of comments, on twelve dependent variables measuring recipients' feelings and potential responses to the comments. Style of comments was manipulated as a within-subjects independent variable with four levels reflecting each of the four humor styles identified by Martin and colleagues (2003): (1) Self-enhancing, (2) Affiliative, (3) Self-defeating, and (4) Aggressive. Presentation format of comments was manipulated as a between-groups independent variable with

three levels: 1) non-humorous, 2) humorous (with no further information about the presenter), and 3) humorous by a presenter known to be depressed. Analyses of variance (ANOVA) were conducted for each of the dependent variables to assess the potential effects of these two independent variables. For significant ANOVA effects, all subsequent comparisons between cell means were corrected for type-I error using a Bonferroni adjustment.

Feelings about the Self

There were five adjectives measuring recipients' feelings about themselves after being presented with the social comments. Factor analyses on these five adjectives, for each of the four styles of comments, and for each of the three conditions, showed that they generally loaded on one factor[1]. As such, it seems that the five adjectives used were all measuring a similar construct: feeling about the self. On average, this general index of feeling about the self served to explain 59% of the shared variance. Therefore, this study will primarily focus on the effects of presentation format and style of comments on participants' average score of the five items measuring feelings about the self. Also, it was of interest to identify whether certain individual feelings about the self were particularly affected by either the presentation format or the style of the comments. Thus, a brief discussion of the effects of these two variables on each of the five feelings about the self is included after the presentation of the results for recipients' average feeling about the self.

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[1] The only exception was for feelings about the self in response to self-defeating comments made in a non-humorous fashion, where two factors were extracted.

Average Feeling about the Self

The means and standard deviations for the index of average feeling about the self are shown in Table 1a, as a function of style of comment (4 levels: affiliative, self-enhancing, self-defeating, and aggressive) and presentation format (3 levels: non-humorous comments, humorous comments, and humorous comments depressed). The ANOVA summary, provided in Table 1b, revealed a significant main effect for presentation format, as shown in the marginal means along the bottom-most row of Table 1a. Here, a humorous presentation format resulted in recipients feeling more positive about the self, compared with a non-humorous presentation, both when the humorous presentation was made by a non-depressed ($p < .001$) and by a depressed presenter ($p < .05$). These results support the expectation that humorous comments would result in more positive feelings about the self than non-humorous comments.

The ANOVA also revealed a significant main effect for style of comment. As shown in the marginal means in the right-most column of Table 1a, aggressive comments resulted in the most negative feelings about the self, compared to any other style of comment (all $ps < .001$). In contrast, affiliative comments resulted in the most positive feelings about the self, compared with any other style of comment (all $ps < .001$). Finally, self-defeating comments resulted in more negative feelings about the self compared to self-enhancing comments ($p < .001$). These results support the expectation that adaptive comments would result in more positive feelings about the self than maladaptive comments. Moreover, these results also support the expectation that, within adaptive comments, affiliative comments would result in more positive feelings about the self than self-enhancing comments, and that, within maladaptive comments, aggressive

Table 1a

Means and (Standard Deviations) of Recipients' Average Feeling about the self: Ranging from More Positive to More Negative, as a Function of the Presentation Format and Style of Comment

Style of comment	Presentation of the comment			
	CND (n=89)	HCND (n=88)	HCD (n=86)	*Marginal mean*
Affiliative	2.07 (.58)	2.04 (.56)	1.87 (.56)	2.00
Self-enhancing	2.54 (.69)	2.18 (.71)	2.27 (.62)	2.33
Self-defeating	3.04 (.49)	2.77 (.73)	3.03 (.56)	2.95
Aggressive	4.48 (.54)	4.41 (.61)	4.39 (.58)	4.43
Marginal mean	3.03	2.85	2.89	2.92

Note: Higher values indicate a more negative average feeling about the self. CND: non-humorous comment, non-depressed presenter; HCND: humorous comment, non-depressed presenter; HCD: humorous comment, depressed presenter.

Table 1b

Analysis of Variance on Recipients' Average Feeling about the Self: Ranging from More Positive to More Negative

Source of Variance	*Df*	*F*	*p* <
Presentation	(2,260)	7.14	.001
Style of Comment	(3,780)	894.09	.001
Presentation x Style of Comment	(6,780)	3.00	.01

comments would result in more negative feelings about the self than self-defeating comments.

These significant main effects were qualified, however, by a significant two-way interaction between style of comment and presentation format. These means are shown in the main body of Table 1a, and indicate that positive feelings about the self in response to affiliative comments did not differ significantly across any of the presentation formats (all ps ns). This was also the case for aggressive comments, with negative feelings about the self not differing significantly across any presentation formats (all ps ns). These results show that the positive feelings about the self that affiliative comments evoke in recipients, and the negative feelings about the self that aggressive comments evoke in recipients, do not change significantly when these comments are made in a humorous way, regardless of whether the presenter is depressed or not.

In contrast, for self-defeating comments, a humorous presentation (by a non-depressed presenter) resulted in significantly more positive feelings about the self, compared with a non-humorous presentation ($p < .01$) and compared with a humorous presentation by a depressed presenter ($p < .05$). Interestingly, when self-defeating humorous comments were made by a depressed presenter, these resulted in similarly negative feelings about the self than if the comments were presented in a non-humorous way (by a non-depressed presenter; p ns). These results show that presenting self-defeating comments in a humorous way is more beneficial, with regards to recipient's feelings about the self. Moreover, these results support the expectation that self-defeating humorous comments by a depressed presenter would lead to recipients feeling more negative about the self, compared with self-defeating humorous comments by a non-

depressed presenter, and show that this suppression effect lowers recipients' feelings about the self to the same level resulting from non-humorous self-defeating comments. Finally, self-enhancing comments also showed an effect for humor, with humorous comments (by a non-depressed presenter) producing more positive feelings about the self than non-humorous comments ($p < .01$). Interestingly, this facilitative effect was maintained even when the presenter was depressed ($p < .05$). Therefore, these results show that presenting self-enhancing comments in a humorous way is more beneficial, with regards to recipient's feelings about the self, and that the depression level of the presenter does not hinder this beneficial effect.

Overall, these results show that the expected facilitative effect of presenting comments in a humorous way, with respect to the recipient's feelings about the self, may apply only to self-enhancing and self-defeating comments, but not to affiliative or aggressive comments. Also, these results show that knowing the presenter is depressed suppresses the effect of humor for self-defeating comments, but not for self-enhancing comments.

Finally, it was of interest to compare the effect of styles of comments within each presentation format. These results showed that when humorous comments were made by a non-depressed presenter, there was no significant difference between affiliative and self-enhancing humorous comments with respect to recipient's feelings about the self (p ns). In contrast, affiliative comments resulted in more positive feelings about the self, compared with self-enhancing comments, when the comments were either humorous by a depressed presenter or non-humorous (both $ps < .001$). This pattern shows that the facilitative effect of making affiliative over self-enhancing comments, with regards to the

recipient's feeling about the self, may not apply when comments are made in a humorous way by a non-depressed presenter, but it may apply in other situations (i.e., where the comments are non-humorous or when the presenter of the humorous comments is depressed).

When separate ANOVAS were computed for each of the five individual feelings about the self, the results were very similar to the ones obtained for the index of average feeling about the self. However, a few interesting differences emerged, including: (1) feelings of comfort in response to affiliative humorous comments were higher when they were presented by a depressed presenter, compared with a presentation by a non-depressed presenter ($p < .05$); (2) feelings of encouragement and feelings of competence were not significantly affected by the presentation format of comments or by an interaction between presentation format and style of comments (all ps ns); and (3) when looking at the effect of style of comment on feelings of competence, only aggressive comments resulted in higher feelings of incompetence, when compared with the other styles of comments (all ps < .001).

Feelings about the Presenter

The means and standard deviations for recipient's feelings about the presenter are shown in Table 2a, as a function of style of comment and presentation format. The ANOVA on these ratings revealed a significant main effect for style of comment (see Table 2b). As shown in the marginal means in the right-most column of Table 2a, aggressive comments resulted in the most negative feelings about the presenter, compared to any other style of comment (ps < .001). In contrast, affiliative comments resulted in the most positive feelings about the presenter, compared with any other style

Table 2a

Means and (Standard Deviations) of Recipients' Feeling about the Presenter: Ranging from "Positive" to "Negative" as a Function of the Presentation Format and Style of Comment

Style of comment	Presentation of the comment			
	CND (n=89)	HCND (n=89)	HCD (n=86)	*Marginal mean*
Affiliative	1.85 (.82)	1.89 (.83)	1.60 (.69)	1.78
Self-enhancing	2.15 (.92)	1.99 (.99)	2.08 (.80)	2.07
Self-defeating	3.54 (.75)	3.26 (.82)	3.74 (.77)	3.51
Aggressive	4.87 (.38)	4.72 (.50)	4.71 (53)	4.77
Marginal mean	3.10	2.96	3.04	3.03

Note: Higher values indicate feeling more negative. CND: non-humorous comment, non-depressed presenter; HCND: humorous comment, non-depressed presenter; HCD: humorous comment, depressed presenter.

Table 2b

Analysis of Variance on Recipients' Feeling about the Presenter: Ranging from "Positive" to "Negative"

Source of Variance	*Df*	*F*	*p <*
Presentation	(2,261)	2.61	Ns
Style of Comment	(3,783)	924.64	.001
Presentation x Style of Comment	(6,783)	4.19	.001

of comment ($ps < .001$). Self-enhancing comments resulted in more positive feelings about the presenter compared with self-defeating comments ($p < .001$). These results support the expectation that adaptive comments would result in more positive feelings about the presenter than maladaptive comments. Moreover, these results also support the expectation that, within adaptive comments, affiliative comments would result in more positive feelings about the presenter than self-enhancing comments, and that, within maladaptive comments, aggressive comments would result in more negative feelings about the presenter than self-defeating comments.

This significant main effect was qualified, however, by a significant two-way interaction between style of comment and presentation format (Table 2b). These means are shown in the main body of Table 2a, and indicate that for self-enhancing comments, the positive feelings about the presenter did not differ significantly across any presentation formats (all ps ns). Similarly, for aggressive comments, the negative feelings about the presenter did not differ significantly across any presentation formats (all ps ns). These results show that the positive feelings about the presenter that self-enhancing comments evoke in recipients, and the negative feelings about the presenter that aggressive comments evoke in recipients, do not change significantly when these comments are made in a humorous way regardless of whether the presenter is depressed or not.

For self-defeating comments, the depression level of the presenter made a difference. Namely, a humorous presentation of self-defeating comments by a depressed presenter resulted in more negative feelings than a humorous presentation by a non-depressed presenter ($p < .001$). In fact, this resulted in recipients' feelings about the

presenter being as negative as feelings in response to a non-humorous presentation of self-defeating comments (p ns). In contrast, a humorous presentation of self-defeating comments led to more positive feelings about the presenter than a non-humorous presentation, with this difference closely approaching statistical significance ($p = .052$). Finally, the depression level of the presenter also seemed to make a difference for affiliative comments. Here, a humorous presentation of affiliative comments by a depressed presenter resulted in more positive feelings about the presenter, compared with a humorous presentation by a non-depressed presenter, with this difference closely approaching statistical significance ($p = .053$). Interestingly, there were no significant differences between either of the two humorous presentations of affiliative comments and the non-humorous presentation (both ps ns).

Overall, these results suggest that the expected facilitative effect of presenting comments in a humorous way, with respect to the recipient's feelings about the presenter, may apply only to self-defeating comments. Also, these results support the expected negative effect of self-defeating humorous comments by a depressed presenter on the recipient's feelings about the presenter. Moreover, these results also suggest that knowing the presenter of affiliative humorous comments is depressed results in more positive feelings about the presenter.

When comparing the effects of the different styles of comments within each presentation format, results showed that for humorous comments by a depressed presenter, affiliative comments resulted in more positive feelings towards the presenter than self-enhancing comments ($p < .01$). Interestingly, this difference was not found when the comments were non-humorous or when the presenter of the humorous

comments was not depressed (both ps ns). Therefore, these results show that the facilitative effects of making affiliative humorous comments over self-enhancing humorous comments (with regards to the recipient's feelings about the presenter) may apply only when the presenter is depressed, but not when the presenter is non-depressed or when the comments are not humorous.

