Too good to be true? Boundary conditions to the use of downward social comparisons in service recovery

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ABSTRACT

Evidence shows that downward social comparisons (DSCs), messages delivered by frontline employees describing how service experiences turned out even worse for others, can reduce customers' anger following a service failure. This study contributes to the literature on DSCs and service recovery by highlighting pitfalls associated with the use of these messages in service recovery and showing the conditions necessary for their effectiveness. Building on persuasion knowledge theory, we show that customers draw manipulative inferences about DSCs because of the perceived bias associated with the source of the message and the implicit derogation of a competitor that DSCs entail. To reduce inferences of manipulative intentions, frontline employees should accompany DSC messages with intense apologies and use self-derogation to reduce the perception that they are criticizing another firm. Past claims on the generalized effectiveness of DSCs need to be revised. Managers should craft social comparison messages carefully to avoid negative reactions from customers. Our research indicates that once adapted to address these concerns, DSCs can be an effective recovery strategy amongst individuals with a strong need for social comparison information.

INTRODUCTION

The art of pleasing is the art of deception. (*Luc De Clapiers*)

Frontline Service Employees (FSEs) play a pivotal role in service recovery management (Hyken 2017). Their account of the failure can be crucial for mitigating customers' negative reactions (Mikolon, Quaiser, and Wieseke 2015; Van der Heijden et al. 2013; Van Vaerenberg and Orsingher, 2016). Some evidence shows that downward social comparisons (DSCs), where employees invite customers to compare their failed service encounter with even worse outcomes experienced by less fortunate others, are effective at diminishing negative emotions (Bonifield and Cole 2008; Vázquez-Casielles, Iglesias, and Varela-Neira 2012). Social comparison theory (Festinger 1954; Wills 1981) suggests that the contrast between one's own condition and that of another person who is worse off is sufficient to reduce negative emotions. Imagine, for example, going to a restaurant and experiencing a delay with your meal. Once the food finally arrives, the waiter, in addition to providing an apology, shares a personal story of going through a similar experience that led to an even worse delay. How would you, as a customer, react? Some evidence suggests that the waiter's account would diminish the feelings of anger elicited by the service failure (Bonifield and Cole 2008; Vázquez-Casielles, Iglesias, and Varela-Neira 2012). Potentially, therefore, DSCs could represent a cost-effective and easy-to-implement service recovery strategy.

Social comparisons are recurring and widespread across a variety of social contexts. Diary studies show that people experience social comparisons often, and on average, more than once per day (Wheeler and Miyake 1992; White et al. 2006). Moreover, about a third of such comparisons are self-generated (Mussweiler, Rüter, and Epstude 2004). Individuals, depending on the circumstances, appear to be able to create social comparisons purposefully and effortlessly (Wood, Michela, and Giordano 2000). Thus, following service failures, FSEs might use social comparisons to connect with customers in a way that is beneficial to the company.

Service failures would also make customers especially receptive to social comparisons to establish their social standing (Alexandrov, Lilly, and Babakus 2013). Evaluating the role of DSCs in service recovery is therefore a useful part of any training program for employees on how to use these messages effectively (Bonifield and Cole 2008).

Customers' emotions are especially relevant in a recovery context, as demonstrated by a significant body of research examining anger following dissatisfactory service encounters (e.g., McColl-Kennedy et al. 2009; Obeidat et al. 2017; Surachartkumtonkun, McColl-Kennedy, and Patterson 2015). Together with other negative emotions, such as frustration and helplessness, anger often arises during service failures because customers blame the company for the service incident (Gelbrich 2010; Kalamas, Laroche, and Makdessian 2008). While some negative emotions might generate a desire to engage with the company in order to solve the problem experienced, scholars show that anger is more likely to lead to negative outcomes for the firm (Gelbrich 2010). A number of studies focus on the damaging behavioral outcomes of anger, including revenge (Grégoire, Tripp, and Legoux 2009), retaliatory behaviors such as negative word of mouth, vindictive complaining and switching (Joireman et al. 2013) and defensive coping mechanisms (Strizhakova, Tsarenko, and Ruth 2012). Anger experienced during service failures can be contagious, spreading within a group of customers quickly (Du, Fan, and Feng 2014). Anger is detrimental and costly for organizations. Considering the importance of this emotion in service failures as well as evidence from psychology documenting the fundamental role of social comparison information in reducing negative affect (Buunk and Gibbons 2007), this study focuses on understanding whether and how DSCs can be deployed in service recovery to reduce customer anger.

We theorize why DSCs might be less effective than previously thought. Existing evidence assumes that customers process employees' interpersonal accounts at face value. This contradicts the extensive literature on persuasion knowledge, which demonstrates individuals'

awareness of, and sensitivity to, persuasion attempts of companies and their representatives (Campbell and Kirmani 2000). Customers are aware that salespeople might be less than genuine when pursuing the interests of the company (Kirmani and Zhu 2007) and react negatively to messages perceived as restricting personal freedom (Guo and Main 2012). In addition, DSCs imply derogatory references to another service provider causing a more negative experience (Bonifield and Cole 2008; Vázquez-Casielles, Iglesias, and Varela-Neira). Customers receive derogatory attempts critically (Jain and Posovac 2004). This study explores the risks associated with social comparison messages with the objective of reconciling preliminary evidence on the effectiveness of DSCs with the larger body of research on persuasion knowledge (Friestad and Wright 1994).

We further suggest that the use of intense apologies and FSEs' self-derogation can help to minimize negative reactions to DSCs. When both strategies are in place, DSCs are effective at reducing feelings of anger among customers with high social comparison orientation (Gibbons and Buunk 1999). Effective DSC accounts override concerns about the source and content of the message, thereby reducing feelings of anger among customers eager to compare themselves to others.

We develop a nuanced view of how employees' DSC accounts impact customer responses to recovery encounters. Our contribution is relevant to service recovery research beyond the use of DSCs (Bonifield and Cole 2008; Vázquez-Casielles, Iglesias, and Varela-Neira). We theorize FSEs' interpersonal accounts as persuasion attempts and establish the relevance of research on persuasion knowledge (Friestad and Wright 1994) in understanding customer-employee service recovery interactions. While not necessarily relevant to all recovery strategies, the insight that persuasion knowledge can drive skeptical reactions from customers promises wide applicability. Studies examining FSEs' behaviors (van der Hejden et al. 2013)

and accounts (Roschk and Kaiser 2013; Wirtz and Mattila 2004) can benefit from considering persuasion knowledge as a moderating influence on FSEs' performance.

