

Assessing the Effectiveness of Debriefing Following a Social Exclusion Paradigm

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Abstract

Researchers investigating social exclusion have identified a number of personal and interpersonal negative consequences of social exclusion. From an ethics perspective, this creates a disconcerting situation, in which participants are exposed to procedures known to have negative psychological consequences. Researchers rely on debriefing procedures to defuse any lasting negative consequences, but to our knowledge, no empirical studies have addressed the effectiveness of these procedures in the context of social exclusion research. In this paper, we report data from a survey assessing four key practical and ethical issues related to a debriefing procedure developed for social exclusion research. Specifically, we assessed (a) the emotional impact of the paradigm after debriefing (b) how effective the explanation of the purpose and use of deception was, (c) the likelihood that participants would discuss the research outside the lab, and (d) participants' knowledge of their rights to withdraw from the study. The data show that the debriefing procedure was largely effective, but it also raises some concern regarding participants' knowledge of their rights to withdraw their participation. The data is discussed in terms of making practical applications for researchers and ethics review boards.

Keywords: social exclusion, debriefing, false feedback

1. Introduction

Research shows that social exclusion causes a number of negative personal and interpersonal consequences. For example, social exclusion reduces people's sense of a meaningful existence (Williams et al., 2002) and self-esteem (Leary, Tambor, Terdal, & Downs, 1995); it causes emotional distress (Leary, Springer, Negel, Ansell, & Evans, 1998), increases self-defeating behavior (Twenge, Cantanese, & Baumeister, 2002), and facilitates aggression (Twenge, Baumeiseter, Tice, & Stucke, 2001).

Twenge et al. (2001) developed a social exclusion paradigm that has become relatively widely-used. In this paradigm, participants complete a personality test. Then, the researcher provides participants with accurate information about their introversion-extroversion score. The researcher goes on to ostensibly use this information to explain to participants that they will either have many good quality relationships throughout their lives (i.e., social acceptance) or have a few poor quality relationships throughout their lives (i.e., social exclusion).

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Using this paradigm, researchers found that social exclusion impaired thought (Baumeister, Twenge, & Nuss, 2002) and self-control (Baumeister, DeWall, Ciarocco, & Twenge, 2005), and it reduced self-awareness (Twenge, Catanese, & Baumeister, 2003), empathy (DeWall & Baumeister, 2006), and prosocial behavior (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007).

From an ethics perspective, then, researchers—aware of the significant psychological effects of social exclusion and this paradigm, in particular—expose participants to brief laboratory experiences of social exclusion without being fully aware how well debriefing addresses the ethical implications of this paradigm. To our knowledge, this important issue has not been addressed.

The purpose of this research, then, was to examine whether debriefing procedures are effective. More precisely, we were concerned with practical and ethical issues related to the effectiveness of debriefing participants exposed to laboratory-based experiences of social exclusion. To address this, we developed a survey that assessed four key ethical and practical issues related to debriefing participants in Twenge et al.'s (2001) social exclusion paradigm.

1.1 Emotional Experience

One of the critical ethical issues in social exclusion research is the emotional experience of participants. From an ethics standpoint, this means two things. First, it includes the *minimal risk* criteria, which is met when the degree of distress that participants experience during the study is no more than the degree of distress they experience in the normal course of life (see Shaughnessy, Zechmeister, & Zechmeister, 2009). Research (Sommer, Williams, Ciarocco, & Baumeister, 2001) indicates that social exclusion takes place outside the lab as a normal part of life, but it can have real and significant consequences (Leary, Kowalski, Smith, & Phillips, 2003).

Second, it is also important that researchers consider the emotional state of participants following debriefing. Aronson, Ellsworth, Carlsmith, and Gonzales (1990) suggested that informing participants that they were deceived through false feedback may produce negative feelings in them. However, they stress that the primary goal of debriefing is to return participants to their pre-experimental state of mind. In short, participants should leave the study feeling as they did before participating. It is, therefore, important to assess how effectively this is done.