Summary of Findings for Recipients' Feelings about the Self and the Presenter

In summary, the expectation that comments made in a humorous fashion would result in more positive feelings about the self was supported only for self-enhancing and self-defeating comments; whereas the expected facilitative effect of humor on recipients' feelings about the presenter was suggested only for self-defeating comments. Furthermore, the expectation that the depression level of the presenter of self-defeating humorous comments would result in recipients experiencing more negative feelings about the self and the presenter was also supported. Interestingly, as anticipated, the results showed that affiliative humorous comments resulted in recipients feeling more comfortable when they knew the presenter was depressed. Moreover, the results also suggested that affiliative humorous comments led to more positive feelings about the presenter when the presenter of these comments was depressed. Finally, the expectation that adaptive comments would result in more positive feelings about the self and the presenter, compared with maladaptive comments, was supported for all presentation formats. Moreover, the expectation that aggressive comments would result in more negative feelings about the self and the presenter than self-defeating comments was also supported for all three presentation formats. However, affiliative comments resulted in more positive feelings about the self, compared with self-enhancing comments, only

when the presentations were non-humorous and when they were humorous by a depressed presenter. Similarly, affiliative comments resulted in more positive feelings about the presenter, compared with self-enhancing comments, only when the presentations were humorous by a depressed presenter.

<div align="center">*Immediate Responses*</div>

Laughing

The means and standard deviations for a laughter response are shown in Table 3a, as a function of style of comment and presentation format. The ANOVA on these ratings revealed that all three sources of variance were significant (Table 3b). Considering first the significant main effect of presentation format, both of the humorous formats resulted in significantly more laughter than the non-humorous presentation format (both $ps < .001$). These results support the expectation that humorous comments would result in more laughter by the recipient, compared with non-humorous comments. The marginal means for the significant main effect of style of comment are shown in the right-most column of Table 3a. Here, affiliative comments resulted in significantly more laughter than any other style of comment (all $ps < .001$). Aggressive comments resulted in the least amount of laughter, compared with the other styles of comments (all $ps < .001$). Finally, self-enhancing comments resulted in more laughter than self-defeating comments ($p < .001$). These results confirm the expectation that adaptive comments would result in more laughter by the recipient, compared with maladaptive comments. Moreover, these results also support the expectation that, within adaptive comments, affiliative comments would result in more laughter than self-enhancing comments, and

Table 3a

Means and (Standard Deviations) of Recipients' Extent to Which They Would Respond by Laughing: Ranging from "Not at all" to "Very much", as a Function of the Presentation Format and Style of Comment

Style of comment	Presentation of the comment			
	CND (n=89)	HCND (n=89)	HCD (n=86)	*Marginal mean*
Affiliative	3.93 (1.02)	3.83 (1.17)	3.99 (1.18)	3.92
Self-enhancing	2.13 (.86)	3.57 (.81)	3.49 (.89)	3.07
Self-defeating	2.17 (1.06)	2.79 (1.05)	2.59 (1.01)	2.52
Aggressive	2.05 (1.28)	1.98 (.99)	2.20 (1.24)	2.08
Marginal mean	2.57	3.04	3.07	2.89

Note: Higher values indicate more likely to laugh. CND: non-humorous comment, non-depressed presenter; HCND: humorous comment, non-depressed presenter; HCD: humorous comment, depressed presenter.

Table 3b

Analysis of Variance on Recipients' Extent to Which They Would Respond by Laughing: Ranging from "Not at all" to "Very much"

Source of Variance	*Df*	*F*	*p* <
Presentation	(2,261)	19.88	.001
Style of Comment	(3,783)	161.96	.001
Presentation x Style of Comment	(6,783)	13.21	.001

that within maladaptive comments, aggressive comments would result in less laughter than self-defeating comments.

The two-way interaction between style of comment and presentation format was also significant (Table 3b), with the means for this interaction presented in Table 3a. Interestingly, for affiliative and aggressive comments, the presentation format did not have any effect, with equivalent amounts of recipient's laughter indicated for each of the three conditions (ps ns). These results show that the high amount of laughter evoked by affiliative comments and low amount of laughter evoked by aggressive comments do not change significantly when these two styles of comments are presented in a humorous way, regardless of whether the presenter is depressed or not. In contrast, presentation format did have a pronounced effect when considering self-enhancing and self-defeating comments. For these two styles of comment, a humorous presentation resulted in more laughter than a non-humorous presentation (both $ps < .001$), and this facilitative effect was maintained even when the humorous presenter was depressed ($p < .001$ for self-enhancing comments and $p < .05$ for self-defeating comments). Therefore, these results show that the expected facilitative effects of humor, with respect to the recipient's laughter response, may apply only to self-enhancing and self-defeating comments and this effect is not hindered by the depression level of the presenter.

When comparing styles of comments within each presentation format, results showed that for non-humorous comments, equivalent amounts of laughter were indicated for self-enhancing, self-defeating, and aggressive comments (all ps ns). These results show that when comments are not presented in a humorous way, only affiliative comments evoke more laughter by recipients compared with the other styles of

comments. Interestingly, this was not the case for the two humorous presentations, where the response patterns observed in the aforementioned main effect of style of comment were maintained. Also, these results showed that, contrary to expectations, affiliative comments resulted in similar amounts of laughter compared with self-enhancing comments for the humorous presentation by a non-depressed presenter (p ns); while for the other two conditions, affiliative comments led to more laughter than self-enhancing comments ($p < .01$ for the humorous presentation by a depressed presenter and $p < .001$ for the non-humorous presentation).

Asking to Stop Making the Comments

The means and standard deviations for the response of asking the presenter to stop making the comments are shown in Table 4a, as a function of style of comment and presentation format. The ANOVA on these ratings revealed a significant main effect for presentation format (Table 4b). In particular, a humorous presentation (by either a depressed or a non-depressed presenter) resulted in a lower willingness to ask the presenter to stop making the comments than a non-humorous presentation (both $ps < .05$). There were no significant differences between the two humorous presentations (p ns). These results support the expectation that a humorous presentation of comments would result in a lower motivation to ask the presenter to stop making the comments, compared with a non-humorous presentation of comments.

The results also showed a significant main effect for style of comment (Table 4b). As shown in the marginal means in the right-most column of Table 4a, aggressive comments resulted in the most willingness to ask the presenter to stop making the comments, compared with any other style of comment ($ps < .001$). Self defeating

Table 4a

Means and (Standard Deviations) of Recipients' Extent to Which They Would Ask the Presenter to Stop Making the Comments: Ranging from "Not at all" to "Very much", as a Function of the Presentation Format and Style of Comment

Style of comment	*Presentation of the comment*			
	CND (n=89)	HCND (n=89)	HCD (n=85)	*Marginal mean*
Affiliative	1.27 (.60)	1.35 (.59)	1.19 (.50)	1.27
Self-enhancing	1.44 (.83)	1.36 (.76)	1.29 (.59)	1.36
Self-defeating	2.81 (1.30)	2.58 (1.27)	2.49 (1.32)	2.63
Aggressive	3.93 (1.14)	3.33 (1.16)	3.61 (1.23)	3.62
Marginal mean	2.36	2.15	2.15	2.22

Note: Higher values indicate more likely to ask to stop making the comments. CND: non-humorous comment, non-depressed presenter; HCND: humorous comment, non-depressed presenter; HCD: humorous comment, depressed presenter.

Table 4b

Analysis of Variance on Recipients' Extent to Which They Would Ask the Presenter to Stop Making the Comments: Ranging from "Not at all" to "Very much"

Source of Variance	*Df*	*F*	*p <*
Presentation	(2,260)	4.36	.05
Style of Comment	(3,780)	366.29	.001
Presentation x Style of Comment	(6,780)	2.30	.05

comments resulted in a higher willingness to ask the presenter to stop making the comments, compared with affiliative and self-enhancing comments ($ps < .001$). Interestingly, affiliative and self-enhancing comments resulted in a similar level of willingness to ask the presenter to stop making the comments (p ns). Therefore, these results support the expectation that adaptive comments would result in less willingness to ask the presenter to stop making the comments, compared with maladaptive comments. Moreover, these results also support the expectation that, within maladaptive comments, aggressive comments would result in more willingness to ask the presenter to stop making the comments than self-defeating comments. However, these results fail to support the expectation that, within adaptive comments, affiliative comments would result in less willingness to ask the presenter to stop the comments than self-enhancing comments.

These significant main effects were qualified, however, by a significant two-way interaction between style of comment and presentation format (Table 4b). These means are shown in the main body of Table 4a, and indicate that for affiliative, self-enhancing, and self-defeating comments, the presentation format did not have any effect (ps ns). Therefore, in response to these three styles of comments, recipients' willingness to ask the presenter to stop making the comments does not change significantly when the comments are presented in a humorous way, regardless of whether the presenter is depressed or not. In contrast, a humorous presentation of aggressive comments resulted in a lower likelihood of asking the presenter to stop making the comment than a non-humorous presentation ($p < .01$). Interestingly, this humor effect disappeared when the humorous comment was made by a depressed presenter (p ns). Therefore, these results

support the expected facilitative effect of presenting comments in a humorous way (with regards to recipients being less willing to ask the presenter to stop the comments) only for aggressive comments, and show that this facilitative effect is hindered when the presenter of aggressive humorous comments is depressed.

Ignoring the Comments

The means and standard deviations for the response of trying to ignore the comments are shown in Table 5a, as a function of style of comment and presentation format. The ANOVA on these ratings revealed a significant main effect for style of comment (Table 5b). As shown in the marginal means in the right-most column of Table 5a, aggressive comments resulted in recipients being most likely to try to ignore the comments, compared with any other style of comment ($p < .01$, when compared with self-defeating comments; $ps < .001$, when compared with affiliative and self-enhancing comments). In contrast, affiliative comments resulted in recipients being least likely to try to ignore the comments (all $ps < .001$). Finally, self-defeating comments led to recipients being more likely to ignore the comments than self-enhancing comments ($p < .001$). These results support the expectation that adaptive comments would result in less willingness to ignore the comments than maladaptive comments. Moreover, these results also support the expectation that, within adaptive comments, affiliative comments would result in less willingness to ignore the comments than self than self-enhancing comments, and that, within maladaptive comments, aggressive comments would result in more willingness to ignore the comments than self-defeating comments. Interestingly, neither presentation format nor the two-way interaction had significant effects.

Table 5a

Means and (Standard Deviations) of Recipients' Extent to Which They Would Ignore the Comments: Ranging from "Not at all" to "Very much", as a Function of the Presentation Format and Style of Comment

Style of comment	Presentation of the comment			
	CND (n=89)	HCND (n=89)	HCD (n=86)	*Marginal mean*
Affiliative	1.61 (.92)	1.60 (.82)	1.40 (.64)	1.53
Self-enhancing	1.96 (1.18)	1.91 (1.00)	1.79 (.92)	1.89
Self-defeating	3.52 (1.12)	3.36 (1.11)	3.53 (1.18)	3.47
Aggressive	3.65 (1.37)	3.78 (1.09)	3.91 (1.16)	3.78
Marginal mean	2.68	2.66	2.66	2.67

Note: Higher values indicate more likely to ignore the comments. CND: non-humorous comment, non-depressed presenter; HCND: humorous comment, non-depressed presenter; HCD: humorous comment, depressed presenter.

Table 5b

Analysis of Variance on Recipients' Extent to Which They Would Ignore the Comments: Ranging from "Not at all" to "Very much"

Source of Variance	*Df*	*F*	*p <*
Presentation	(2,261)	.05	Ns
Style of Comment	(3,783)	326.07	.001
Presentation x Style of Comment	(6,783)	1.32	Ns

Summary of Findings for Recipients' Immediate Responses

Results for the three immediate responses by recipients support the expected facilitative effect of humor, but only for certain styles of comments. In particular, compared with a non-humorous presentation, a humorous presentation of comments resulted in more recipients' laughter only when the comments were self-enhancing or self-defeating. Furthermore, a humorous presentation of comments made recipients less likely to ask the presenter to stop making the comments only when the comments were aggressive. Interestingly, a humorous presentation, compared with a non-humorous presentation, did not result in recipients being less likely to ignore the comments, regardless of the style of comment. Contrary to expectations, the expected negative effect of depression level of the presenter of self-defeating humorous comments was not supported for these measures of recipient's immediate responses.

Finally, the expectation that adaptive comments, compared with maladaptive comments, would result in recipients being more likely to laugh and less likely to ignore the comments or ask the presenter to stop making the comments, was supported for all three presentation formats. Moreover, the expectation that aggressive comments would result in recipients being more likely to ask the presenter to stop making the comments and ignore the comments, compared with self-defeating comments was supported for all three presentation formats and the expectation that aggressive comments would result in less laughter compared with self-defeating comments was supported for the two humorous presentations, but not for the non-humorous presentation format. Also, as expected, affiliative comments led to recipients being less willing to ignore the comments than self-enhancing comments. However, in contrast to expectations, affiliative and self-

enhancing comments resulted in similar levels of recipient's willingness to ask the presenter to stop the comments, for the three presentation formats. Similarly, affiliative and self-enhancing comments resulted in similar amounts of laughter, when the comments were presented in a humorous way by a non-depressed presenter.