Contributing to the marketing literature on social comparisons (e.g., Hill, Martin, and Chaplin 2012; Kim et al. 2016), we show that the use of DSCs in marketing messages is effective only under certain conditions. While customers tend to resist DSCs initiated by employees, those who are more prone to comparing themselves to others appear to be more receptive of social comparison messages (Gibbons and Buunk 1999).

CONCEPTUAL DEVELOPMENT

DSCs as a service recovery tactic

Social comparisons denote a process of *"relating one's own features to those of others"* (Buunk and Mussweiler 2001: 467). People with a strong desire to learn about the self via comparison with others (Gibbons and Buunk 1999) and in negative situations where objective information is unavailable (Festinger 1954) are more likely to deploy such process. The literature distinguishes social comparisons based on direction: *upward* (i.e., comparisons with better-off individuals) and *downward* (i.e., comparisons with worse-off individuals).

When facing a negative event with little prospect of ameliorative actions, individuals often use DSCs (Taylor, Wood, and Lichtman 1983; Wills 1981). Comparisons with worse-off others provide a low reference point which fulfills self-enhancement needs, improves mood and self-esteem (e.g., Gibbons and McCoy 1991). Crucially, DSCs' positive impact on well-being is predicated on the ability to alleviate negative emotions (Buunk and Gibbons 2007). In a recovery context, the service failure is perceived as less severe because customers compare themselves to worse-off others and realize that the service incident could have been even worse (Bonifield and Cole, 2008). Perceived severity of the failure is one of the dominant appraisals associated with experiences of anger: the more severe the failure, the angrier customers are

likely to feel (Grégoire, Laufer, and Tripp 2010; Kuppens et al. 2003). Consequently, DSCs are expected to aid recovery by alleviating feelings of anger (Bonifield and Cole, 2008).

DSCs can be *active* or *passive* (Wills 1981). Active DSCs entail a proactive, often spontaneous, cognitive process of imagining how the target of comparison is worse off. Passive DSCs, on the other hand, denote social comparisons formulated by a third party (Buunk and Gibbons 2007). Research looking at the positive effects of social comparisons mostly focus on active DSCs (Aspinall and Taylor 1993; Buunk, Olderma, and Dreu 2001). In a service recovery context, however, social comparisons are typically passive, that is, induced by FSEs (e.g., Richins 1991).

Bonifield and Cole (2008) further differentiate between *complete* and *incomplete* DSCs. Complete DSCs contain an explicit description of the negative outcomes for the comparison target. In their study, the above differentiation between complete and incomplete DSCs is deployed to control for the impact that the number of arguments used in different messages might have on customer responses.

Customers' reactions to DSCs as persuasion attempts

Persuasion knowledge denotes *"knowledge about the tactics used in persuasion attempts"* (Friestad and Wright 1994: 1). Such knowledge develops throughout the life span to help increase individuals' ability to recognize and respond adequately to persuasion attempts in order to accomplish personal goals (Friestad and Wright 1994).

Research on customers' reactions to messages from salespeople and/or advertisements has often examined persuasion knowledge (Campbell and Kirmani 2000; DeCarlo 2005; Isaac and Grayson 2017; Kirmani and Zhu 2007). The reception of a message from a company activates persuasion knowledge and this, in turn, often generates skepticism. Specifically, suspicion about a salesperson's ulterior motives diminishes the persuasiveness of the message (Campbell

and Kirmani 2000), negatively affects attitudes toward the salesperson (DeCarlo 2005) and reduces trustworthiness (Guo and Main 2012). Furthermore, suspicion incites customers to scrutinize the message (Ahluwalia and Burnkrant 2004) and to elaborate further on the motives of the company (Kirmani and Zhu 2007; Szykman, Bloom, and Blazing 2004). Persuasion knowledge therefore makes manipulative intentions salient.

Past studies focus on responses to persuasion attempts in largely positive or neutral encounters, such as the display of advertisements (Ahluwalia and Burnkrant 2004), and/or positive customer-salesperson interactions (e.g., flattering remarks from salespeople, Campbell and Kirmani 2000; Guo and Main 2012). Negative events, such as service failures, should only reinforce the tendency to question FSEs' intentions as well as the company's character (Ybarra 2002). Conceptualizing DSCs as persuasion attempts, we posit that customers will scrutinize both the source and content of these messages (Friestad and Wright 1994).

Questioning the source: inferences of manipulative intentions

The extent to which individuals resist persuasion attempts often depends on the motives attributed to the source (Ahluwalia and Burnkant 2004; Isaac and Grayson 2017; Kirmani and Zhu 2007). Inferences about the motives of the source can lead to a *"change of meaning"* (Friestad and Wright 1994: 13) that radically alters the response to persuasion attempts.

In most service encounters, customers know that the salesperson is motivated to support the company's interests (Campbell and Kirmani 2000) and such awareness leads to inferences of manipulative intent (Isaac and Grayson 2017). Inferences that the agent's behavior is driven by manipulative intentions, in turn, increase resistance to persuasion, as manifested with less favorable attitudes and more negative affect (Campbell 1995).

We therefore expect that social comparison messages are interpreted as attempts of FSEs to manipulate customers into believing that the service failure is less bad than it might seem.

Inferences of manipulative intentions will increase, rather than decrease, customer anger. When customers feel angry at manipulative messages, they tend to react in opposition to the wishes of the source (Coulter and Pinto 1995; Rains 2013). On the basis of the above theorizing, we hypothesize that:

H1a: DSCs increase customer inferences of manipulative intentions.

H1b: Inferences of manipulative intentions increase customer anger.

Questioning the content: perceived derogation

When used in a service recovery context, DSCs implicitly contain two types of comparisons. The first is a social comparison between the customer and a worse off other. This is the intended comparison, consistent with the treatment of DSCs in social psychology, where individuals compare themselves to peers (Gibbons and McCoy 1991) or close others (Buunk, Oldersma, and de Dreu 2001). The second is an implicit comparison of two companies: the focal company, which is responsible for the service failure, and another company responsible for a service failure leading to a worse outcome. The latter comparison is unintended and yet unavoidable given that a comparison of service failures requires implicitly contrasting the performance of two organizations[1] (see, for example, Bonifield and Cole 2008; p. 569). The presence of this second comparison is problematic.