1.2 Revealing the Purpose of the Study and Use of Deception

Aronson, Wilson, and Brewer (1998) suggest that another goal of debriefing is to make participants aware of the purpose of the research. This is particularly important because deception is used in social exclusion research. While some research (e.g., Christensen, 1988) suggests that deception is more beneficial to participants (e.g., educationally) than research without deception, deception is inevitable an ethical issue to consider, especially in this context, where the social exclusion feedback threatens a core and primary psychological need (see Baumeister & Leary, 1995; Deci & Ryan, 2000). As a result, it was important to assess participants' retrospective opinion about their experience in light of the use of false feedback.

1.3 Beyond the Lab

One of the practical issues that must be considered using false feedback is whether participants will reveal this to other potential participants. If this takes place, the research is largely invalid or, at the least, tainted. The debriefing procedures used in our studies included subtle questions probing for suspicion and an emphasis on the importance of not revealing this information to other participants (see Aronson et al., 1998).

Edlund, Sagarin, Skowronski, Johnson, and Kutter (2009) found that participants were less likely to reveal critical experiment information if they stressed the importance of not talking to others about their experiences in studies or if they asked the participants not to reveal critical information. Therefore, it is important to assess participants' commitment to maintaining the integrity of the research with potential participants.

1.4 Terminating Participation

Finally, an ethical issue to consider in social exclusion research is whether participants feel their liberties as participants are being supported. Specifically, participants have the option to withdraw from a study at any time (APA, 2002, as reported in Spatz & Kardas, 2008). While this is an issue that all researchers using human subjects consider, this *may* pose a special problem for social exclusion research. One of the consequences of social exclusion is that those who are socially excluded are especially motivated to reestablish social relationships (Maner, DeWall, Bauemeister, & Schaller, 2007). As a result, it *may be* that the particular psychological state in which social exclusion places participants in increases the pressure to continue their role as a *good participant* by continuing with their participation (Orne, 1962).

1.5 The Present Study

We identified these four areas as ethical and practical issues related to debriefing in social exclusion research that needed investigation. This data was collected from some of the participants who volunteered to take part in two studies using Twenge et al.'s (2001) paradigm. In the course of these studies, participants were randomly assigned to one of two additional conditions that were under investigation. After receiving the false acceptance/exclusion feedback, participants were either told the feedback was invalid and asked to write about why they thought personality tests could not predict their future relationships or were assigned to a control condition and asked to write about their typical day (see Kitchens & Gohm, 2010 for more details about reappraising social exclusion feedback). The important part of this manipulation for the present paper is that it provided a unique situation in which some participants were immediately told the feedback was invalid and some participants were not. Therefore, this context allowed us to examine whether these conditions would influence their post-debriefing experience. We examined this in a secondary, follow-up analysis by analyzing the effect of these conditions on some of the questions in our post-debriefing survey. The primary goal, however, was to provide descriptive statistics on the effectiveness of debriefing, as defined by the four issues outlined earlier.

2. Method

2.1 Participants

Participants took part in two studies investigating issues related to the consequences of social exclusion. Specifically, following the debriefing session of these studies, some of the participants ($N = 119$) were asked to complete a short questionnaire about their experiences. Of those participants, eight participants' data were excluded in the analysis reported in this paper because they indicated they were suspicious the feedback was false, and three participants' data were excluded in the analysis reported in this paper because their experimental condition information was not recorded.

The number of participants included in the analysis reported in this paper was 108. Of those reporting ($n = 106$; 68 female), 67% indicated they were White/Caucasian, 27.4% indicated they were Black/African American, 4.7% indicated they were Asian/Pacific Islanders, and 0.9% indicated they were Hispanic/Latino. The average age of these participants was $M_{age} = 19.88$ ($SD = 3.13$, 1 not reporting).

2.2 Informed Consent Form

The consent forms informed participants that some information about the study would be withheld from them until the end, but it described all the relevant procedures, including that they would receive feedback about their scores on personality tests. The consent form also warned participants that their “personality profile may have negative implications regarding your future relationships.” Particularly relevant to this paper, the consent form indicated that participants could withdraw from the study without penalty.