Future Responses Based on the Comments

Wanting to Continue Interacting with the Presenter

The means and standard deviations for the future response of wanting to continue interacting with the presenter are shown in Table 6a, as a function of style of comment and presentation format. The ANOVA on these ratings revealed significant main effects for both presentation format and style of comment (Table 6b). Considering first the significant main effect of presentation format, the humorous presentation by a non-depressed presenter resulted in a higher willingness to continue interacting with the presenter than a non-humorous presentation ($p < .05$). Interestingly, this effect of humor disappeared when the presenter was depressed (p ns; see marginal means in bottom row of Table 6a). Therefore, these results support the expectation that a humorous presentation of comments would result in recipients being more willing to continue interacting with the presenter in the future, compared with a non-humorous presentation, and show that this facilitative effect of humor is hindered by the depression level of the presenter.

The marginal means for the significant main effect of style of comment are shown in the right-most column of Table 6a. Here, affiliative comments resulted in significantly higher willingness to continue interacting with the presenter in the future than any other style of comment ($p < .01$, when compared with self-enhancing comments;

Table 6a

Means and (Standard Deviations) of Recipients' Extent to Which They Would Continue Interacting with the Presenter in the Future: Ranging from "Not at all" to "Very much", as a Function of the Presentation Format and Style of Comment

Style of comment	Presentation of the comment			
	CND (n=89)	HCND (n=89)	HCD (n=86)	*Marginal mean*
Affiliative	4.15 (.82)	4.19 (.71)	4.06 (1.11)	4.13
Self-enhancing	3.83 (.77)	4.03 (.78)	3.84 (.70)	3.90
Self-defeating	3.02 (.66)	3.07 (.82)	3.02 (.78)	3.04
Aggressive	1.33 (.62)	1.67 (.81)	1.50 (.70)	1.50
Marginal mean	3.08	3.24	3.11	3.14

Note: Higher values indicate more likely to continue interacting with the presenter in the future. CND: non-humorous comment, non-depressed presenter; HCND: humorous comment, non-depressed presenter; HCD: humorous comment, depressed presenter.

Table 6b

Analysis of Variance on Recipients' Extent to Which They Would Continue Interacting with the Presenter in the Future: Ranging from "Not at all" to "Very much"

Source of Variance	*Df*	*F*	*p <*
Presentation	(2,261)	3.56	.05
Style of Comment	(3,783)	664.42	.001
Presentation x Style of Comment	(6,783)	.99	Ns

ps < .001, when compared with self-defeating and aggressive comments). Aggressive comments, as expected resulted in the lowest willingness to continue interacting with the presenter in the future, compared with the other styles of comments (all *ps* < .001). Finally, self-enhancing comments resulted in a higher willingness to continue interacting with the presenter than self-defeating comments (*p* < .001). Therefore, these results support the expectation that adaptive comments would result in more willingness to continue interacting with the presenter than maladaptive comments. Moreover, these results also support the expectation that, within adaptive comments, affiliative comments would result in more willingness to continue interacting with the presenter than self-enhancing comments, and that, within maladaptive comments, aggressive comments would result in less willingness to continue interacting with the presenter than self-defeating comments.

There was no significant two-way interaction. Therefore, the facilitative effect of humor regarding recipient's willingness to continue interacting with the presenter applies to all four styles of comments.

Wanting to Become a Closer Friend of the Presenter in the Future

The means and standard deviations for wanting to become a closer friend of the presenter are shown in Table 7a, as a function of style of comment and presentation format. The ANOVA on these ratings revealed a significant main effect for style of comment (see Table 7b), as shown in the marginal means in the right-most column of Table 7a. Here, affiliative comments resulted in significantly higher willingness to become closer friends than any other style of comment (all *ps* < .001). Aggressive comments, resulted in the lowest willingness to become closer friends, compared with the

Table 7a

Means and (Standard Deviations) of Recipients' Extent to Which They Would Want to Become Closer Friends of the Presenter in the Future: Ranging from "Not at all" to "Very much", as a Function of the Presentation Format and Style of Comment

Style of comment	Presentation of the comment			
	CND (n=89)	HCND (n=89)	HCD (n=86)	*Marginal mean*
Affiliative	3.99 (.86)	3.91 (.85)	4.16 (.76)	4.02
Self-enhancing	3.62 (.79)	3.90 (.78)	3.67 (.77)	3.73
Self-defeating	2.84 (.71)	2.80 (.83)	2.87 (.84)	2.84
Aggressive	1.19 (.40)	1.52 (.71)	1.36 (.67)	1.36
Marginal mean	2.91	3.03	3.02	2.99

Note: Higher values indicate more willing to become closer friends in the future. CND: non-humorous comment, non-depressed presenter; HCND: humorous comment, non-depressed presenter; HCD: humorous comment, depressed presenter.

Table 7b

Analysis of Variance on Recipients' Extent to Which They Would Want to Become Closer Friends of the Presenter in the Future: Ranging from "Not at all" to "Very much"

Source of Variance	*Df*	*F*	*p* <
Presentation	(2,261)	2.03	Ns
Style of Comment	(3,783)	745.53	.001
Presentation x Style of Comment	(6,783)	2.86	.01

other styles of comments (all ps < .001). Finally, self-enhancing comments resulted in a higher willingness to become closer friends than self-defeating comments (p < .001). Therefore, these results support the expectation that adaptive comments would result in more willingness to become closer friends than maladaptive comments. Moreover, these results also support the expectation that, within adaptive comments, affiliative comments would result in more willingness to become closer friends than self-enhancing comments, and that, within maladaptive comments, aggressive comments would result in less willingness to become closer friends than self-defeating comments.

The main effect of style of comment was qualified, however, by a significant two-way interaction between style of comment and presentation format (Table 7b). These means are shown in the main body of Table 7a, and indicate that willingness to become closer friends in the future based on affiliative and self-defeating comments did not differ significantly across any of the presentation formats (all ps ns). In contrast, a humorous presentation of aggressive comments (by a non-depressed presenter) resulted in higher willingness to become closer friends with the presenter, compared with a non-humorous presentation ($p < .001$). Results also suggested a similar facilitative effect of humor for self-enhancing comments, with this effect closely approaching statistical significance ($p = .052$). Interestingly, when the presenter was depressed, a humorous presentation of aggressive and self-enhancing comments did not differ from a non-humorous presentation, in terms of recipients' willingness to become closer friends with the presenter (ps ns). Therefore, these results show that the expected facilitative effect of presenting comments in a humorous way, with respect to recipient's willingness to become closer friends with the presenter, may only apply to self-enhancing and

aggressive comments, and that this effect is hindered when the presenter of these comments is depressed.

When comparing styles of comments within each presentation format, results showed that the expected higher level of recipient's willingness to become closer friends with the presenter when they made affiliative, compared with self-enhancing comments, was supported only when the presentation of the comments was either non-humorous or humorous by a depressed presenter (both $ps < .001$), but not when the comments were presented in a humorous fashion by a non-depressed presenter (p ns).

Wanting to Avoid the Presenter in the Future

The means and standard deviations for wanting to avoid the presenter in the future are shown in Table 8a, as a function of style of comment and presentation format. The ANOVA on these ratings revealed a significant main effect for style of comment (Table 8b), as shown in the marginal means in the right-most column of Table 8a. Here, affiliative comments resulted in the lowest willingness to avoid the presenter in the future, compared with the other styles of comments (all $ps < .001$). Aggressive comments resulted in the highest willingness to avoid the presenter in the future, compared with the other styles of comments (all $ps < .001$). Finally, self-defeating comments resulted in a higher willingness to avoid the presenter in the future than self-enhancing comments ($p < .001$). Therefore, these results support the expectation that adaptive comments would result in less future avoidance of the presenter than maladaptive comments. Moreover, these results also support the expectation that, within adaptive comments, affiliative comments would result in less future avoidance of the presenter than self-enhancing comments, and that, within maladaptive comments,

Table 8a

Means and (Standard Deviations) of Recipients' Extent to Which They Would Want to Avoid the Presenter in the Future: Ranging from "Not at all" to "Very much", as a Function of the Presentation Format and Style of Comment

Style of comment	Presentation of the comment			
	CND (n=89)	HCND (n=89)	HCD (n=86)	*Marginal mean*
Affiliative	1.42 (.72)	1.56 (.72)	1.26 (.56)	1.41
Self-enhancing	1.58 (.80)	1.62 (.94)	1.66 (.85)	1.62
Self-defeating	2.46 (.98)	2.24 (1.06)	2.38 (1.00)	2.36
Aggressive	4.34 (.99)	3.69 (1.21)	3.97 (1.26)	4.00
Marginal mean	2.45	2.28	2.32	2.35

Note: Higher values indicate more willing to avoid the presenter in the future. CND: non-humorous comment, non-depressed presenter; HCND: humorous comment, non-depressed presenter; HCD: humorous comment, depressed presenter.

Table 8b

Analysis of Variance on Recipients' Extent to Which They Would Want to Avoid the Presenter in the Future: Ranging from "Not at all" to "Very much"

Source of Variance	*Df*	*F*	*p <*
Presentation	(2,261)	2.64	Ns
Style of Comment	(3,783)	445.36	.001
Presentation x Style of Comment	(6,783)	4.06	.001

aggressive comments would result in more future avoidance of the presenter than self-defeating comments.

The significant main effect for style of comment was qualified by a significant two-way interaction between style of comment and presentation format (Table 8b). These means are shown in the main body of Table 8a, and indicate that willingness to avoid the presenter in the future after self-enhancing and self-defeating comments did not differ significantly across the three presentation formats (all ps ns). Interestingly, for affiliative comments, a humorous versus non-humorous presentation did not affect future avoidance of the presenter (p ns), except for when the presenter was depressed. As anticipated, a humorous presentation of affiliative comments by a depressed presenter resulted in a lower willingness to avoid the presenter in the future, compared with a humorous presentation by a non-depressed presenter ($p < .01$). For aggressive comments, a humorous presentation by a non-depressed presenter resulted in a lower willingness to avoid the presenter in the future than a non-humorous presentation ($p < .001$). Interestingly, this humor effect disappeared when the humorous comment was made by a depressed presenter (p ns). Therefore, these results show that the expected facilitative effect of presenting comments in a humorous way, with respect to recipient's willingness to avoid the presenter in the future, applies only to aggressive comments, but not to affiliative, self-enhancing, or self-defeating comments. Also, results show that this facilitative effect of humor for aggressive comments is hindered when the presenter of these comments is depressed.

Finally, when comparing styles of comments within each presentation format, results showed that recipient's expected lower willingness to avoid the presenter when

they made affiliative, compared with self-enhancing comments, was supported only when the presentation of comments was humorous by a depressed presenter ($p < .001$), but not when the comments where non-humorous or when they were humorous by a non-depressed presenter (ps ns).

Summary of Findings for Recipients' Future Responses

The results for the three future potential responses by recipients support the expected facilitative effects of humor. Regarding approach-oriented responses, humorous presentations of all comment styles led to recipients being more willing to continue interacting with the presenter in the future, compared with non-humorous presentations. Interestingly, this facilitative effect was hindered when the presenter was depressed. The results also showed that, for aggressive comments, a humorous presentation resulted in recipients being more willing to become closer friends with the presenter, compared with a non-humorous presentation. Similar results were suggested for self-enhancing comments. Again, these facilitative effects of humor were hindered when the presenter was depressed. With regards to the avoidance-oriented response, a humorous presentation of aggressive comments (but not the other styles of comments), resulted in recipients being less likely to avoid the presenter in the future, compared with a non-humorous presentation. Yet again, this facilitative effect of humor was hindered by the depression level of the presenter of the comments. In contrast, a humorous presentation of affiliative comments by a depressed presenter resulted in recipients being less willing to avoid the presenter in the future, compared with the same style of humorous comments made by a non-depressed presenter.

Finally, the expectation that adaptive comments, compared with maladaptive comments, would result in more approach-oriented and less avoidance-oriented future responses was supported for all three presentation formats. Similarly, the expectation that aggressive comments would lead to more avoidance-oriented responses and less approach-oriented future responses, compared with self-defeating comments, was also supported for the three presentation formats. However, in contrast to expectations, affiliative and self-enhancing comments resulted in similar levels of recipient's willingness to avoid and to become closer friends with the presenter when these comments were presented in a humorous way by a non-depressed presenter.