Negative comparative messages deployed against the competition lead to counterarguments and inferences of manipulative intentions (Jain, Buchanan, and Maheswaran 2000), especially when the claims used cannot be verified and/or people are suspicious of the veracity of the message (Jain, Buchanan, and Maheswaran 2000). Perceptions that the company attempts to profit from the dissemination of negative information about the competition enhances negative attributions about the source and diminishes the perceived believability of the comparative message (Jain and Posavac 2004).

In a service recovery context, DSCs implicitly offer derogatory comparisons which cannot be verified. Consequently, customers might not believe the message and question the source's motives. Derogation perceptions increase inferences of manipulative intentions of the employee using DSCs (Kirmani and Zhu 2007; Jain and Posavac 2004), which in turn increase anger (Jain, Buchanan, and Maheswaran 2000). Accordingly, we hypothesize that:

H2a: DSCs increase perceived derogation.

H2b: Perceived derogation increases inferences of manipulative intentions.

Showing that you care: Improving perceptions of the source

The discussion above identifies two pitfalls of DSCs. We now consider strategies that might offset the limitations of DSCs. In particular, we test whether the intensity of the apology rendered by FSEs can lower inferences of manipulative intentions.

Apologies entail messages containing acknowledgement of responsibility for negative events (Fehr and Gelfand 2010). Such messages have been studied extensively in service recovery (Gelbrich and Roschk 2011). While some studies support the effectiveness of this recovery tactic (e.g., Coulter 2009; Wirtz and Mattila 2004), others dispute its viability (e.g., Davidow 2000; de Ruyter and Wetzels 2000). Roschk and Kaiser (2013) argue that the way the apology is rendered explains this inconsistency. To be effective, apologies need to be intense, empathetic and timely. In intense apologies, employees express empathy and frequently use the word 'sorry' to denote profound remorse (Roschk and Kaiser 2013). At an interpersonal level, intense apology restores customers' self-esteem (Bramel, Taub, and Blum 1968; Walster, Berscheid, and Walster 1973), lowers customer aggressiveness (McCullough et al. 1998) and enhances perceptions of interactional justice (Colquitt 2001).

An intense apology might lower suspicion about ulterior employee's motives (DeCarlo 2005), reducing the likelihood of negative reactions to DSCs (Friestad and Wright 1994;

Szykman, Bloom, and Blazing 2004). In this sense, an intense apology might counterbalance the negative impact of DSCs postulated above. We hypothesize that:

H3a: The effect of DSCs on inferences of manipulative intentions is weaker (stronger) when an intense (weak) apology is delivered.

H3b: The mediated effect of DSCs on customer anger is weaker (stronger) when an intense (weak) apology is delivered.

Focusing the message: Improving perceptions of the content

The presence of a derogatory target is a characteristic of DSCs used in service recovery. In Bonifield and Cole (2008: 576), following a flight delay, an employee prompts the affected customer to think of an even worse experience by saying: *"You know, things could have been worse. My college-aged son got delayed in O'Hare when traveling on a different airline last spring break. The airline didn't get him to his destination until 5 days later"*. Within the message, a social comparison is presented (i.e., "my college-aged son") along with an implicit derogation of another company (i.e., "a different airline"). Derogation complicates the assessment of DSCs given that some customers might pay attention to the social comparison element of the message, while others might be affected by the company-focused comparison. The beneficial effect of social comparisons rests only on the first element and not the second (Wills 1981). Therefore, it is important to understand whether, by modifying DSC messages, customer attention can be steered away from the derogatory content.

The presence of derogated targets should also facilitate social comparison processes (Wills 1981). It is easier to compare favorably with someone else who is being derogated (Aspinall and Taylor 1993; Gibbons and McCoy 1991). Conversely, when a target is inappropriate for comparison, social comparison messages are dismissed (see Guimond et al. 2007; Major, Sciacchitano, and Crocker 1993). Based on this background, we argue that FSEs can improve DSC messages by introducing an element of self-derogation, which makes them a more

apposite comparison target. Derogatory references towards the employee might be deemed as more acceptable by customers than references to the poor performance of another company (Wills 1981). Self-derogation might therefore steer customers' attention away from the implicit derogation of a competitor. In a self-derogating statement, the employee stresses some personal failing on his/her part (e.g., failing to arrive on time) that is partly to blame for the negative consequences generated by the service failure.

In Table 1, we differentiate between three types of DSC messages: DSC, company-focused DSC and self-focused DSC. All three messages refer to another customer as a social comparison target. The messages differ, however, in the derogation target. DSC messages used in past research do not consider derogation explicitly, but include implicit derogatory references about another firm. To examine the impact of derogation on DSCs, we also propose that derogation of a competitor could be more explicit. We expect company-focused DSCs to be the least persuasive. Self-focused DSCs, by contrast, are expected to be the most persuasive as FSEs relegate competitor derogation to the background and introduce self-derogation to boost their role as comparison targets. Self-focused DSCs are expected to increase customers' ability to process the relevant social comparison information. Thus, we hypothesize that:

H4: Self-focused DSCs, when compared to company-focused DSCs, reduce perceived derogation.

<div align="center">INSERT TABLE 1 HERE</div>

Targeting the message: Social Comparison Orientation (SCO)

People vary in the extent to which they are interested in social comparison information (Gibbons and Buunk 1999). Social Comparison Orientation (SCO) is defined as: *"the personality disposition of individuals who are inclined to use social comparisons to evaluate their characteristics, who tend to focus on how they are doing in comparison with others, and who have a tendency to relate what happens to others to themselves"* (Buunk, Oldersma, and

De Dreu 2001: 453). People high in SCO are characterized by low intellectual autonomy, low self-esteem, a chronic sense of uncertainty about themselves and high neuroticism (Buunk, van der Zee, and van Yperen 2001; Gibbons and Buunk 1999). They also tend to be younger (Wilson and Ross 2000). Evidence from diverse contexts including interpersonal relationships (Buunk, Oldersma, and De Dreu 2001), workplace (Buunk, van der Zee, and van Yperen 2001; Thau, Aquino, and Wittek 2007) and health behavior (Ouellette et al. 2005; Van der Zee et al. 1998) shows that the positive effect of DSCs is contingent upon individuals' SCO.