2.3 The Social Exclusion Procedure

The debriefing data was collected across two studies. The procedures of both of the studies were largely identical. In both studies, participants signed consent forms and were told that the purpose of this study was to assess the association between the quality of their future relationships and their cognitive abilities. After participants completed personality measures, one of which was Goldberg’s (1990) Big-5 personality scale, the experimenter calculated participants’ introversion-extroversion scores. The participants were, then, accurately informed their scores indicated they were an extrovert (scored 6-9) or an introvert (scored 1-5).

Participants randomly assigned to receive social acceptance feedback were told that being an extrovert (or an introvert) was a good thing for future relationships, and then were read this personality profile:

You’re the type who has rewarding relationships throughout life. You’re likely to have a long and stable marriage and have friendships that will last into your later years. The odds are that you’ll always have friends and people who care about you.

Participants randomly assigned to receive social exclusion feedback were told that being an extrovert (or an introvert) was a bad thing for relationships, and then were read this personality profile:

You’re the type who will end up alone later in life. You may have friends and relationships now, but by mid-20s most of these will have drifted away, you. You may even marry or have several marriages, but these are likely to be short-lived and not continue into your 30s. Relationships don’t last, and when you’re past the age where people are constantly forming new relationships, the odds are you’ll end up being alone more and more.

Immediately following the feedback, participants were randomly assigned to one of two reappraisal conditions. Participants assigned to the reappraisal condition were told that the personality tests were very inaccurate ways to assess future relationships. Participants were then instructed to write for 4-minutes why they think these personality tests make poor methods for assessing the number and quality of their future relationships.

Participants assigned to the control condition were told that another way to learn about them and people who score like them (on these personality tests) is to write about themselves. Participants were then instructed to write for 4-minutes about how they spend their time on a typical day.

Following these key manipulations, participants completed various dependent measures not relevant to this paper¹. Finally, participants were debriefed, signed the second consent form, completed the debriefing survey, and given course credit in exchange for their participation.

2.4 Debriefing and Second Consent Form

At the end of the study, participants were fully debriefed (see Appendix for debriefing script).

To comply with the IRB's request, we provided all participants with a secondary consent form following the debriefing. This consent form stated that the purpose of the study had been fully explained to them, and that they were aware that some aspects of the study had been prearranged. This consent form further explained that they had the option to refuse the use of the data now that they had been fully informed. Participants indicated whether they wanted their data used or destroyed by checking the appropriate box and signing the form. In both of the studies where the data for this work was collected, no one asked that their data be destroyed.

2.5 Debriefing Survey

Following the secondary consent form, participants were offered to complete a brief survey on their experience in the studies. They were told that they were not required to complete this, but this data was going to be used to help make people's experience in our studies better.

The survey contained 9 questions. The first question asked about their level of distress that they experienced in the study, as compared to the normal distress experienced in their everyday lives. Participants responded on a 5-point scale that was labeled at each interval (1 = *much more distress*, 2 = *slightly more distress*, 3 = *about the same as my everyday life*, 4 = *slightly less distress*, 5 = *much less distress*). Reverse coding was used to analyze this data, so that higher number indicated greater degrees of stress.

The second question asked if they would have participated in this study if they had known they were going to receive false feedback. Participants responded by circling 1 (*yes*), 2 (*no*), or 3 (*unsure*). For analysis of this data, this was recoded, such that 1 = *no*, 2 = *unsure*, and 3 = *yes*. This was done so that higher numbers indicated greater certainty that participants would have participated if they had known false feedback was used.

The third question asked if they wanted to stop during the study because of psychological or emotional distress. Participants responded by circling 1 (*yes*) or 2 (*no*).

The fourth question asked if they felt like they could stop at any time. Participants responded by indicating 1 (*yes*), 2 (*no*) or 3 (*I was unaware I could stop*).

The fifth question asked about how much pressure they felt to continue in this study as compared to other studies in which they have participated. Participants responded by circling 1 (*more pressure*), 2 (*less pressure*), 3 (*the same amount of pressure*), or 4 (*not applicable [I have not participated in other studies]*). For the analysis of this question, the first three responses were recoded, such that 1 = *less pressure*, 2 = *the same amount of pressure*, and 3 = *more pressure*. This was done so that higher numbers represented increasing degrees of pressure. Those who indicated that they had not participated in other studies were excluded from the secondary follow-up analysis assessing how the experimental conditions affected their responses on the survey.