Recipients' Levels of Psychological Well-being and Their Responses to Social Comments

We were also interested in investigating whether the recipients' level of depression, self-esteem, and social interaction anxiety were related to their responses to social comments. This was done by computing the correlations between each of the dependent variables, for each style of comment, and recipients' scores on measures of depression (DASS), self-esteem (RSEI), and social interaction anxiety (SIAS). Since presentation format was a between-groups variable, separate sets of correlations were calculated for each of the three presentation formats. Interestingly, of the total number of 288 correlations (96 for each presentation format), only a very small number of correlations were statistically significant (11 in CND, 7 in HCND, and 3 in HCD). This suggests that, contrary to expectations, the level of psychological well-being of recipients may not be generally related to their responses to social comments. The following is a brief discussion of the correlations that were found to be statistically significant for each presentation format.

Non-humorous Comments: Considering first recipients' responses to non-humorous comments, results showed as expected that a higher level of social interaction anxiety and a lower level of self-esteem were related to more negative feelings about the self in response to aggressive comments ($r = .24$, $p < .05$ for social interaction anxiety; $r = -.27$, $p < .05$ for self-esteem). Also, a lower level of self-esteem was related to a higher willingness to avoid a presenter of aggressive comments ($r = -.23$, $p < .05$). Interestingly, a higher level of depression and social interaction anxiety and lower level of self-esteem were also related to a lower willingness to ask the presenter of aggressive comments to stop making these comments ($r = -.25$, $p < .05$ for depression and social interaction anxiety; $r = .24$, $p < .05$ for self-esteem). Also, in response to self-defeating comments, a higher level of social interaction anxiety and a lower level of self-esteem were related to a higher willingness to become closer friends with the presenter ($r = .29$, $p < .01$ for social interaction anxiety; $r = -.33$, $p < .01$, for self-esteem) and a lower willingness to avoid the presenter in the future ($r = -.28$, $p < .01$ for social interaction anxiety; $r = .22$, $p < .05$ for self-esteem). Finally, a higher level of social interaction anxiety was related to a lower willingness to ask a presenter of affiliative comments to stop making these comments ($r = -.27$, $p < .05$).

Humorous Comments (by a Non-depressed Presenter): When comments were presented in a humorous way (by a non-depressed presenter), a higher level of social interaction anxiety and a lower level of self-esteem were also related to a lower willingness to ask the presenter of aggressive comments to stop making these comments ($r = -.32$, $p < .01$ for social interaction anxiety; $r = .29$, $p < .01$ for self-esteem). Moreover, a lower level of self-esteem was related to a higher willingness to continue

interacting and become closer friends with a presenter of aggressive humorous comments ($r = -.23, p < .05$, for both correlations). For self-defeating humorous comments, a higher level of depression was related to a lower willingness to become closer friends with the presenter ($r = -.21, p < .05$). Interestingly, a lower level of self-esteem was related to a lower willingness to continue interacting and become closer friends with a presenter of affiliative humorous comments ($r = .27, p < .05$ and $r = .34, p < .01$, respectively).

Humorous Comments Made by a Depressed Presenter: Finally, when comments were presented in a humorous way by a depressed presenter, very few correlations between recipients' level of psychological well-being and their responses to these comments were significant. In particular, higher level of depression was related to a higher willingness to ignore self-enhancing comments and to ask the presenter to stop making these comments ($r = .22, p < .05$ and $r = .26, p < .05$, respectively). Also, results showed that a higher level of social interaction anxiety was related to a higher willingness to become closer friends with a presenter of affiliative humorous comments ($r = .25, p < .05$). There were no significant correlations between recipients' level of self-esteem and their responses to humorous comments by a depressed presenter.

General Discussion

Each of the four primary goals of this thesis will be reviewed and evaluated, including directions for future research. This will be followed by a discussion of the limitations and implications of the present study. The first goal of this study was to investigate the impact on recipients of the four humor styles identified by Martin and colleagues (2003; affiliative, self-enhancing, self-defeating, and aggressive). Second, it was of interest to evaluate whether recipients' responses to these comments differ when

the comments are presented in a humorous versus non-humorous way. Thirdly, it was of interest to investigate whether recipients' responses to the four styles of humorous comments differ when the presenter of these comments is identified as being depressed. Fourthly, it was of interest to investigate whether recipients' own levels of depression, self-esteem, and social interaction anxiety are related to their responses to these comments, for each of the three presentation conditions.

Impact of Humorous Comments on Recipients

The present results showed that recipients' positive responses to affiliative humorous comments were in accord with the purpose of affiliative humor. Namely, individuals are assumed to use affiliative humor to enhance their relationships with others, by enhancing others' feelings of well-being, reducing conflicts, and strengthening ties (Martin et al., 2003). The present results accord well with this purpose. Specifically, when compared with self-defeating and aggressive humorous comments, affiliative humorous comments led to recipients reporting more positive feelings about the self and the presenter, being more willing to engage in approach-oriented responses, and being less willing to engage in confrontational and avoidance-oriented responses. Therefore, these results suggest that affiliative humor may facilitate interpersonal interactions with casual acquaintances and, thus, help to foster the development of friendships.

Similarly, the present results showed that recipients' negative responses to aggressive humorous comments were in accord with the purpose of aggressive humor. Namely, individuals are assumed to use aggressive humor to enhance the self by putting down others (Martin et al., 2003). The present results provided support for the negative impact of aggressive humor on recipients. In particular, compared to all the other styles

of humorous comments, aggressive humorous comments led to recipients reporting more negative feelings about the self and the presenter, being less willing to engage in approach-oriented responses, and more willing to engage in confrontational and avoidance-oriented responses. These results are in accord with research findings showing that ridicule and teasing evoke negative emotional and behavioral responses in others (Bollmer et al., 2003; Platt, 2008). Moreover, these results suggest that aggressive humor may be detrimental to interpersonal interactions with casual acquaintances and thus, may interfere with the development of friendships.

Hence, the results from this study showed recipients' responses to affiliative and aggressive humorous comments were in accord with the purpose of affiliative and aggressive humor styles. However, it is relevant to consider that the descriptions of affiliative and aggressive humorous comments used in this study also included a description of the intentions of the presenter of these comments (i.e., "to entertain the rest of you and put you at ease" for affiliative humorous comments; and "to put you down" for aggressive humorous comments). Thus, it is possible that recipients responded positively to affiliative humorous comments based on the description of the positive intentions of the presenter. Similarly, it is possible that recipients responded negatively to aggressive humorous comments based on the description of the negative intentions of the presenter. In fact, researchers in the past have found that perceived intent is an important determinant of individuals' responses to others (Maselli & Altrocchi, 1969).

Accordingly, the present findings may be limited to situations where the recipients of affiliative and aggressive humorous comments interpret the intentions of the presenter of these comments in similar ways to the ones described in this study. This is

particularly relevant to consider when evaluating recipients' responses to aggressive humor, since this style of humor can sometimes be disguised as playful fun and, therefore, may be received by others as a non-threatening form of play. In such cases, it is possible that aggressive humor would evoke less negative responses by recipients.

Interestingly, the present results showed that recipients' positive responses to self-enhancing humorous comments went beyond the purpose of self-enhancing humor. Namely, individuals are assumed to use self-enhancing humor to enhance the self in a way that is accepting and non-detrimental to others (Martin et al., 2003). Therefore, the main purpose of self-enhancing humor is believed to be the enhancement of the self, not of others, or of one's relationships with others. However, the present results showed that self-enhancing humorous comments had a positive impact on all measures of recipients' reported feelings and responses. Moreover, this positive impact on recipients was generally as high as the positive impact of affiliative humorous comments. Therefore, these results suggest that self-enhancing humor may not only serve to enhance the self, but also to facilitate positive interpersonal interactions with acquaintances and, thus, promote the development of friendships. These results are similar to findings from past research showing that affiliative and self-enhancing humorous comments received by adolescents resulted in similar levels of positive feelings about the self and in a similarly high desire to continue the interaction with the presenter of these comments (Kirsh & Kuiper, 2003).

Finally, the present study found recipients' negative responses to self-defeating humorous comments were in contrast with the purpose of self-defeating humor. Namely, individuals are assumed to use self-defeating humor to enhance their relationship with

others, at the expense of deprecating themselves (Martin et al., 2003). However, the present results showed that self-defeating humorous comments had a relatively negative impact on recipients' reported feelings and responses to these comments. In particular, recipients reported more negative feelings about the self and the presenter, were less willing to engage in approach-oriented responses, and were more willing to engage in confrontational and avoidance-oriented responses, compared with their responses to affiliative and self-enhancing humorous comments.

It is important to note that these negative responses to self-defeating humorous comments occurred despite the fact that the description of these comments also included a statement of the positive, pro-social, intentions of the presenter of these comments ("to get the others to like and accept them"). Therefore, these results show that even when knowing that self-defeating humorous comments are made in order to gain acceptance from others, recipients may still respond negatively to these comments. Thus, the present findings suggest self-defeating humor may not only be detrimental to the self, but also to one's interpersonal relationships with others. In particular, these results suggest that self-defeating humor may be deleterious to interpersonal interactions with casual acquaintances, and may thus interfere with the development of friendships. These suggestions may help explain previous findings showing that higher use of self-defeating humor is related to lower levels of satisfaction with social support (Martin et al., 2003).

In summary, the results from this study suggest that: 1) affiliative and self-enhancing humorous comments may be received positively by recipients and may serve to enhance recipients' interest in fostering a good relationship with the presenter; 2) self-defeating humorous comments may be received negatively by recipients and may be

detrimental to recipients' interest in fostering a good relationship with the presenter, and 3) aggressive humorous comments may be the most detrimental style of humorous comments for recipients' feelings and interest in fostering a good relationship with the presenter.

Recipients' Responses to Humorous versus Non-humorous Comments

When comparing recipients' responses to humorous comments with responses to the same style of comments presented in a non-humorous way, some facilitative effects of humor emerged. To begin, a humorous presentation of all four styles of comments led to recipients being more willing to continue interacting with the presenter in the future, compared with a non-humorous presentation of these comments. Therefore, these results suggest that presenting social comments in a humorous way may serve to promote further interpersonal interactions with acquaintances and thus, may serve to foster the development of friendships.

With regards to the other types of responses investigated here (i.e., feelings about the self and the presenter, laugh, ignore the comments, ask the presenter to stop making the comments, become closer friends with the presenter, and avoid the presenter in the future), the facilitative effects of a humorous presentation were specific to each style of comments. Interestingly, for affiliative comments, a humorous presentation did not affect any of these responses by recipients. Therefore, these results suggest that affiliative comments may be always received positively by recipients, regardless of whether they are presented in a humorous fashion or not. This could be due to a ceiling effect whereby affiliative comments already have such a strong positive impact on recipients that a humorous presentation of these same comments can add little extra.

In contrast, for self-enhancing comments, results showed that a humorous presentation led to recipients reporting feeling more positive about the self and being more likely to laugh, and further suggested that recipients were also more willing to become closer friends with the presenter in the future. For self-defeating comments, results showed that a humorous presentation led to recipients reporting feeling more positive about the self and being more likely to laugh, and suggested recipients also reported more positive feelings about the presenter. Finally, for aggressive comments, a humorous presentation resulted in recipients being less willing to ask the presenter to stop making the comments or avoid the presenter in the future, and being more willing to become closer friends with the presenter in the future. This positive impact of humor on recipients of aggressive comments is consistent with researchers' suggestions that using humor when making aggressive or hostile comments results in recipients taking the comments as less serious, and thus reduces the negative reactions of recipients, helping the presenter of these comments to "save face" (Keltner, et al., 1998, 2001; Martin, 2007).

Overall, the present study found support for some positive effects of humor on recipients, and these positive effects suggest the use of humor may serve to foster positive interactions with acquaintances and promote the development of friendships. Nevertheless, the reasons underlying these effects are not yet clearly understood. In the past, researchers have suggested that the mirth and laughter evoked by humor results in general feelings of well-being and this serves to facilitate interpersonal relationships (Bachorowski & Owren, 2001; Gervais & Wilson, 2005; Smoski & Bachorowski, 2003). However, the present study found a facilitative effect of humor even when utilizing

vignettes to describe the different styles of humorous comments. Thus, the humorous comments used in this study were unlikely to directly evoke feelings of amusement or laughter in recipients, given that there was nothing "funny" about the description of these comments. However, it may be possible that just reading that the comments were humorous indirectly evoked some state of joy in recipients. Another possibility is that recipients were reminded of positive emotional reactions to past experiences containing humorous comments, and thus responded to the comments based on these previous experiences.

It is further possible that when comments were presented in a humorous fashion, recipients perceived the presenter of these comments as being more positive, and thus, responded in a more positive way to these comments. This suggestion is consistent with past research showing that most people attribute additional positive characteristics to an individual considered to be humorous, and consider sense of humor as one of the most desirable attributes a friend and a romantic partner could have (Cann & Calhoun, 2001; Regan & Joshi, 2003; Sprecher & Regan, 2002).