Although this was not examined in previous service recovery research (Bonifield and Cole 2008; Vázquez-Casielles, Iglesias, and Concepción 2012), SCO could influence the extent to which customers are receptive to DSCs delivered after service failures. We expect DSCs to be more effective at lowering anger for customers high in SCO. Customers high in SCO will be more likely to use comparison information to lower their negative emotions. Customers high in SCO, who typically feel uncertain about the self, might be motivated to reduce such uncertainty (Gibbons and Buunk 1999) and thus perceive information embedded in DSCs as salient. By contrast, the effectiveness of DSCs might be reduced among customers low in SCO who might find comparison information secondary to their well-being. In sum:

H5: DSCs are more (less) likely to reduce anger of customers scoring high (low) on SCO.

OVERVIEW OF THE EMPIRICAL RESEARCH

Figure 1 presents the research model and the hypotheses assessed in this research. We conduct two online experiments to test our hypotheses. Participants are randomly assigned to one version of a scenario describing a service failure and a recovery attempt. Study 1, using a DSC message consistent with past research (Bonifield and Cole 2008; Vázquez-Casielles, Iglesias, and Varela-Neira 2012), introduces the analysis of potential counterproductive effects of DSCs. In Study 2, we differentiate empirically between company-focused DSCs and self-focused DSCs. Our argument is that the effectiveness of social comparison messages increases

when FSEs, in addition to describing an even worse service experience they went through, introduce self-derogatory information.

INSERT FIGURE 1 HERE

STUDY 1

Method

Research design and sample. To be consistent with past research, we compared complete DSCs with incomplete DSCs to control for the number of arguments used by the employee (see Bonifield and Cole 2008; Study 2). We did not expect that this difference would impact our findings because both complete and incomplete DSCs should be perceived manipulative and derogatory according to our theory. We conducted a 3 (DSC: Complete DSC vs Incomplete DSC vs No DSC) X 2 (Apology: Intense vs Weak) between-subjects experiment. Three hundred and nine British residents were recruited for participation using the consumer panel Prolific Academic (https://www.prolific.ac). Recent research shows the suitability of this platform for behavioral research (Peer et al. 2017). Participants accessed an online survey through a link and were randomly allocated to the relevant condition by the survey software Qualtrics. We analyzed a total of 286 complete cases out of which 75% are females. Different age groups are represented: 18% are 18 to 24 years old, 43% 25 to 34 years old, 21% 35 to 44 years old, 12% 45 to 55 years old, and 6% 55 years old or above.

Stimuli. We developed a scenario based on work by Bonifield and Cole (2008). The service failure describes a couple going to a restaurant and experiencing a service delivery delay. Details of the manipulations are presented in Appendix A. The scenario was refined through both qualitative and quantitative pre-tests. Participants rated the scenario on its clarity ("The situation is easy to understand"), credibility ("The situation is credible") and realism ("The situation could happen in real life") from 1 = strongly disagree to 7 = strongly agree. Results

indicated that the scenario was easy to understand (M = 6.28), credible (M = 5.79) and realistic (M = 6.01), with no significant differences between conditions.

Three items were used as manipulation checks for DSCs (e.g., "The waiter described how the situation could have turned out even worse for the couple" – rated from 1= strongly disagree to 7 = strongly agree). Perceptions of DSCs varied in accordance with our expectations (M_{DSC} = 6.02, $M_{incomp.\ DSC}$ = 5.68, $M_{No\ DSC}$ = 2.31; $F(1, 284) = 196.96$, $p = .001$). To compare complete and incomplete DSCs, in line with Bonifield and Cole (2008), we asked participants if: 1) the waiter had a worse outcome from the experience, 2) the couple had a worse outcome from the experience or 3) the waiter did not report any outcome of the experience. 80% of participants in the DSC condition identified that the waiter had a worse experience and 83% in the incomplete DSC condition reported that no outcome was indicated. The difference is in line with expectations and statistically significant ($\chi^2(2) = 139.503$, $p < .001$). The manipulation of intensity of apology was assessed through two items. One enquired about how sympathetic the apology was (1 = very unsympathetic to 7 = very sympathetic) and results are in line with expectations ($M_{intense}$ = 4.01, M_{weak} = 3.18; t (283) = 5.58, $p < .001$). We also asked participants how many times the waiter had apologized with options ranging from zero to four. The average varies from .85 in the weak apology condition to 1.45 in the intense apology group ($t(283) = 5.96$, $p < .001$).

Measures. Individual differences in social comparison orientation were assessed through six items of the Iowa-Netherlands Comparison Orientation scale[2] (Gibbons and Buunk 1999). The scale was completed by all participants at the beginning of the survey and measures individual tendency to compare the self against others' performance. Four items from Campbell (1995) were adapted to measure inferences of manipulative intentions. Perceived derogation was measured using four items by Jain and Posavac (2004). Feelings of anger were measured using four items commonly used in the literature (Grégoire, Laufer, and Tripp 2010;

Laros and Steenkamp 2005). As a further control, we measured interactional justice (Grégoire, Laufer, and Tripp 2010; Tax, Brown, and Chandrashekaran 1998). The objective was to test our hypotheses while controlling for perceived interactional fairness of the customer-employee interaction.

All scales perform adequately in terms of reliability with high loadings on the intended constructs (Bagozzi and Yi 1988). Average variance extracted and composite reliability are above established thresholds (Bollen and Lennox 1991). Discriminant validity is confirmed through the Fornell-Larcker criterion (Fornell and Lacker 1981) and the HTMT ratio (highest value of .59; Henseler, Ringle, and Sarstedt 2015; Voorhees et al. 2016). All measures, sources and standardized loadings are included in Appendix B. Correlations between our conceptual constructs are reported in Appendix C[3].

Results

A factorial ANOVA shows a significant difference in terms of manipulative intentions (F (2, 280) = 29.52, $p < .01$), derogation (F (2, 280) = 116.72, $p < .01$) and anger (F (2, 280) = 5.30, $p < .01$) between DSC conditions. Manipulative intentions are significantly higher in the DSC (M = 4.60) and incomplete DSC (4.42) conditions than in the no DSC condition (M = 3.45). The same applies to derogation (M_{DSC} = 4.56, $M_{incomp. DSC}$ = 4.67, $M_{No DSC}$ = 2.20) and anger (M_{DSC} = 4.58, $M_{incomp. DSC}$ = 4.44, $M_{No DSC}$ = 3.96). There is also evidence of a significant interaction effect of complete DSC and apology conditions (F (1, 184) = 4.46, $p = .04$).