The sixth question asked if they would recommend others to participate in this study. Participants responded by circling 1 (*yes*), 2 (*no*), or 3 (*unsure*). For analysis of this data, the responses were recoded so that 1 = *no*, 2 = *unsure*, and 3 = *yes*. Higher numbers indicated a greater degree of certainty that they would recommend the study to others.

The seventh question asked the likelihood of them telling others that the feedback used in the study was not true. Participants responded by circling 1 (*very unlikely*), 2 (*somewhat unlikely*), 3 (*unsure*), 4 (*somewhat likely*) or 5 (*very likely*).

The eighth question asked if they felt like the explanation of the research at the end of the study (i.e., during the debriefing) was sufficient. Participants responded by circling 1 (*yes*) or 2 (*no*).

The final question asked participants how they felt (psychologically and emotionally) after participating in the study, as compared to how they felt before they had participated. Participants indicated their answer by circling 1 (*better*), 2 (*worse*), or 3 (*about the same*). For analysis of this data, responses were recoded, such that 1 = *worse*, 2 = *about the same*, and 3 = *better*. Higher numbers indicated an improved state of mind.

3. Results

Descriptive statistics were used to identify strengths and weaknesses in the debriefing procedure by examining the trends in the data.

3.1 Emotional Impact

It was unclear whether social exclusion research could be classified as *minimal risk*, in which the distress experienced in the study was no greater than what was experienced in the course of normal life. The data show that 40.7% of participants reported feeling the same level of stress during the study as they do during the course of their normal lives. Somewhat alarming is that slightly more than half of the participants (51.9%) reported feeling either slightly more or much more distress than in their normal lives (see Table 1).

Table 1: Reported Distress Experienced by Participants during Study as Compared to Distress Experienced in Everyday Life by Condition and Total

Responses	Accepted Condition		Excluded Condition		Total
	Invalid	Control	Invalid	Control	
Much Less	00.0	00.0	00.0	04.2	00.9
Slight Less	03.3	03.3	04.2	16.7	06.5
About Same	43.3	40.0	37.5	41.7	40.7
Slightly More	10.0	20.0	37.5	20.8	21.3
Much More	43.3	36.7	20.8	16.7	30.6

Note. The question on the survey read “What is the level of distress that you experienced in this study as compared to the level of distress you experience in your everyday life (i.e., outside this research study)?” Numbers represent the percentage of participants in each condition who indicated one of the possible responses. The total column represents the total percentage of participants’ responses across possible responses. Some participants ($n = 5$) failed to answer this question.

It was also important to assess whether the debriefing procedures effectively eliminated any distress experienced as a result of participating in the study. The data show that most of the participants (75.9%) who answered this question reported feeling the same as they did before they participated in the study, and some of the participants (18.5%) who answered this question reported feeling better than they had before participating in the study. Only 1 participant reported feeling worse (see Table 2). Interestingly, this participant was assigned to the social exclusion condition and did not write about why the feedback was invalid.

Table 2: Reported Feelings (Psychologically and Emotionally) After Participating in Study as Compared to Feelings before Participating in Study By Condition and Total

Responses	Accepted Condition		Excluded Condition		Total
	Invalid	Control ^a	Invalid ^b	Control ^c	
Worse	00.0	00.0	00.0	04.2	00.9
About Same	80.0	83.3	70.8	66.7	75.9
Better	20.0	06.7	25.0	25.0	18.5

Note. The question on the survey read “How do you feel (psychologically and emotionally) *after* participating in this study, as compared to how you felt *before* you participated in this study?” Numbers represent the percentage of participants in each condition who indicated one of the possible responses. The total column represents the total percentage of participants’ responses across possible responses. Some participants ($n = 5$) failed to answer this question.

^aThree participants in this condition did not respond to this question.

^bOne participant in this condition did not respond to this question.

^c One participant in this condition did not respond to this question.

3.2 Revealing the Purpose of the Study and Use of Deception

Another goal of the debriefing session was to make sure that participants understood the purpose of the study. This was particularly important because deception was used. All but one participant who answered this question, indicated that the explanation of the study was sufficient (see Table 3).