Finally, it is relevant to note that, even though humor had facilitative effects for all styles of comments, recipients' responses to self-defeating and aggressive humorous comments were never as positive as those associated with affiliative and self-enhancing humorous comments. Thus, the present results suggest that recipients' responses to humorous comments may be more strongly influenced by the style of the comments (i.e., affiliative, self-enhancing, self-defeating, or aggressive style) than by the humorous nature of these comments. Again, these differences in the way recipients responded to the different styles of humorous comments could have been affected by differences in the

way they perceived the presenter of these comments. This possibility is consistent with findings from a recent study showing that people form different personality impressions about humorous individuals, based on the style of humor used by these individuals (Kuiper & Leite, in press). In particular, this study found people formed more positive personality impressions about individuals who used adaptive styles of humor, and more negative personality impressions about individuals who used maladaptive styles of humor. Furthermore, this study showed that affiliative humor led to more positive personality impressions than self-enhancing humor; whereas aggressive humor resulted in more negative personality impressions than self-defeating humor.

Therefore, future research might further investigate the impact of using humor when making adaptive and maladaptive styles of comments by observing actual social interactions involving both humorous and non-humorous comments, and measuring recipients' feelings, responses, perceptions of the presenter's intent and personality impressions about the presenter. This could be accomplished, for example, by planning an interaction between participants and a confederate in which the confederate makes different styles of comments, in either a humorous or non-humorous fashion. This way, participants' verbal and non-verbal responses could be directly observed and rated, and participants could be later asked to report their feelings, as well their perceptions and impressions about the presenter and the interaction.

Impact of Depression of the Presenter of Humorous Comments on Recipients' Responses

To begin, for self-defeating and affiliative humorous comments, results showed that knowing the presenter was depressed led to some differences in recipients' responses. In particular, when self-defeating humorous comments were made by a

depressed presenter, the facilitative effects of humor were reversed, resulting in recipients reporting more negative feelings about the self and the presenter, compared with a humorous presentation by a non-depressed presenter. In contrast, for affiliative humorous comments, results showed that knowing the presenter was depressed led to recipients reporting higher feelings of comfort and being less willing to avoid the presenter in the future, and also suggested recipients reported more positive feelings about the presenter. Moreover, when comparing the effects of affiliative and self-enhancing comments for each of the two humorous presentations, results showed that when the presenter was depressed, affiliative humorous comments had a more positive impact on recipients than self-enhancing humorous comments. In contrast, affiliative and self-enhancing humorous comments generally resulted in similar responses by recipients when the presenter was not depressed.

The above pattern of findings suggests that making self-defeating humorous comments may be particularly detrimental for depressed individuals' relationships with the recipients of those comments; whereas making affiliative humorous comments may be particularly beneficial for depressed individuals' relationships with the recipients of these comments (and more beneficial than making self-enhancing humorous comments). These results are important as past research has consistently found that, compared to non-depressed individuals, depressed individuals tend to use more self-defeating humor and less affiliative humor (Frewen et al., 2008; Kuiper et al., 2004; Martin et al., 2003). Thus, combining previous findings with the results from the present thesis, it appears that the style of humor depressed individuals tend to use the most (self-defeating) is the same style of humor that results in more negative responses by recipients. Similarly, one of the

styles of humor depressed individuals tend to use the least (affiliative) is the same style that results in more positive responses by recipients.

Accordingly, it is possible that one important factor contributing to depressed individuals' poor interpersonal relationships is the response of others to their excessive use of self-defeating humor, along with their lower rate of use of affiliative humor. This possibility is also consistent with previous research showing that higher use of self-defeating humor and lower use of affiliative humor are associated with lower intimacy in relationships, as well as with higher feelings of loneliness (Çeçen, 2007; Hampes, 2005; Martin et al, 2003).

It is important to note that the reasons underlying recipients' differential responses to the self-defeating and affiliative humorous comments made by a depressed presented are not fully understood yet. One possibility is that recipients perceive these styles of comments in a different way when they know the presenter is depressed. For example, self-defeating comments demonstrate a negative focus on the self. Therefore, it is possible that when the presenter of self-defeating humorous comments was described as being depressed, recipients were reminded of the characteristic difficulties of depression (i.e., negative self-focus) and thus, reported more negative feelings, despite the humorous nature of the comments. In contrast, affiliative humorous comments demonstrate an interest in making others feel good, which contrasts with the expected negative self-focus that is characteristic of depressed individuals. Therefore, it is possible that when the presenter of affiliative humorous comments was described as being depressed, recipients saw these comments as a sign of improvement, and thus, reported feeling better and being less willing to avoid the presenter in the future. Future research

could investigate these possibilities by assessing recipients' attributions of the nature and purpose of humorous comments made by depressed and non-depressed individuals.

The results from this study also showed that knowing that the presenter of humorous comments is depressed resulted in the hindering of most of the facilitative effects associated with a humorous presentation. Namely, when humorous comments were presented by a depressed acquaintance, recipients' responses to these comments were somewhat less positive (or more negative) than when no information about the presenter was given. This hindering effect resulted in responses to humorous comments made by a depressed presenter being similar to responses to the same style of comments presented in a non-humorous way. The only exceptions were for feelings about the self in response to self-enhancing comments and amount of laughter in response to self-enhancing and self-defeating comments, for which the facilitative effects of humor were maintained, even when the presenter was depressed.

It is not clear why this hindering effect occurred. One possibility is that the identification of the presenter of humorous comments as being depressed resulted in a general negative disposition, which then counterbalanced the positive disposition evoked by humor. This general negative disposition may be related to stigma. Stigma has been described as a social process characterized by exclusion, rejection, blame or devaluation that results from an adverse social judgment about a person or group (Martin & Johnston, 2007). Past research has found evidence for the existence of stigma against depression (Angermeyer & Matschinger, 2004; Wang & Lai, 2008). Consequently, future research may investigate further whether recipients' responses to the humorous comments made by a depressed individual could be affected by the stigma attached to depression.

Finally, it is relevant to note that the present study did not examine any potential differences in the way humorous comments are made by depressed versus non-depressed individuals. Past research has shown that depressed individuals show poor social skills during interpersonal interactions. In particular, depressed individuals have been found to look less at their partners during conversations, speak less and softer, take longer to respond, and smile less often (Tse & Bond, 2004). Therefore, it is possible that depressed individuals may formulate and express humorous comments in a different way than non-depressed individuals. Moreover, these potential differences in the way humorous comments are made by depressed individuals may affect the way recipients respond to these comments. Future research could investigate this by observing actual humorous conversations between depressed and non-depressed individuals, and noting any differences in the way depressed individuals formulate and express humorous comments, as well as in the way recipients respond to these comments.

Relationship between Recipients' Psychological Well-being and Their Responses to Social Comments

The findings from this study showed that the level of recipients' depression, social interaction anxiety, and self-esteem were not much related to the ways they responded to social comments. Nevertheless, as expected, a few results showed that a higher level of social interaction anxiety and a lower level of self-esteem were related to more negative feelings about the self in response to non-humorous aggressive comments, but not in response to aggressive comments presented in a humorous fashion. These results are consistent with past research showing that individuals with low self-esteem and social anxiety are particularly sensitive to interpersonal rejection (Amir et al., 2005;

Nezlek et al., 1997). Interestingly, results also showed that, in response to both a humorous and non-humorous presentation of aggressive comments, higher levels of social interaction anxiety and lower levels of self-esteem (as well as higher levels of depression for the humorous presentation) were related to a lower willingness to ask the presenter to stop making these comments. These results are consistent with past research showing that high levels of social anxiety, high levels of depression, and low levels of self-esteem are related to lower levels of assertiveness (Lefevre & West, 1981; Segal, 2005; Weber, Wiedig, Freyer, & Gralher, 2004). Moreover, the present results showed that lower levels of self-esteem were related to a higher willingness to continue interacting and become closer friends with a presenter of aggressive humorous comments. These results are consistent with the self-verification theory, which suggests people tend to seek out self-verifying information. Thus, people with negative self-views tend to seek out interaction partners who evaluate them more negatively (Giesler et al., 1996; Swann, Pelham & Krull, 1989; Swann et al., 1990).

Limitations and Implications

There were various limitations to this study. First, the use of vignettes to describe a hypothetical scenario served to manipulate the presentation of four styles of comments (affiliative, self-enhancing, self-defeating, and aggressive) and three presentation formats (humorous, non-humorous, and humorous by a depressed presenter). However, the use of hypothetical scenarios only allowed assessing how recipients thought they would respond to these comments, rather than how recipients actually respond to humorous and non-humorous comments during real interactions with casual acquaintances. Therefore, the results from this study should be considered with the understanding that recipients'

thoughts about how they would respond to these hypothetical scenarios may or may not be an accurate representation of how recipients respond during actual social interactions.

Moreover, the comments described in the scenarios used in this study included a description of the intention of the presenter (e.g., "to entertain the rest of you and put you at ease"). Including these intentions served to clearly differentiate the four styles of comments, as well as to ensure all recipients interpreted each style of comment in a similar way. This was considered essential, given that perceived intent is a major determinant of individuals' responses to others (Maselli & Altrocchi, 1969). Nevertheless, providing recipients with an interpretation of the presenter's intent may have influenced recipients' responses in specific ways, resulting in responses that may differ from responses to real-life social comments. This is because the underlying purpose of social comments in real life may not always be so obvious to recipients. This is particularly true for humorous comments, which are ambiguous in nature (Martin, 2007). For example, whether affiliative humorous comments are made to entertain others, to change the topic of a conversation, or to be the center of attention, may not always be so clear for recipients, and each of these interpretations could possibly lead to different responses by recipients.

Given the importance of considering recipients' understanding of the presenter's intent, future research may investigate recipients' responses to different styles of humorous and non-humorous comments by utilizing descriptions of these comments with examples, but without describing the presenter's intentions. Instead, recipients may be asked to report their perception of the intentions of the presenter, along with their reactions to these comments. This methodology would allow considering recipients'

perception of the purpose of the different styles of comments when comparing their responses to these comments. Moreover, this methodology would allow investigating the various purposes recipients may attribute to different styles of comments presented in humorous and non-humorous ways.

Another methodological limitation of the present study is that the hypothetical scenarios described social comments presented by a casual acquaintance from school, during a conversation about the level of difficulty of a new course. Therefore, the results from this study may be limited to that particular type of social interaction. There were two reasons for describing the presenter as a casual acquaintance. First, we did not want participants to think of a friend or anyone close to them, since their pre-study perceptions of or feelings towards their real friends could have affected the way they responded to the hypothetical scenarios presented in the study. Second, it was of interest to investigate the potential role of humor among casual acquaintances in the fostering of interpersonal interactions that could then develop into friendships. Substantial amount of research supports that friendships are developmentally significant throughout the life course, and particularly during young adulthood (Bagwell et al., 2005; Hartup & Stevens, 1997). Nevertheless, it is possible humor may be received differently when the presenter is a friend. This distinction may be particularly relevant for aggressive humor. For example, one study found that teasing by friends was interpreted by adolescents in a more benevolent way than teasing by classmates (Jones, Newman, & Bautista, 2005). Therefore, future research may investigate the effects of humor and depression on recipients' responses to social comments made by friends versus acquaintances.

Also, the hypothetical interaction utilized in the present study described a conversation about the difficulty level of a new course. This topic of conversation was chosen because it was suitable for all four styles of comments investigated in this study (i.e., self-enhancing comments generally occur in response to a difficult situation). However, future research may investigate the effects of humor and depression on recipients' responses to comments about other topics of conversation.

Another methodological limitation of the present study involves the use of undergraduate students, which limits the generalizability of the findings to the general population. Therefore, future research may target other age groups, such as school-age children and middle age adults.

Also, this study did not include a further comparison condition in which a depressed presenter made non-humorous comments. Therefore, it is still not known whether recipients' responses to comments made by a depressed presenter differ when the comments are non-humorous versus humorous. This is something that future research may address, as it would inform whether, for depressed individuals, making certain styles of comments in a humorous way may serve to enhance their relationships with others, compared with making the same styles of comments in a non-humorous fashion.

Finally, another limitation of the present study is that the gender of the presenter of the social comments was kept neutral. Moreover, the analysis of recipients' responses was collapsed across male and female recipients. This was due to the fact that 65% of the recipients were female; whereas 35% were male. Nevertheless, past research has found that, in general, males and females are similarly impacted by humor. For example, one

study that evaluated individuals' responses to a list of a variety of humorous comments found that, in general, responses by males and females had more similarities than differences (Crawford & Gressley, 1991). Similarly, another study found much overlap between females' and males' perspectives on humor, particularly in the rejection of hostile humor and in valuing every day humor and coping humor (Gallivan, 1999). Also, research has found that males and females respond to humor with similar amounts of laughter (Martin & Kuiper, 1999). However, other research findings suggest there may be some differences between genders with regards to the perception of the role of humor during conflict (Bippus, 2005). Consequently, future research may systematically investigate whether recipients' responses to humorous and non-humorous comments vary, depending on the gender of both the recipient and the presenter.