To test our hypotheses, we estimate the model presented in Figure 1 and run a conditional effect analysis using a custom model in PROCESS and 10,000 resamples for the estimation of confidence intervals using bias-corrected and accelerated bootstrap (Hayes 2018). The variables are mean-centered before analysis and we code the No DSC condition as 0 and the relevant DSC condition as 1. The average of the items for each construct is used for the analysis. The model is estimated including age, gender and interactional justice as controls.

The parameters estimated for the moderated (serial) mediation model are presented in Figure 2. Both the models for complete and incomplete DSCs are considered. Consistent with H1 and H2, there is evidence that the use of DSCs influences derogation and manipulative intentions. Furthermore, these variables affect anger since derogation increases manipulative intentions, which in turn increase feelings of anger. In the case of complete DSC, the path to manipulative intentions is marginally significant ($p = .06$). Table 2 presents the indirect effects and provides evidence on the potential negative impacts of DSCs both in the case of the complete and incomplete versions. Overall, the serial mediation of derogation and manipulative intentions is supported by data related to both types of DSCs.

The moderation of apology is supported by the data when considering complete DSC. The direct effect from complete DSC to manipulative intentions is significant when the apology is weak (.75, CI = .24 to 1.24) but not significant when the apology is intense (-.01, CI = -.49 to .47). Indirect effects (Table 2) show that complete DSCs increase anger through the mediation of manipulative intentions only when the apology is weak. The effect, however, is not statistically significant when the apology is intense. The index of moderated mediation (Hayes, 2018) supports the moderation (-.18, CI = -.41 to -.19). Figure 3 plots the interaction effect and shows that participants in the intense apology condition draw lower inferences of manipulative intentions than participants exposed to a weak apology. The evidence thus appears to support H3. There is no evidence, however, in support of the moderation hypothesized for SCO. The personality variable does not appear to moderate the influence of either incomplete ($p = .89$) or complete ($p = .25$) DSC.

INSERT FIGURE 2 HERE
INSERT TABLE 2 HERE
INSERT FIGURE 3 HERE

Discussion

In line with H1a, H1b, H2a and H2b, the study shows the pitfalls associated with the use of DSCs in service recovery. Following service failures, DSCs, especially when delivered with weak apologies, result in inferences of manipulative intentions, which in turn increase (rather than decrease) anger. The evidence is consistent with persuasion knowledge theory (Friestad and Wright 1994) in demonstrating how persuasion attempts generate suspicion about the motives of the FSE (Kirmani and Zhu 2007; Szykman, Bloom, and Blazing 2004).

Our findings also demonstrate that, when confronted with passive DSCs, customers react negatively to derogating content included in these messages. Competitor derogation appears to mediate most of the effect of DSCs on manipulative intentions. This finding is consistent with evidence from comparative advertising research showing that negative claims against the competition cause perceptions of manipulative intentions (Jain, Buchanan, and Maheswaran 2000). We extend existing research by showing that, in service recovery encounters, consumers are influenced by the implicit derogation present in a DSC account. This finding provides evidence of the damaging effect of negative comparisons and highlights the importance for organizations to avoid its direct or indirect use in marketing communications (Jain and Posavac 2004). By showing that customer reactions to passive DSCs delivered at the time of service recovery are predominantly negative, our results fail to replicate findings presented in prior research[4]. However, we find that the detected pitfalls associated with DSCs can be addressed. In support of H3a and H3b, we show that intense apologies can improve perceptions of the source of DSCs by means of reassuring customers about the positive intentions of FSEs (Roschk and Kaiser 2013).

Finally, and contrary to our expectations, SCO does not appear to moderate the effect of DSCs. This finding might be due, however, to the overwhelmingly negative reactions elicited by the messages tested. It seems likely that derogation and inferences of manipulative

intentions overshadow the potential role of SCO in this study. In Study 2, we attempt to reduce DSCs' negative reactions whilst testing for the effect of SCO on anger.

STUDY 2

Method

Research design and sample. Using the same procedures discussed above, two hundred and twenty six UK residents were recruited for participation on Prolific Academic. Participants were randomly allocated to one of three conditions (DSC: No DSC vs Company-focused DSC vs Self-focused DSC). All other procedures were consistent with Study 1. We analyzed 211 complete cases out of which 73% are female. In terms of age groups, 11% are 18 to 24 years old, 37% 25 to 34 years old, 27% 35 to 44 years old, 12% 45 to 55 years old and 13% 55 years old or above.

Stimuli. We used the same scenario of Study 1 and maintained intense apology across conditions. In company-focused DSCs, participants read a version of the message including derogatory references toward a competitor: *"In our case, however, the restaurant served us the food more than an hour after we arrived. The delay at this other restaurant was even longer than the one you experienced today. Because of this longer waiting time, we ended up missing the entire movie. As you can imagine, tickets are non-refundable, so I lost all the money."* On the contrary, self-focused DSCs include derogatory references toward the employee (i.e., the employee derogates himself/herself): *"In our case, however, the restaurant served us the food more than an hour after we arrived. At least you were smart and allowed yourselves plenty of time for the dinner, unlike us. We did not plan the dinner as well as you did, and for this reason we ended up missing the entire movie. As you can imagine, tickets are non-refundable, so I lost all the money."* The No DSC condition contains no social comparison information.

Results show that DSCs were successfully manipulated ($M_{company\ DSC} = 6.14$, $M_{self\ DSC} = 6.29$, $M_{No\ DSC} = 2.23$; $F\ (1, 208) = 281.34$, $p = .001$). Furthermore, two items were used to

compare company-focused DSCs and self-focused DSCs (e.g., "The waiter criticized himself for poorly planning his evening out"; rated from 1 = strongly disagree to 7 = strongly agree). Results show that the focus of derogation was switched successfully ($M_{\text{company DSC}} = 1.96$, $M_{\text{self DSC}} = 5.88$, $M_{\text{No DSC}} = 1.96$; $F(1, 208) = 167.35$, $p = .001$).