Table 3: Participants who indicated the Explanation for the Research was Sufficient by Condition and Total

Responses	Accepted Condition		Excluded Condition		Total
	Invalid	Control ^a	Invalid ^b	Control ^c	
No	03.3	00.0	00.0	00.0	00.9
Yes	96.7	93.3	95.8	95.8	95.4

Note. The question on the survey read “Did you feel like that the explanation of this research at the end of the study was sufficient?” Numbers represent the percentage of participants in each condition who indicated one of the possible responses. The total column represents the total percentage of participants’ responses across possible responses. Some participants ($n = 4$) failed to answer this question.

^aTwo participants in this condition did not respond to this question.

^bOne participant in this condition did not respond to this question.

^c One participant in this condition did not respond to this question.

Furthermore, most of the participants (68.5%) reported that even if they had known the study included false feedback before they began, they would have still participated. Only a few were certain that they would not (7.4%; see Table 4).

Table 4: Participants who would take Part in Study if They Knew about False Feedback by Condition and Total

Responses	<u>Accepted Condition</u>		<u>Excluded Condition</u>		Total
	Invalid	Control	Invalid	Control	
No	06.7	06.7	04.2	12.5	07.4
Unsure	26.7	16.7	29.2	25.0	24.1
Yes	66.7	76.7	66.7	62.5	68.5

Note. The question on the survey read “As you were told at the end of the study, the feedback that we gave you about your personality was not true, but used to explore how you might naturally react to this kind of information. If you had known that you were going to receive feedback that was not true before the study, would you have participated? ” Numbers represent the percentage of participants in each condition who indicated one of the possible responses. The total column represents the total percentage of participants’ responses across possible responses.

3.3 Beyond the Lab

One practical issue related to the use of false feedback in social exclusion studies was whether participants would discuss the experiment with others. Most of the participants who answered this question (89.8%) said they would recommend this study to others, and no one reported that they would not recommend it to others (see Table 5).

Table 5: Participants Recommending the Study to Others by Condition and Total

Responses	<u>Accepted Condition</u>		<u>Excluded Condition</u>		Total
	Invalid	Control ^a	Invalid ^b	Control ^c	
No	00.0	00.0	00.0	00.0	00.0
Unsure	06.7	06.7	04.2	08.3	06.5
Yes	93.3	86.7	91.7	87.5	89.8

Note. The question on the survey read “Would you recommend that others participate in this study?” Numbers represent the percentage of participants in each condition who indicated one of the possible responses. The total column represents the total percentage of participants’ responses across possible responses. Some participants ($n = 4$) failed to answer this question.

^aTwo participants in this condition did not respond to this question.

^bOne participant in this condition did not respond to this question.

^cOne participant in this condition did not respond to this question.

Even though they would discuss this research, most of the participants (83.3%) who answered this question reported that it was very unlikely they would disclose this information to others. Only a few participants who answered this question were either unsure (3.7%) or were very likely to tell (1.9%; see Table 6).

Table 6: Participants Who Would Tell Others about False Feedback Manipulation by Condition and Total

Responses	Accepted Condition		Excluded Condition		Total
	Invalid	Control ^a	Invalid ^b	Control ^c	
Very Unlikely	86.7	83.3	83.3	79.2	83.3
Somewhat Unlikely	06.7	06.7	08.3	08.3	07.4
Unsure	03.3	03.3	04.2	04.2	03.7
Somewhat Likely	00.0	00.0	00.0	00.0	00.0
Very Likely	03.3	00.0	00.0	04.2	01.9

The question on the survey read “What are the chances that you will tell someone who might participate that the feedback in the study was not true, but used as a way to explore how one might react to this kind of information?” Numbers represent the percentage of participants in each condition who indicated one of the possible responses. The total column represents the total percentage of participants’ responses across possible responses. Some participants (n = 4) failed to answer this question.

a Two participants did not answer this question.

b One participant did not answer this question.

c One participant did not answer this question.

3.4 Terminating Participation

The final area we assessed was participants’ perception of their right to withdraw from the study. The data revealed that none of the participants wanted to stop because of emotional or psychological stress. This is true, despite the fact that most of the participants (63%) felt like they could stop at any time.