Despite these limitations, there are some possible implications arising from the findings of this study, which future research could investigate further. First, individuals interested in making their interactions with acquaintances more positive and fostering the development of friendships, could be encouraged to use humor when making social comments. Self-enhancing humorous comments could be particularly recommended, since they seem to not only enhance the self, but also the relationship with the recipients of these comments. Also, it is important that individuals are made aware that the style of the comments they make (affiliative, self-enhancing, self-defeating, or aggressive) has a strong impact on recipients, and that adding humor to these comments facilitates positive responses, but only to a certain extent. For example, individuals could be informed that making aggressive comments in a humorous way does diminish confrontational and avoidance responses, but does not eliminate the negative impact on recipients associated

with the aggressive aspect of these comments. Therefore, individuals interested in fostering more positive relationships with acquaintances should be encouraged to use more affiliative and self-enhancing humor, and less self-defeating and aggressive humor when interacting with others.

Second, depressed individuals interested in improving their interpersonal interactions with acquaintances could be taught to use less self-defeating humor and more affiliative humor when conversing with others. If depressed individuals made more affiliative and less self-defeating humorous comments, the recipients of these humorous comments would feel more positive and would be less likely to want to avoid them in the future. Thus, this strategy could serve to diminish the higher levels of rejection generally experienced by these individuals.

Finally, acquaintances of individuals suffering from depression, low self-esteem, and social interaction anxiety could be discouraged from making aggressive comments to these individuals, even when the aggressive comments are made in a humorous fashion. This is because individuals with these lower levels of psychological well-being seem to have difficulties confronting others making aggressive comments to them and, thus, may be at higher risk of being victims of verbal aggression.

Conclusion

In conclusion, the present study provided a better understanding of the effects of humor on recipients' responses to social comments, and the way depression level of the presenter can alter these effects. One of the most salient findings was that, to some extent, the use of humor in social comments served to facilitate more positive responses by the recipients of these comments, including recipients' feelings, as well as both

immediate and future social responses. Therefore, these results suggest that the use of humor may serve to facilitate positive social interactions and, thus, may serve to foster positive interpersonal relationships. Nevertheless, results from this study also showed that, in general, the style of social comments made (i.e., affiliative, self-enhancing, self-defeating, and aggressive) represented a stronger determinant of recipients' responses. Another salient finding of this study was that identifying the presenter of humorous comments as depressed had facilitative effects on some of the recipients' responses to affiliative humorous comments; whereas it had detrimental effects on some of the recipients' responses to self-defeating humorous comments. Finally, this study showed that recipients' own level of psychological well-being affected their responses to social comments only to a very limited extent.

Overall, the present study provided important information about the role of humor in interpersonal relationships, by showing that the facilitative effects of humor on recipients' responses to social comments may be qualified by the style of these comments and by the depression level of the person making the comments. Future research should continue to explore the role of humor in fostering interpersonal relationships, by taking into account the characteristics of the presenter and the recipients, the characteristics of the relationship between the presenter and the recipients, and other contextual characteristics of the social interaction.

References

Alberts, J. K., Kellar-Guenther, Y., & Corman, S. R. (1996). That's not funny:

Understanding recipients' responses to teasing. *Western Journal of Communication,*

60(4), 337-357.

Amir, N., Beard, C., & Bower, E. (2005). Interpretation bias and social anxiety.

Cognitive Therapy and Research, 29(4), 433-443.

Angermeyer, M. C., & Matschinger, H. (2004). Public attitudes to people with

depression: Have there been any changes over the last decade? *Journal of Affective*

Disorders, 83(2-3), 177-182.

Bachorowski, J., & Owren, M. J. (2001). Not all laughs are alike: Voiced but not

unvoiced laughter readily elicits positive affect. *Psychological Science, 12*(3), 252-

257.

Bagwell, C. L., Bender, S. E., Andreassi, C. L., Kinoshita, T. L., Montarello, S. A., &

Muller, J. G. (2005). Friendship quality and perceived relationship changes predict

psychosocial adjustment in early adulthood. *Journal of Social and Personal*

Relationships, 22(2), 235-254.

Barrett, M. S., & Barber, J. P. (2007). Interpersonal profiles in major depressive disorder.

Journal of Clinical Psychology, 63(3), 247-266.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal

attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3),

497-529.

Bippus, A. M. (2000). Making sense of humor in young romantic relationships: Understanding partners' perceptions. *Humor: International Journal of Humor Research, 13*(4), 395-417.

Bippus, A. M. (2005). Humor usage during recalled conflicts: The effect of form and sex on recipient evaluations. In S. P. Shohov (Ed.), *Advances in psychology research* (vol. 34). Hauppauge, NY, US: Nova Science Publishers.

Bollmer, J. M., Harris, M. J., Milich, R., & Georgesen, J. C. (2003). Taking offense: Effects of personality and teasing history on behavioral and emotional reactions to teasing. *Journal of Personality, 71*(4), 557-603.

Butzer, B., & Kuiper, N. A. (2008). Humor use in romantic relationships: The effects of relationship satisfaction and pleasant versus conflict situations. *Journal of Psychology: Interdisciplinary and Applied, 142*(3), 245-260.

Campbell, L., Martin, R. A., & Ward, J. R. (2008). An observational study of humor use while resolving conflict in dating couples. *Personal Relationships, 15*(1), 41-55.

Cann, A., & Calhoun, L. G. (2001). Perceived personality associations with differences in sense of humor: Stereotypes of hypothetical others with high or low senses of humor. *Humor: International Journal of Humor Research, 14*(2), 117-130.

Çeçen, A. R. (2007). Humor styles in predicting loneliness among turkish university students. *Social Behavior and Personality, 35*(6), 835-844.

Corwyn, R. F. (2000). The factor structure of global self-esteem among adolescents and adults. *Journal of Research in Personality, 34*(4), 357-379.

Coyne, J. C. (1976). Depression and the response of others. *Journal of Abnormal Psychology, 85*(2), 186-193.

Crawford, M., & Gressley, D. (1991). Creativity, caring, and context: Women's and

men's accounts of humor preferences and practices. *Psychology of Women*

Quarterly, 15(2), 217-231.

Dobson, K. S. (1989). Real and perceived interpersonal responses to subclinically

anxious and depressed targets. *Cognitive Therapy and Research, 13*(1), 37-47.

Erickson, S. J., & Feldstein, S. W. (2007). Adolescent humor and its relationship to

coping, defense strategies, psychological distress, and well-being. *Child Psychiatry*

& Human Development, 37(3), 255-271.

Fleming, J. S., & Courtney, B. E. (1984). The dimensionality of self-esteem: II.

hierarchical facet model for revised measurement scales. *Journal of Personality and*

Social Psychology, 46(2), 404-421.

Fraley, B., & Aron, A. (2004). The effect of a shared humorous experience on closeness

in initial encounters. *Personal Relationships, 11*(1), 61-78.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The

broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218-

226.

Freiheit, S. R., Overholser, J. C., & Lehnert, K. L. (1998). The association between

humor and depression in adolescent psychiatric inpatients and high school students.

Journal of Adolescent Research, 13(1), 32-48.

Frewen, P. A., Brinker, J., Martin, R. A., & Dozois, D. J. A. (2008). Humor styles and

personality-vulnerability to depression. *Humor: International Journal of Humor*

Research, 21(2), 179-195.

Gallivan, J. (1999). Gender and humor: What makes a difference? *North American Journal of Psychology, 1*(2), 307-318.

Gervais, M., & Wilson, D. S. (2005). The evolution and functions of laughter and humor: A synthetic approach. *Quarterly Review of Biology, 80*(4), 395-430.

Gibbons, F. X. (1987). Mild depression and self-disclosure intimacy: Self and others' perceptions. *Cognitive Therapy and Research, 11*(3), 361-380.

Giesler, R. B., Josephs, R. A., & Swann, W. B., Jr. (1996). Self-verification in clinical depression: The desire for negative evaluation. *Journal of Abnormal Psychology, 105*(3), 358-368.

Gotlib, I. H., & Robinson, L. A. (1982). Responses to depressed individuals: Discrepancies between self-report and observer-rated behavior. *Journal of Abnormal Psychology, 91*(4), 231-240.

Gray-Little, B., Williams, V. S. L., & Hancock, T. D. (1997). An item response theory analysis of the rosenberg self-esteem scale. *Personality and Social Psychology Bulletin, 23*(5), 443-451.

Gurtman, M. B. (1986). Depression and the response of others: Reevaluating the reevaluation. *Journal of Abnormal Psychology, 95*(1), 99-101.

Haeffel, G. J., Voelz, Z. R., & Joiner, T. E. (2007). Vulnerability to depressive symptoms: Clarifying the role of excessive reassurance seeking and perceived social support in an interpersonal model of depression. *Cognition & Emotion, 21*(3), 681-688.

Hampes, W. P. (1992). Relation between intimacy and humor. *Psychological Reports, 71*(1), 127-130.

Hampes, W. P. (1994). Relation between intimacy and the multidimensional sense of humor scale. *Psychological Reports, 74*(3), 1360-1362.

Hampes, W. P. (1999). The relationship between humor and trust. *Humor: International Journal of Humor Research, 12*(3), 253-259.

Hampes, W. P. (2001). Relation between humor and empathic concern. *Psychological Reports, 88*(1), 241-244.

Hampes, W. P. (2005). Correlations between humor styles and loneliness. *Psychological Reports, 96*(3), 747-750.

Hampes, W. P. (2006). Humor and shyness: The relation between humor styles and shyness. *Humor: International Journal of Humor Research, 19*(2), 179-187.

Hartup, W. W., & Stevens, N. (1997). Friendships and adaptation in the life course. *Psychological Bulletin, 121*(3), 355-370.

Hautzinger, M., Linden, M., & Hoffman, N. (1982). Distressed couples with and without a depressed partner: An analysis of their verbal interaction. *Journal of Behavior Therapy and Experimental Psychiatry, 13*(4), 307-314.

Hokanson, J. E., Hummer, J. T., & Butler, A. C. (1991). Interpersonal perceptions by depressed college students. *Cognitive Therapy and Research, 15*(6), 443-457.

Hokanson, J. E., Rubert, M. P., Welker, R. A., Hollander, G. R., & Hedeen, C. (1989). Interpersonal concomitants and antecedents of depression among college students. *Journal of Abnormal Psychology, 98*(3), 209-217.

Howes, M. J., & Hokanson, J. E. (1979). Conversational and social responses to depressive interpersonal behavior. *Journal of Abnormal Psychology, 88*(6), 625-634.

Huppert, J. D., Pasupuleti, R. V., Foa, E. B., & Mathews, A. (2007). Interpretation biases in social anxiety: Response generation, response selection, and self-appraisals. *Behaviour Research and Therapy, 45*(7), 1505-1515.

Joiner, T. E., Jr., Metalsky, G. I., Katz, J., & Beach, S. R. H. (1999). Depression and excessive reassurance-seeking. *Psychological Inquiry, 10*(4), 269-278.

Joiner, T. E., Alfano, M. S., & Metalsky, G. I. (1992). When depression breeds contempt: Reassurance seeking, self-esteem, and rejection of depressed college students by their roommates. *Journal of Abnormal Psychology, 101*(1), 165-173.

Joiner, T. E., & Metalsky, G. I. (1995). A prospective test of an integrative interpersonal theory of depression: A naturalistic study of college roommates. *Journal of Personality and Social Psychology, 69*(4), 778-788.

Jones, D. C., Newman, J. B., & Bautista, S. (2005). A three-factor model of teasing: The influence of friendship, gender, and topic on expected emotional reactions to teasing during early adolescence. *Social Development, 14*(3), 421-439.

Keltner, D., Capps, L., Kring, A. M., Young, R. C., & Heerey, E. A. (2001). Just teasing: A conceptual analysis and empirical review. *Psychological Bulletin, 127*(2), 229-248.

Keltner, D., Young, R. C., Heerey, E. A., Oemig, C., & Monarch, N. D. (1998). Teasing in hierarchical and intimate relations. *Journal of Personality and Social Psychology, 75*(5), 1231-1247.

Kernis, M. H., Whisenhunt, C. R., Waschull, S. B., Greenier, K. D., Berry, A. J., Herlocker, C. E., et al. (1998). Multiple facets of self-esteem and thier relations to depressive symptoms. *Personality and Social Psychology Bulletin, 24*(6), 657-668.