Measures. The measures adopted were the same of Study 1 and perform satisfactorily in terms of reliability, convergent and discriminant validity (see Appendix B).

Results

A one-way ANOVA shows significant differences in terms of derogation ($F(2, 208) = 8.98$, $p < .01$) and manipulative intentions ($F(2, 208) = 118.94$, $p < .01$). There is no significant difference in terms of anger ratings ($F(2, 208) = 1.58$, $p = .21$). As expected, manipulative intentions are significantly higher in the company-focused (M = 4.67) and in the self-focused (M = 4.33) DSC conditions than in the no DSC condition (M = 3.76). The same applies to derogation which is highest in the company-focused condition (M = 5.00), significantly lower in the self-focused condition (M = 4.26) and lowest in the no DSC condition (M = 1.90).

To test our research hypotheses, we estimate a model of moderated mediation using the same procedures discussed above. The results for both company-focused and self-focused DSC are presented in Figure 4 while in Table 3 we present the relevant indirect effects. H1a, H1b, H2a and H2b are supported by this additional analysis: derogation increases manipulative intentions and this variable explains anger. Furthermore, and consistent with H4, self-focused DSC appear to reduce the negative effect of derogation. When compared to company-focused DSC, self-focused DSC reduce derogation and increase the persuasiveness of social comparison messages employed at the recovery stage.

INSERT FIGURE 4 HERE

INSERT TABLE 3 HERE

The moderation of SCO is significant in the case of self-focused DSC only, offering partial support to H5. A Johnson-Neyman analysis (Spiller et al. 2013), summarized in Figure 5, identifies two areas of significance. For about 5% of the distribution, at low values of SCO (below 2.8), self-focused DSC increase anger. However, for about 52% of the distribution, where higher values of SCO are recorded (above 4.8), self-focused DSC reduce anger. This evidence suggests that the effect of self-focused DSCs is heavily dependent on SCO.

INSERT FIGURE 5 HERE

Discussion

Study 2 supports H4: FSEs can improve the effectiveness of DSCs by self-derogating. When derogatory content is shifted away from the competition and more towards the employee, perceived derogation diminishes. Importantly, while still being perceived as derogatory to an extent, self-focused DSCs appear to be less damaging than company-focused DSCs.

Results partially support H5 for self-focused DSCs and show that these reduce anger for individuals high in SCO. For this segment, concerns related to derogation and manipulative intentions are secondary to the benefits of social comparison information. Consistent with social comparison theory, individuals high in SCO rely on social comparison information, in an effort to minimize uncertainty (Gibbons and Buunk 1999). The effectiveness of self-focused DSCs is also in line with research findings from psychology suggesting that social comparisons increase self-enhancement when suitable targets of comparisons are identified (Aspinall and Taylor 1993; Gibbons and McCoy 1991; Wills 1981). By self-derogating, the FSE increases his/her suitability as a comparison target.

To summarize, Study 2 shows that DSCs can be effective when a) including self-derogation on the part of the FSE and b) targeting customers who are especially sensitive to social comparison information. Complementing past research on DSCs (Bonifield and Cole

2008; Vázquez-Casielles, Iglesias, and Varela-Neira 2012), we identify the boundary conditions to the use of these messages in service recovery.

GENERAL DISCUSSION

Theoretical contributions

DSCs have been suggested as a recovery strategy to assuage customers' feelings of anger (Bonifield and Cole 2008). Evidence on the effectiveness of DSCs as a service recovery tactic, however, needs to be reconciled with findings from persuasion research postulating that customers are active, often skeptical, interpreters of messages from salespeople (Campbell and Kirmani 2000), especially when such communications are derogatory toward the competition (Jain and Posavac 2004).

Drawing on persuasion knowledge theory (Friestad and Wright 1994), our study is the first to examine the potential pitfalls associated with the use of DSCs as a recovery tactic. The beneficial effect of DSCs does not always apply. In fact, DSCs can even increase feelings of anger when perceived as unnecessarily derogatory and manipulative persuasion attempts. Our first contribution is therefore to identify and explain the risks associated with the use of DSCs in service recovery.

Furthermore, we provide remedies to these pitfalls. Firstly, raising the intensity of the apology (Roschk and Kaiser 2013) improves perceptions of the source of DSCs by reducing inferences of manipulative intentions. Secondly, stressing FSEs' self-derogation both increases the acceptability of the persuasion attempt (Jain and Posovac 2004) and facilitates the social comparison process (Wills 1981). Thus, our second contribution is providing a clearer theoretical explanation of when and why DSCs are effective in reducing customer anger. We expand upon existing research by clarifying DSCs influence during recovery.

Our third contribution, at a more general level, lies in advancing our understanding of the role of persuasion knowledge in customer-employee interactions during service recovery. As

active interpreters of the recovery attempts, customers process messages from employees as manipulative (Campbell 1995; Campbell and Kirmani 2000; Friestad and Wright 1994). While our findings apply to DSCs specifically, any recovery strategy involving customer-employee interactions could arguably generate manipulative intentions. For example, while a customer might reject an apology if insufficiently empathetic or timely (Roschk and Kaiser 2013), negative reactions might also be driven by perceptions that the apology is an attempt to manipulate customer reactions, given the bias associated with the source of the message (DeCarlo 2005). Past service research examining recovery strategies such as explanations or apologies (Mattila 2006; Wirtz and Mattila 2004), opportunity for co-creation (Roggeveen, Tsiros, and Grewal 2012) and choice (Karande, Magnini, and Tam 2007) appear to assume that customers always interpret communications from the company at face value. Our study invites scholars to consider the impact of persuasion knowledge more explicitly, as this might influence customer responses to service recovery in certain circumstances.

A further insight also contributing to debates on customer-employee interactions (e.g., Campbell and Kirmani, 2000) relates to customers' sensitivity to employees' accounts that are derogatory toward the competition. While there is an extensive debate on comparative advertising (Jain, Buchanan, and Maheswaran 2000), the study of customers' reactions to comparative information employed by FSEs remains underdeveloped. Prior service research studied the effect of comparative information communicated via self-service technologies, not by FSEs, on customers (Zhu et al. 2007). By showing that customers are averse even to implicit criticism of potential competitors, our study clarifies the cognitive processes underlying reactions to comparative information emanated by FSEs. Future research might consider how such sensitivity impacts other types of customer-employee interactions such as when an employee uses derogatory references when providing advice on a product offering. Any time

FSEs provide direct or indirect information about competitors, it is possible that customers might draw unwanted inferences of derogation.