Perhaps the most alarming statistics in our data are the number of participants that did not feel like they could stop (21.3%) and the number of participants that were unaware they could stop (15.7%; see Table 7).

Table 7: Participants who Felt They Could Stop by Condition and Total

Responses	Accepted Condition		Excluded Condition		Total
	Invalid	Control	Invalid	Control	
No	26.7	20.0	16.7	20.8	21.3
Yes	53.3	60.0	75.0	66.7	63.0
Unaware	20.0	20.0	08.3	12.5	15.7

Note. The question on the survey read “Did you feel like you could stop at any time?” Numbers represent the percentage of participants in each condition who indicated one of the possible responses. The total column represents the total percentage of participants’ responses across possible responses.

To assess the specific pressure to continue in social exclusion studies, we asked participants how much pressure they felt to continue as compared to other studies they participated. Most participants (51.9%) reported feeling less pressure in this study, as compared to the pressure they felt to continue in other studies; however, 35.2% of participants said they felt more pressure to continue to participate, as compared to the pressure felt in other studies (see Table 8).

Table 8: Pressure Felt by Participants to Continue in this Study as Compared to Other Studies in Which They Have Taken Part by Condition and Total

Responses	Accepted Condition		Excluded Condition		Total
	Invalid	Control	Invalid	Control	
Less Pressure	43.3	53.3	50.0	62.5	51.9
Same	06.7	00.0	04.2	04.2	03.7
More Pressure	40.0	40.0	41.7	16.7	35.2
Not Applicable	10.0	06.7	04.2	16.7	09.3

Note. The question on the survey read “Did you feel like you could stop at any time?” Numbers represent the percentage of participants in each condition who indicated one of the possible responses. The total column represents the total percentage of participants’ responses across possible responses.

3.5 Effect of Relationship Feedback and Reappraisal on Experience

Because the design of the study allowed us to examine effects across the type of feedback *and* whether they were asked to think about the validity of the feedback, a secondary purpose of this study was to examine whether these variables influenced the post-debriefing experience. To assess main and interaction effects amongst these variables, separate 2 Feedback (social acceptance vs. social exclusion) \times 2 Validity (invalid vs. control) ANOVAs were performed where appropriate on the questions in the post-debriefing experience survey (i.e., questions 1, 2, 5, 6, 7, and 9). The results of these analyses showed that participants did not significantly differ in their responses to these questions as a function of these variables, except in one case.

The first question on the experience survey asked participants about the level of distress they experienced during the study as compared to the level of distress experienced in everyday life. Results showed a main effect for Feedback, $F(1, 104) = 4.34, p = .040$. Unexpectedly, participants that received social acceptance feedback ($M = 3.92, SD = 0.98$) reported that the level of distress experienced during the study as compared to their everyday life was greater than participants that received social exclusion feedback ($M = 3.52, SD = 0.99$). There was no main effect of Validity, $F(1, 104) = 1.68, p = .198$, and there was no interaction, $F(1, 104) = 1.25, p = .266$.

The results of this analysis are not clear because it seems unlikely that accepted participants found the feedback more distressing than excluded participants. One possibility is that the scale used to assess this was misinterpreted. The rating scale was labeled such that higher numbers indicated less distress. Except for this one area, the secondary analyses suggest that the debriefing session eliminated any differences between participants’ experience in the study, regardless of whether they received social acceptance or social exclusion feedback or whether they wrote about the feedback as invalid or not.

4. Discussion

The purpose of this work was to assess the effect of debriefing following a social exclusion paradigm. Debriefing is always an important and ethical step in research (Aronson et al., 1990), but this is particularly important in social exclusion research, which has identified numerous negative personal and interpersonal consequences as a result of social exclusion feedback.

The first area examined the emotional impact of the study. These data suggests that social exclusion studies have an emotional impact on participants. More than half reported feeling greater distress during the study than they do in their everyday lives; however, nearly all the participants felt the same as or better than they did before the study after debriefing.