Kirsh, G.A., & Kuiper, N.A. (2003, June). Sense of humor use in adolescent relationships and associations with psychological well-being. In R. Martin (Chair), *Laughter is not always the best medicine.* Symposium conducted at the Annual Conference of the Canadian Psychological Association, Hamilton, Ontario.

Kuiper, N. A., Grimshaw, M., Leite, C., & Kirsh, G. (2004). Humor is not always the best medicine: Specific components of sense of humor and psychological well-being. *Humor: International Journal of Humor Research, 17*(1-2), 135-168.

Kuiper, N. A., Leite, C. (in press). Personality Impressions Associated with Four Distinct Humor Styles. *Scandinavian Journal of Psychology.*

Kuiper, N. A., Martin, R. A., & Olinger, L. J. (1993). Coping humour, stress, and cognitive appraisals. *Canadian Journal of Behavioural Science, 25*(1), 81-96.

Lefevre, E. R., & West, M. L. (1981). Assertiveness: Correlations with self-esteem locus of control, interpersonal anxiety, fear of disapproval, and depression. *Psychiatric Journal of the University of Ottawa, 6*(4), 247-251.

Lovibond, P. F. & Lovibond, S. H. (1995). The structure of negative emotional states: comparison of the depression anxiety stress scales (DASS) with the beck depression and anxiety inventories. *Behaviour Research and Therapy, 33*(3), 335-343.

Marcus, D. K., & Askari, N. H. (1999). Dysphoria and interpersonal rejection: A social relations analysis. *Journal of Social and Clinical Psychology, 18*(3), 370-384.

Martin, R. A. (1996). The situational humor response questionnaire (SHRQ) and coping humor scale (CHS): A decade of research findings. *Humor: International Journal of Humor Research, 9*(3-4), 251-272.

Martin, R. A. (2007). *The psychology of humor: An integrative approach*. New York: Academic Press.

Martin, N., & Johnston, V. (2007). *A time for action: Tackling stigma and discrimination: Report to the Mental Health Commission of Canada*. Retrieved from: http://www.mentalhealthcommission.ca/SiteCollectionDocuments/Anti-Stigma/TimeforAction_Eng.pdf

Martin, R. A., & Kuiper, N. A. (1999). Daily occurrence of laughter: Relationships with age, gender, and type A personality. *Humor: International Journal of Humor Research, 12*(4), 355-384.

Martin, R. A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the humor styles questionnaire. *Journal of Research in Personality, 37*(1), 48-75.

Maselli, M. D., & Altrocchi, J. (1969). Attribution of intent. *Psychological Bulletin, 71*(6), 445-454.

Mattick, R. P., & Clarke, J. C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour Research and Therapy, 36*(4), 455-470.

Nezlek, J. B., & Derks, P. (2001). Use of humor as a coping mechanism, psychological adjustment, and social interaction. *Humor: International Journal of Humor Research, 14*(4), 395-413.

Nezlek, J. B., Hampton, C. P., & Shean, G. D. (2000). Clinical depression and day-to-day social interaction in a community sample. *Journal of Abnormal Psychology, 109*(1), 11-19.

Nezlek, J. B., Imbrie, M., & Shean, G. D. (1994). Depression and everyday social interaction. *Journal of Personality and Social Psychology, 67*(6), 1101-1111.

Nezlek, J. B., Kowalski, R. M., Leary, M. R., Blevins, T., & Holgate, S. (1997). Personality moderators of reactions to interpersonal rejection: Depression and trait self-esteem. *Personality and Social Psychology Bulletin, 23*(12), 1235-1244.

Olson, M. L., Hugelshofer, D. S., Kwon, P., & Reff, R. C. (2005). Rumination and dysphoria: The buffering role of adaptive forms of humor. *Personality and Individual Differences, 39*(8), 1419-1428.

Orth, U., Robins, R. W., & Roberts, B. W. (2008). Low self-esteem prospectively predicts depression in adolescence and young adulthood. *Journal of Personality and Social Psychology, 95*(3), 695-708.

Platt, T. (2008). Emotional responses to ridicule and teasing: Should gelotophobes react differently? *Humor: International Journal of Humor Research, 21*(2), 105-128.

Pozo, C., Carver, C. S., Wellens, A. R., & Scheier, M. F. (1991). Social anxiety and social perception: Construing others' reactions to the self. *Personality and Social Psychology Bulletin, 17*(4), 355-362.

Puhlik-Doris, P. (2004). *The humor styles questionnaire: Investigating the role of humor in psychological wellbeing.* Unpublished Ph.D. dissertation, University of Western Ontario, London, Ontario.

Regan, P. C., & Joshi, A. (2003). Ideal partner preferences among adolescents. *Social Behavior and Personality, 31*(1), 13-20.

Roberts, J. E., & Monroe, S. M. (1994). A multidimensional model of self-esteem in depression. *Clinical Psychology Review, 14*(3), 161-181.

Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the rosenberg self-esteem scale. *Personality and Social Psychology Bulletin, 27*(2), 151-161.

Rosenberg, M., (1965). *Society and the Adolescent Self-Image.* NJ: Princeton University Press.

Segal, D. L. (2005). Relationships of assertiveness, depression, and social support among older nursing home residents. *Behavior Modification, 29*(4), 689-695.

Segrin, C., & Dillard, J. P. (1992). The interactional theory of depression: A meta-analysis of the research literature. *Journal of Social & Clinical Psychology, 11*(1), 43-70.

Smoski, M. J., & Bachorowski, J. (2003). Antiphonal laughter between friends and strangers. *Cognition & Emotion, 17*(2), 327-340.

Sprecher, S., & Regan, P. C. (2002). Liking some things (in some people) more than others: Partner preferences in romantic relationships and friendships. *Journal of Social and Personal Relationships, 19*(4), 463-481.

Starr, L. R., & Davila, J. (2008). Excessive reassurance seeking, depression, and interpersonal rejection: A meta-analytic review. *Journal of Abnormal Psychology, 117*(4), 762-775.

Swann, W. B., Hixon, J. G., Stein-Seroussi, A., & Gilbert, D. T. (1990). The fleeting gleam of praise: Cognitive processes underlying behavioral reactions to self-relevant feedback. *Journal of Personality and Social Psychology, 59*(1), 17-26.

Swann, W. B., Pelham, B. W., & Krull, D. S. (1989). Agreeable fancy or disagreeable truth? Reconciling self-enhancement and self-verification. *Journal of Personality and Social Psychology, 57 (5), 782-791.*

Thorson, J. A., Powell, F. C., Sarmany-Schuller, I., & Hampes, W. P. (1997). Psychological health and sense of humor. *Journal of Clinical Psychology, 53*(6), 605-619.

Tse, W. S., & Bond, A. J. (2004). The impact of depression on social skills: A review. *Journal of Nervous and Mental Disease, 192*(4), 260-268.

Wang, J., & Lai, D. (2008). The relationship between mental health literacy, personal contacts and personal stigma against depression. *Journal of Affective Disorders, 110*(1-2), 191-196.

Ward, J. R. (2004). *Humor and its association with friendship quality.* Unpublished masters thesis, University of Western Ontario, London, Ontario.

Weber, H., Wiedig, M., Freyer, J., & Gralher, J. (2004). Social anxiety and anger regulation. *European Journal of Personality, 18*(7), 573-590.

Yip, J. A., & Martin, R. A. (2006). Sense of humor, emotional intelligence, and social competence. *Journal of Research in Personality, 40*(6), 1202-1208.

Ziv, A., & Gadish, O. (1989). Humor and marital satisfaction. *Journal of Social Psychology, 129*(6), 759-768.

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Use of Human Subjects - Ethics Approval Notice

Review Number	08 01 14	Approval Date	08 01 29
Principal Investigator	Nick Kuiper/M. Sol Ibarra-Rovillard	End Date	08 04 30
Protocol Title	Reactions to social comments and psychological well-being		
Sponsor	n/a		

This is to notify you that The University of Western Ontario Department of Psychology Research Ethics Board (PREB) has granted expedited ethics approval to the above named research study on the date noted above.

The PREB is a sub-REB of The University of Western Ontario's Research Ethics Board for Non-Medical Research Involving Human Subjects (NMREB) which is organized and operates according to the Tri-Council Policy Statement and the applicable laws and regulations of Ontario. (See Office of Research Ethics web site: http://www.uwo.ca/research/ethics/)

This approval shall remain valid until end date noted above assuming timely and acceptable responses to the University's periodic requests for surveillance and monitoring information.

During the course of the research, no deviations from, or changes to, the protocol or consent form may be initiated without prior written approval from the PREB except when necessary to eliminate immediate hazards to the subject or when the change(s) involve only logistical or administrative aspects of the study (e.g. change of research assistant, telephone number etc). Subjects must receive a copy of the information/consent documentation.

Investigators must promptly also report to the PREB:
a) changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
b) all adverse and unexpected experiences or events that are both serious and unexpected;
c) new information that may adversely affect the safety of the subjects or the conduct of the study.

If these changes/adverse events require a change to the information/consent documentation, and/or recruitment advertisement, the newly revised information/consent documentation, and/or advertisement, must be submitted to the PREB for approval.

Members of the PREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the PREB.

Clive Seligman Ph.D.

Chair, Psychology Expedited Research Ethics Board (PREB)

The other members of the 2007-2008 PREB are: Mike Atkinson, David Dozois, Bill Fisher and Matthew Maxwell-Smith

CC: UWO Office of Research Ethics

This is an official document. Please retain the original in your files

APPENDIX B

<u>LETTER OF INFORMATION</u>

REACTIONS TO SOCIAL COMMENTS

In this study, we are interested in examining the use of and response to social comments and the way in which these experiences relate to well-being and social life. You will be asked to complete a booklet of questionnaires.

This study will take less than 60 minutes to complete, and you will receive one research credit for your participation. There are no known physical or psychological risks associated with this study. Your responses will be used for research purposes only and will be kept entirely confidential. You may withdraw from this study at any point in time, for any reason, without loss of credit. Furthermore, you have the right to omit any specific question without penalty. Upon completion of the booklet, you will be provided with a debriefing form offering further information pertaining to the study. Please feel free to contact the researchers with any questions or concerns that you may have in regards to this study.

M. Sol Ibarra-Rovillard, Hon. Sc.
M.Sc. Candidate, Dept. of Psychology,
University of Western Ontario
Room 315, Westminster College

Dr. Nick Kuiper, Ph.D
Thesis supervisor
Professor, Dept. of Psychology
Room 309, Westminster College

INFORMED CONSENT

REACTIONS TO SOCIAL COMMENTS

I, _____, have read and understood the Letter of
Information, have had the nature of the study explained to me, and hereby agree to
participate in the study described above. All questions have been answered to my
satisfaction.

Signature _____   Date _____

_____
Experimenter's signature

M. Sol Ibarra-Rovillard, Hon. Sc.   Dr. Nick Kuiper, Ph.D
M.Sc. Candidate, Dept. of Psychology,   Thesis supervisor
University of Western Ontario   Professor, Dept. of Psychology
Room 315, Westminster College   Room 309, Westminster College

APPENDIX C

DEBRIEFING FORM

REACTIONS TO SOCIAL COMMENTS

The purpose of this study was to examine the relationship between the use of four different humor styles and various aspects of psychological well-being and social life, particularly with respect to depression. Humor is fundamentally a social phenomenon that sometimes serves to enhance self and others - but can also have detrimental effects. Researchers have recently documented four different humor styles, two adaptive styles (self-enhancing and affiliative) and two maladaptive styles (self-defeating and aggressive). Self-enhancing humor refers to the use of humor in the face of stress to help one cope with the situation, affiliative humor refers to the use of humor to facilitate social relationships, aggressive humor refers to the use of humor to criticize others, and self-defeating humor refers to the use of humor to amuse others, but at one's own expense. Even though humor is utilized most often during social encounters, the role of humor on interpersonal relationships is not yet well understood. There is some research showing that maladaptive humor is used more frequently by maladjusted couples, and that it is associated with a lower ability to initiate social interactions and lower satisfaction with social support. In contrast, the use of adaptive humor has been found to relate to higher levels of intimacy in relationships, higher satisfaction with romantic relationships, and with greater social support.

Prior work has shown that increased levels of depression are also associated with various interpersonal difficulties. Accordingly, this study aimed to investigate how humor styles, experience with humorous interactions, and reactions to humorous and non-humorous comments are related to the social skills and satisfaction with social life of depressed and non-depressed individuals. As such, you were given questionnaires measuring various components of well-being, humor styles, and experiences with humor. This study further aimed to investigate whether people react differently to a humorous comment made by a non-depressed individual than to the same humorous comment made by someone who is feeling depressed. To this end, you were given a measure with four scenarios describing a hypothetical casual acquaintance making each of the four types of humorous comments. Some of the participants received the version describing the casual acquaintance as depressed, whereas other participants received the version that did not mention anything about the mental health of the casual acquaintance. Finally, as a further comparison condition, some of the participants in this study received four scenarios which described a non-depressed individual making non-humorous comments.