Lastly, our study contributes to research on social comparisons in marketing (e.g., Hill, Martin, and Chaplin 2012; Kim et al. 2016) in three ways. First, we provide evidence that passive DSCs are unlikely to generate positive consequences when adopted as persuasion attempts. When exposed to passive DSCs, customers resist social comparisons, and such resistance activates inferences of manipulative intentions. Second, we demonstrate that the presence of implicit comparisons with competitors is problematic for passive DSCs (Jain and Posavac 2004). Thirdly, we show that the relevance of social comparison information varies by target audience, with people high in SCO being particularly receptive to comparative messages. Scholars might consider individual propensity to rely on social comparisons in order to assess the role of social comparisons in different marketing contexts.

Managerial implications

The study raises important managerial implications. Past research in service recovery suggests that DSCs are an additional technique in the tool kit of managers dealing with service failures (Bonifield and Cole 2008). While DSCs can be employed successfully, we recommend using such messages with caution given the risks identified in this research. Arguably, genuine and intense apologies are comparatively more effective and less risky.

Managerial decision-making should start by considering the characteristics of the potential targets of the DSC message. If a company has a reason to believe that its customers typically rely on social comparisons, then DSCs can be rendered effectively. The relevant issue then is training staff adequately so that FSEs can formulate effective messages. Alternatively, if the customer base has low sensitivity to social comparisons it is best to avoid DSCs.

Identifying SCO levels in real-time during a service recovery may prove challenging in practice. SCO should be part of regular customer segmentation research conducted through surveys and/or customer workshops. Short of measuring SCO, characteristics which are linked with high SCO can be employed. Research suggests that high SCO is typical of individuals low in self-esteem, but high in social anxiety, neuroticism and depression (Gibbons and Buunk 1999). On average, women seem to score higher than men on SCO and, regardless of the gender, collectivist societies report greater orientation toward social comparisons than individualist societies (Guimond et al. 2007). Intolerance toward uncertainty also relates to higher interest in social comparison information (Butzer and Kuiper 2006). This body of knowledge might aid managerial decisions and lead to the identification of suitable target segments for the use of DSCs.

Once a firm has established that social comparisons are relevant for its customers, our study outlines how to minimize risks and increase the effectiveness of DSC messages. FSEs should be trained to understand that their communication can be perceived as manipulative and should attempt to reduce perceptions of the source as biased. Intense apologies are effective in this respect, as they reduce inferences of manipulative intentions. Furthermore, all messages that are perceived as derogatory are problematic and should be avoided (Jain and Posavac 2004). In this respect, FSEs should derogate themselves so that customer attention is steered away from company-focused content, which is counterproductive. Once these changes are implemented, and the messages targeted to an appropriate segment, DSCs can prove effective in reducing anger and its negative consequences.

Limitations and areas for further research

We conduct two scenario-based experiments in a restaurant context. While the choice of context and methodology is relevant to existing debates on DSCs, the findings might not be applicable to all service industries. DSCs might be more acceptable in some failure contexts.

In service contexts typically high in stress and uncertainty, such as health services, social comparison information might be particularly useful. Future research should therefore extend the number of service contexts examined while adopting methodologies that offer higher ecological validity.

Our theorizing focuses on customer anger because, as discussed, we expect social comparison processes to have mostly emotional consequences (Buunk and Mussweiler 2001). However, we do collect a behavioral measure in the form of negative word of mouth. Our evidence suggests that DSCs influence negative word of mouth only indirectly through the mediation of anger. Further research is required to examine more closely the type and size of the behavioral effects associated with DSCs. For example, a relevant question not tackled in this research, is whether DSCs can be leveraged to reduce customer revenge and/or whether they might be also linked to an increase in supportive behavioral tendencies (e.g., Gelbrich 2010; Joireman et al. 2013).

Consistent with prior research (e.g., Bonifield and Cole 2008), we combine DSCs with apologies. Future research should explore the relative effectiveness of DSCs when compared with other recovery strategies. Studies could investigate the extent to which the concerns expressed in our study remain valid when other recovery tactics (e.g., explanation) or a range of recovery tactics (e.g., apology plus explanation, apology plus compensation) are employed. It is possible that, for example, inferences of manipulative intentions associated with DSCs lower when compensation is offered, if the latter generates positive intentions of the company.

Moreover, we focused on DSCs initiated by FSEs involved in the day-to-day operations of the company. As supervisors and/or FSEs of higher status within the company often intervene following service failures, future research might investigate whether the status of FSEs has any effect on customer acceptance of DSCs and related inferences of manipulative intent. An interesting question relates to whether the status of FSEs initiating DSCs influences

perceived legitimacy of passive DSCs during service recovery encounters. FSEs might handle the service failures differently depending on perceived customer status, for instance by trying to accommodate the preferences of high status customers (Jerger and Wirtz 2017). A fruitful avenue for further research would therefore concern customer status, and the extent to which a high-status customer is willing to accept passive DSCs initiated by a low-status FSE. Likewise, psychological research highlights the relevance of social comparison information at evoking a certain mood among receivers. For instance, comparisons with better-off others seem to evoke less positive mood than comparisons to worse-off others (Buunk, van der Zee, and VanYperen 2001), with such mood changes being predominant among low self-esteem people (Aspinwall and Taylor 1993). Another avenue for further research would therefore be to consider how mood and self-esteem impact reactions to passive DSCs employed as a recovery tactic.

In conclusion, the contribution of our analysis is to posit recovery communications as a persuasive message that can be rejected as manipulative by customers. The development of successful recovery strategies, therefore, requires an understanding of the defense mechanisms customers are likely to employ and an awareness of the situational factors that enhance (or diminish) such defensive responses.

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[1] The only other logical alternative would be to use an even worse customer experience delivered by the same firm in the past. However, this option seems problematic because, while rendering a social comparison, it would reinforce a negative impression of the target firm.

[2] We used only the first dimension of the scale, because it assesses more directly individual tendency to seek social comparison information (Gibbons and Buunk, 1999; p. 131). In both studies, we dropped item 2 from the analysis as it is not consistent with the other indicators. Including the item in the measure however does not affect the results.