Participants also felt the debriefing offered a satisfactory explanation of the research. This is important because participants should receive some educational benefit from participating in research (Aronson et al., 1990). Psychology departments often require students to participate in research (or some alternative) as a way to further research agendas, but it is justified by the belief that participants are compensated for their participation, in part, by receiving an educational return on their investment. Another reason this is important is because social exclusion research uses deception. One of the risks in using deception is that participants, often exposed to psychological science for the first time as participants in research, may become bitter about a science that operates under these conditions. Our data suggests that was not the case here, and therefore, it may support work on the educational value of studies with deception (e.g., Christensen, 1988). At the very least, it illustrates the effectiveness of our debriefing procedures to provide a clear rationale and explanation for the research.

While it is a goal to have participants fully informed at the end of a debriefing session, an unintended consequence for research using false feedback is that they will inform other potential participants about this information. Our data shows that they will recommend the study to others, but not tell them about the false feedback. This, of course, raises some concern. Past research (Taylor & Shepperd, 1996) shows that participants are unlikely to admit knowing about deception to researchers. This is why we followed the recommendations of Aronson et al. (1990) in our debriefing by including broad question to probe for suspicion (e.g., “Can you tell me in your own words the purpose of the experiment?”). Using these procedures, we identified a few participants who may have been aware that the feedback was false ($n = 8$). There is no perfect way to identify suspicion or prevent it, but research (Edlund, et al., 2009) shows that contamination of the participant pool is reduced by procedures used in our debriefing, such as stressing its importance (e.g., “If participants know what the experiment is about, they may alter their responses”) and asking for a verbal commitment not to tell (“Can you do that?”).

There was also a particular concern that participants’ perception of their right to terminate their participation in the study would be reduced because social exclusion research (Maner et al., 2007) shows that excluded participants are especially motivated for acceptance. We wondered whether this would exacerbate the *good participant role* (Orne, 2002) in the form of continuing on with the experiment even if they wanted to quit because of the emotional or psychological distress. We were pleased that no one wanted to stop because of any emotional or psychological stress, and most felt they could stop. However, while most of our participants felt less or the same amount of pressure to continue participating, a notable percentage indicated that there was more pressure. It is tempting to suggest that the majority indicates that there was nothing particularly unique about social exclusion studies that pressured them to continue their participation, but this may warrant further investigation. Also, alarming in this data was the number of participants that were simply unaware they could stop. This raises larger issues about how we communicate participants’ rights to them.

Overall, these data largely support our debriefing procedures as an effective tool. Participants were returned to a healthy frame of mind, educated about the research process, and were unlikely to contaminate the participant pool. All of this, however, must be considered in light of its limitation. This is self-report data. We are unaware, for example, about the number of participants that actually told others about the false feedback.

It is also possible that the mere participation in the study improved their perception of the study. Cognitive dissonance theory (Festinger, 1954) and self-perception theory (Bem, 1965) would suggest that taking part in the study might cause participants to evaluate the study more positively as a means of justifying their effort and because their attitude was determined by their participation, respectively. For example, Aronson and Mills (1959) showed that participants who underwent a severe initiation process to join a group conversation enjoyed the conversation more than participants who underwent a mild initiation process. Therefore, based on this research, excluded participants would be expected to have a more favorable attitude toward their experience than accepted participants. This explanation is weakened by our follow-up analyses, showing that accepted and excluded participants did not feel differently about their experiences as a function of condition.

In short, this study provides some useful information about the role of debriefing in social exclusion paradigms. In particular, this study contributes to a body of research that has grown in the last decade. Indeed, a brief glance at recent meta-analyses of social exclusion research (e.g., Gerber & Wheeler, 2009; Blackhart, Nelson, Knowles, & Baumeister, 2009) reveals that most of the studies were published since 2000. Therefore, the ultimate consequences beyond the lab needed attention.

4.2 Practical Applications of this Work

There are documented cases in which IRBs have prevented relatively innocuous studies (see Ceci & Buck, 2009). Indeed, IRBs tend to have a focus on preventing harm (Fiske, 2009). While this emphasis may be seen as valuable, it ignores the unintended consequences of preventing valuable research (Hyman, 2007). Consequently, one area that needs more empirical attention in human research is identifying participants' perception of the harm they experience in studies.