We would like to thank you very much for your participation in this study. The information you provided will contribute to our understanding of the relationship between humor, psychological well-being, and social interactions. If you are interested in this topic, you are encouraged to take a look at the references that are listed below. Also, please feel free to ask us any further questions that you have pertaining to this research.

If you have any questions about your rights as a research participant, you should contact the Director of the Office of Research Ethics at ethics@uwo.ca or 661-3036. If you are feeling distressed, or depressed, and feel that you would like to talk with someone, please go to the Student Development Center's Psychological Counseling Services, Room 235 located in SDC, UCC Room 210 (phone # 519-661-3031).

REFERENCES

Martin, A. R., Puhlik-Doris, P., Larsen, G., Gray, J., Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: development of the humor styles questionnaire. *Journal of Research in Personality, 37*, 48-75.

Nezlek, J. B., Imbrie, M., Shean, G. D. (1994). Depression and everyday social interaction. *Journal of Personality and Social Psychology, 67(6)*, 1101-1111.

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M.Sc. Candidate, Dept. of Psychology,   Thesis supervisor
University of Western Ontario   Professor, Dept. of Psychology
Room 315, Westminster College   Room 309, Westminster College

APPENDIX D

RSC-CND Inventory

Instructions: *We are interested in finding out about your reactions to different types of comments that people can make. You will be presented with a brief scenario four times - each time the scenario has a different ending. Please answer the set of questions beneath each scenario as they pertain to that specific scenario. Thus, for each scenario, please circle the appropriate number on the rating scales to describe how you would typically react to the use of that particular set of comments.*

A) Imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts making comments that put down their own academic abilities. This person makes several self-defeating comments that highlight their own intellectual faults and academic weaknesses, in order to get the others to like and accept them.

1) How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?

       More Positive 1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:
a) Laughing?

       Not at all   1   2   3   4   5   Very Much

b) Asking this person to stop making this type of comment?

       Not at all   1   2   3   4   5   Very Much

c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?

       Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:
a) continue interacting with this casual acquaintance in the future?

       Not at all   1   2   3   4   5   Very Much

b) become a closer friend of this casual acquaintance in the future?

       Not at all   1   2   3   4   5   Very Much

g) avoid this casual acquaintance in the future?

       Not at all   1   2   3   4   5   Very Much

RSC-CND Inventory (continued)

B) Now, imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts telling several harmless comments about a party they recently went to. This person makes these comments to entertain the rest of you and put you at ease.

1) How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?
               More Positive   1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:

    a) Laughing?
              Not at all   1   2   3   4   5   Very Much

    b) Asking this person to stop making this type of comment?
              Not at all   1   2   3   4   5   Very Much

    c) Trying to ignore these comments by changing the topic of the conversation or doing
       something else, such as reading the course outline?
             Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:

    a) continue interacting with this casual acquaintance in the future?
             Not at all   1   2   3   4   5   Very Much

    b) become a closer friend of this casual acquaintance in the future?
             Not at all   1   2   3   4   5   Very Much

    g) avoid this casual acquaintance in the future?
             Not at all   1   2   3   4   5   Very Much

RSC-CND Inventory (continued)

C)   Now, imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts making comments that ridicule your academic abilities. This person continues to comment about your intellectual faults and academic weaknesses, in order to put you down.

1)   How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?

  More Positive   1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:

a) Laughing?

  Not at all   1   2   3   4   5   Very Much

b) Asking this person to stop making this type of comment?

  Not at all   1   2   3   4   5   Very Much

c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?

  Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:

a) continue interacting with this casual acquaintance in the future?

  Not at all   1   2   3   4   5   Very Much

b) become a closer friend of this casual acquaintance in the future?

  Not at all   1   2   3   4   5   Very Much

g) avoid this casual acquaintance in the future?

  Not at all   1   2   3   4   5   Very Much

RSC-CND Inventory (continued)

D) Now, imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts making comments about the amount of time and work they will have to dedicate towards this class, if they are to pass it. These comments indicate that this person has a relaxed yet realistic perspective on this situation.

1) How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?
> More Positive   1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:

a) Laughing?
> Not at all   1   2   3   4   5   Very Much

b) Asking this person to stop making this type of comment?
> Not at all   1   2   3   4   5   Very Much

c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?
> Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:

a) continue interacting with this casual acquaintance in the future?
> Not at all   1   2   3   4   5   Very Much

b) become a closer friend of this casual acquaintance in the future?
> Not at all   1   2   3   4   5   Very Much

g) avoid this casual acquaintance in the future?
> Not at all   1   2   3   4   5   Very Much

RSC-HCND Inventory

Instructions: *We are interested in finding out about your reactions to different types of comments that people can make. You will be presented with a brief scenario four times - each time the scenario has a different ending. Please answer the set of questions beneath each scenario as they pertain to that specific scenario. Thus, for each scenario, please circle the appropriate number on the rating scales to describe how you would typically react to the use of that particular set of comments.*

A)   Imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts making humorous comments that put down their own academic abilities. This person tells several self-defeating jokes that highlight their own intellectual faults and academic weaknesses, in order to get the others to like and accept them.

1)   How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?

More Positive   1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:
   a) Laughing?

   Not at all   1   2   3   4   5   Very Much

   b) Asking this person to stop making this type of comment?

   Not at all   1   2   3   4   5   Very Much

   c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?

   Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:

   a) continue interacting with this casual acquaintance in the future?

   Not at all   1   2   3   4   5   Very Much

   b) become a closer friend of this casual acquaintance in the future?

   Not at all   1   2   3   4   5   Very Much

   g) avoid this casual acquaintance in the future?

   Not at all   1   2   3   4   5   Very Much

RCS-HCND Inventory (continued)

B) Now, imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts telling several harmless silly jokes about a party they recently went to. This person makes these humorous comments to entertain the rest of you and put you at ease.

1) How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?

       More Positive 1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:

a) Laughing?

       Not at all   1   2   3   4   5   Very Much

b) Asking this person to stop making this type of comment?

       Not at all   1   2   3   4   5   Very Much

c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?

       Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:

a) continue interacting with this casual acquaintance in the future?

       Not at all   1   2   3   4   5   Very Much

b) become a closer friend of this casual acquaintance in the future?

       Not at all   1   2   3   4   5   Very Much

g) avoid this casual acquaintance in the future?

       Not at all   1   2   3   4   5   Very Much

RSC-HCND Inventory (continued)

C)   Now, imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts making funny comments that ridicule your academic abilities. This person continues to joke about your intellectual faults and academic weaknesses, in order to put you down.

1)   How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?
　　　　　　　More Positive   1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:

a) Laughing?
　　　　Not at all   1   2   3   4   5   Very Much

b) Asking this person to stop making this type of comment?
　　　　Not at all   1   2   3   4   5   Very Much

c) Trying to ignore these comments by changing the topic of the conversation or doing
　　　something else, such as reading the course outline?
　　　　Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:

a) continue interacting with this casual acquaintance in the future?
　　　　Not at all   1   2   3   4   5   Very Much

b) become a closer friend of this casual acquaintance in the future?
　　　　Not at all   1   2   3   4   5   Very Much

g) avoid this casual acquaintance in the future?
　　　　Not at all   1   2   3   4   5   Very Much

RSC-HCND Inventory (continued)

D) Now, imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts making funny jokes and comments about the amount of time and work they will have to dedicate towards this class, if they are to pass it. These humorous comments indicate that this person has a relaxed yet realistic perspective on this situation.

1) How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?

        More Positive 1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:

a) Laughing?

        Not at all   1   2   3   4   5   Very Much

b) Asking this person to stop making this type of comment?

        Not at all   1   2   3   4   5   Very Much

c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?

        Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:

a) continue interacting with this casual acquaintance in the future?

        Not at all   1   2   3   4   5   Very Much

b) become a closer friend of this casual acquaintance in the future?

        Not at all   1   2   3   4   5   Very Much

g) avoid this casual acquaintance in the future?

        Not at all   1   2   3   4   5   Very Much

RSC-HCD Inventory

Instructions: *We are interested in finding out about your reactions to different types of comments that people can make. You will be presented with a brief scenario four times - each time the scenario has a different ending. Please answer the set of questions beneath each scenario as they pertain to that specific scenario. Thus, for each scenario, please circle the appropriate number on the rating scales to describe how you would typically react to the use of that particular set of comments.*

A)   Imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. You have recently heard that this person is feeling depressed – they are often sad, have less energy than usual, and don't seem to get as much pleasure out of life as they used to. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts making humorous comments that put down their own academic abilities. This person tells several self-defeating jokes that highlight their own intellectual faults and academic weaknesses, in order to get the others to like and accept them.

1) How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?

More Positive   1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:
    a) Laughing?

Not at all   1   2   3   4   5   Very Much

    b) Asking this person to stop making this type of comment?

Not at all   1   2   3   4   5   Very Much

    c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?

Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:
    a) continue interacting with this casual acquaintance in the future?

Not at all   1   2   3   4   5   Very Much

    b) become a closer friend of this casual acquaintance in the future?

Not at all   1   2   3   4   5   Very Much

    g) avoid this casual acquaintance in the future?

Not at all   1   2   3   4   5   Very Much

RSC-HCD Inventory (continued)

B) Now, imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. You have recently heard that this person is feeling depressed – they are often sad, have less energy than usual, and don't seem to get as much pleasure out of life as they used to. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts telling several harmless silly jokes about a party they recently went to. This person makes these humorous comments to entertain the rest of you and put you at ease.

1) How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?
    More Positive 1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:
    a) Laughing?
        Not at all   1   2   3   4   5   Very Much

    b) Asking this person to stop making this type of comment?
        Not at all   1   2   3   4   5   Very Much

    c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?
        Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:
    a) continue interacting with this casual acquaintance in the future?
        Not at all   1   2   3   4   5   Very Much

    b) become a closer friend of this casual acquaintance in the future?
        Not at all   1   2   3   4   5   Very Much

    g) avoid this casual acquaintance in the future?
        Not at all   1   2   3   4   5   Very Much

RSC-HCD Inventory (continued)

C) Now, imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. You have recently heard that this person is feeling depressed – they are often sad, have less energy than usual, and don't seem to get as much pleasure out of life as they used to. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts making funny comments that ridicule your academic abilities. This person continues to joke about your intellectual faults and academic weaknesses, in order to put you down.

1) How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?

More Positive 1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:
a) Laughing?

Not at all   1   2   3   4   5   Very Much

b) Asking this person to stop making this type of comment?

Not at all   1   2   3   4   5   Very Much

c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?

Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:
a) continue interacting with this casual acquaintance in the future?

Not at all   1   2   3   4   5   Very Much

b) become a closer friend of this casual acquaintance in the future?

Not at all   1   2   3   4   5   Very Much

g) avoid this casual acquaintance in the future?

Not at all   1   2   3   4   5   Very Much

RSC-HCD Inventory (continued)

D) Now, imagine that on the first day of class you enter a classroom and find a seat next to a casual acquaintance from a previous class. You have recently heard that this person is feeling depressed – they are often sad, have less energy than usual, and don't seem to get as much pleasure out of life as they used to. This person greets you and introduces you to two other people sitting in the row in front of you. Before the class begins, the four of you start a conversation about how hard this course seems to be - all of you are a bit worried about this. At one point, the casual acquaintance from your previous class starts making funny jokes and comments about the amount of time and work they will have to dedicate towards this class, if they are to pass it. These humorous comments indicate that this person has a relaxed yet realistic perspective on this situation.

1) How would these comments make you feel about yourself?

Pleased	1	2	3	4	5	Upset
Encouraged	1	2	3	4	5	Discouraged
Competent	1	2	3	4	5	Incompetent
Accepted	1	2	3	4	5	Rejected
Comfortable	1	2	3	4	5	Uncomfortable

2) How would these comments make you feel about this casual acquaintance?

        More Positive 1   2   3   4   5   More Negative

3) To what extent would you react to these comments by:
   a) Laughing?

        Not at all   1   2   3   4   5   Very Much

   b) Asking this person to stop making this type of comment?

        Not at all   1   2   3   4   5   Very Much

   c) Trying to ignore these comments by changing the topic of the conversation or doing something else, such as reading the course outline?

        Not at all   1   2   3   4   5   Very Much

4) To what extent would these comments make you want to:
   a) continue interacting with this casual acquaintance in the future?

        Not at all   1   2   3   4   5   Very Much

   b) become a closer friend of this casual acquaintance in the future?

        Not at all   1   2   3   4   5   Very Much

   g) avoid this casual acquaintance in the future?

        Not at all   1   2   3   4   5   Very Much