IRBs should use data in making decisions about research protocols when they can. This work does this for social exclusion research. In particular, this work provided descriptive information about participants' post-debriefing experience in social exclusion research. With the rise in these studies and the documented negative consequences of social exclusion, this is an important contribution to make in maintaining ethical research standards.

Apart from the ethical implications, one practical aspect of the debriefing that we found particularly useful for research purposes was asking the participants early in the debriefing session to describe in their own words what they thought the purpose of the experiment was. This question helped to accomplish two related goals. First, it was an effect method for probing for suspicion. If the participants indicated that the purpose of the study was to investigate how people react to the feedback, it was obvious that they were aware of its true purpose or aware enough that their data may be tainted. The other goal was to see if the cover story was effective. Many times, the participants repeated the cover story back in response to this question. This indicated that they were (a) paying attention to the rationale for the study and (b) likely believed that was the goal of the research.

4.4 Conclusion

Broadly speaking, the results from this work are an impetus for other researchers to consider the importance of debriefing in their work. Often the debriefing is seen as a secondary issue or a burdensome obligation. Instead, we suggest that researchers become familiar with effective debriefing techniques (see Aronson et al., 1990; Aronson et al., 1998). We also suggest that researchers consider investigating the effectiveness of these procedures. We were particularly motivated to do so in the context of social exclusion research because there was a large (and growing) body of work that identified several negative and significant personal and interpersonal consequences.

Exposing participants to conditions known to produce such effects should not be taken lightly, and IRBs should base their decisions on empirical evidence of harm. Therefore, we believe we have contributed to an area not yet investigated in this context, and encourage others to be more proactive in empirically supporting their ethical practices, particularly in areas of research known to have ill-effects.

5.1 References

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Footnotes

1. Details on the procedures of these studies or measurement instruments will be provided upon request.

Appendix

Now that you have been through the experiment, do you have any questions? Were any of the instructions unclear? Can you tell me in your own words the purpose of the experiment?

Let me tell you more about this experiment. I told you that the purpose of the study was to investigate the connection between the kind of relationships that you have or will have and your cognitive abilities. However, I am actually interested in how people respond to feedback about their future relationships. So, the feedback I gave you was not entirely accurate. Your answers on the personality measure indicate you are an (extrovert/introvert); however, it is not possible to tell whether you will have good relationships or bad relationships because of this. So, again, your responses on the personality measure indicate you are an (extrovert/introvert), but the feedback that I gave you, which indicated you would have (good or bad) relationships, was randomly assigned and has nothing to do with you as a person or your personality.

The reason I give you this feedback is so that I can learn something about your natural reactions to this feedback. If I had asked you to pretend you just received this feedback, your reactions may have been very different than if you truly believed this feedback was real.

Do you understand that your personality test indicates you are an (extrovert/introvert), but the feedback I gave you about your personality was false?

Another aspect I am exploring in this study is to see if the way we think about an event changes the way we feel about that event. So, you were asked to write (why this is a poor method of predicting the quality of your future relationships/about how you spend your time). Other people are asked to write about (why this is a poor method of predicting the quality of your future relationships/about how you spend your time). I want to know whether thinking that the feedback was irrelevant will cause people to feel differently about the feedback. For example, you got (good/bad) feedback, but if you thought that it is not accurate, it might make you feel (not as good/less bad).

I am also interested in ... [*here is where we explain the rationale for the dependent variables we used in the studies*]

Does this make sense? Do you have any questions?

A couple more things before you go. First, if you are interested in the results of this study, you can speak with me (Michael Kitchens). I hope to finish the study in a few weeks. Second, it is very important that when other people participate in this study they know as little as you did when you arrived. If participants know what the experiment is about, they may alter their responses. So, we ask that you not disclose the details of the study. If someone asks you about the experiment, you can tell him or her that we are interested in the processes of forming relationships. Can you do that?

Thank you again for your participation.

Post-Debriefing Experience Survey

We are interested in people's experience in this study. Would you like to complete a brief survey about your experience? You are not required to do this, but this will only take a few minutes and help us make people's experience in our studies better. Thank you.