[3] In both Study 1 and Study 2 we also collect measures of negative word of mouth as a behavioral outcome of service failures strongly associated with anger. We included this measure to be consistent with past research on DSCs (Bonifield and Cole 2008). Prior research shows a strong link between anger and negative word of mouth (Grégoire et al. 2010). However, since DSCs produce emotional outcomes, our theorizing focuses on anger and we do not report specific tests on negative word of mouth (see Appendix C for the correlation between anger and negative word of mouth).

[4] As part of this research, we replicated the counterproductive effects of DSCs in three further studies, also examining a different type of service failure from the one assessed here (i.e., delays at check-in at a hotel). In these additional three studies we did not collect the SCO measure to avoid potential priming effects that might be engendered by reading the scale before completing the experiment. Results converge on the view that DSCs increase manipulative intentions. There is no evidence either that including the SCO affects in any way the results. For reasons of space we do not present all this empirical evidence here but further information is available upon request.

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APPENDIX A – Scenario used in Study 1

Two friends have tickets for a movie at the local cinema. They have plenty of time before the movie starts, so decide to go out for dinner at Kobe, a restaurant in town. They are hungry and look forward to having a nice dinner before heading to the cinema. Upon arrival at the restaurant, the couple wave at the waiter, who smiles, greets them and seats them right away.

Once seated, the couple order two dishes listed on the menu.

40 minutes later, they are still waiting for the food to be served. The couple call the waiter over and tell him they have tickets to the movies and any further delay means they will miss the beginning of the movie.

The waiter kindly asks them to wait a bit longer as the food is on the way.

After another 15 minutes, the waiter finally serves the food. Due to the delay, the couple have missed the beginning of the movie. At this point, the couple eat quickly and prepare to leave, as they do not want to miss the entire movie.

Weak Apology: Whilst the couple prepare to leave, the waiter walks over to the table and says: "I am sorry that you missed part of the movie. Please accept our apologies for the inconvenience."

Intense Apology: Whilst the couple prepare to leave, the waiter walks over to the table and says: "I am really sorry that you missed part of the movie. I feel very uncomfortable about it. I understand how disappointed you must feel. I hope you can still enjoy your evening. Again, please forgive us for the trouble caused. Please accept our apologies for the inconvenience."

Complete DSC: Then the waiter continues: "You know, things could have been even worse. The other night I went out to eat at another restaurant in town and was not served until two hours after I arrived. I was with a friend and we also had tickets to go to the cinema after dinner, but we ended up missing the entire movie. As you can imagine, tickets are non-refundable, so I lost all the money."

Incomplete DSC: Then the waiter continues: "You know, things could have been even worse. The other night I went out to eat at another restaurant in town and was not served until two hours after I arrived. I was with a friend and we also had tickets to go to the cinema after dinner."

A few minutes later, the waiter rings up their bill, the couple pay and leave the restaurant.

APPENDIX B – Measurement model

Constructs	Study 1	Study 2
Social Comparison Orientation (from 1= strongly disagree to 7= strongly agree) **Study 1 α= .83, CR= .87, AVE= .57; Study 2 α= .76, CR= .81, AVE= .52.** *Source: Gibbons and Buunk 1999*		
I often compare how my loved ones (boy or girlfriend, family members, etc.) are doing with how others are doing	.79	.83
If I want to find out how well I have done something, I compare what I have done with how others have done	.77	.88
I often compare how I am doing socially (e.g., social skills, popularity) with other people	.70	.69
I am not the type of person who compares often with others	.70	.72
I often compare myself with others with respect to what I have accomplished in life	.80	.73
Manipulative intentions (from 1= strongly disagree to 7= strongly agree) **Study 1 α= .79, CR= .87, AVE= .62; Study 2 α= .81, CR= .87, AVE= .63.** *Source: Adapted from Campbell 1995*		
The way the waiter tried to influence the customer seems acceptable to me *[reverse scored]*	.70	.75
The waiter tried to manipulate the couple in ways that I don't like	.90	.88
I would be annoyed by the waiter because he tried to control the couple inappropriately	.87	.87
The waiter was not excessively manipulative *[reverse scored]*	.71	.70
Perceived derogation (from 1= strongly disagree to 7= strongly agree) **Study 1 α= .93, CR= .95, AVE= .83; Study 2 α= .95, CR= .96, AVE= .87.** *Source: Adapted from Jain and Posavac 2004*		
The waiter was hostile to a competitor	.88	.93
The waiter derogated a competitor	.95	.96
The waiter criticized a competitor	.91	.91
The waiter tried to damage the reputation of a competitor	.91	.93
Anger (from 1= not at all to 7= extremely) **Study 1 α= .86, CR= .90, AVE= .69; Study 2 α= .88, CR= .92, AVE= .73.** *Source: Adapted Laros and Steenkamp 2005*		
Angry	.86	.89
Offended	.77	.80
Outraged	.88	.89
Mad	.83	.83
Negative word of mouth (from 1= strongly disagree to 7= strongly agree) **Study 1 α= .88, CR= .92, AVE= .73; Study 2 α= .87, CR= .91, AVE= .72.** *Source: Bonifield and Cole 2008*		
Complain about Kobe to other people	.85	.86
Spread negative information about the restaurant Kobe	.83	.85
Denigrate the restaurant to your friends	.87	.81
Tell your friends not to go to Kobe if they were looking for a restaurant	.88	.88
Interactional justice (from 1= strongly disagree to 7= strongly agree) **Study 1 α= .86, CR= .90, AVE= .70; Study 2 α= .88, CR= .91, AVE= .76.** *Source: Adapted from Grégoire, Laufer, and Tripp 2010*		
The waiter seemed very interested in the problem caused to the couple	.84	.85
The waiter treated the couple with empathy	.85	.88
The waiter was keen to solve the problem caused by the delay	.78	.77
The waiter treated the couple with respect	.88	.90

α= Cronbach's Alpha; CR = Composite Reliability; AVE = Average Variance Extracted

APPENDIX C – Constructs Correlations

	Manipulative intentions	Derogation	Anger	Negative word of mouth	Social comparison orientation	Interactional justice
Manipulative intentions	-	.44**	.43**	.49**	.16**	-.64**
Derogation	.48**	-	.12	.19**	.18**	-.17*
Anger	.35**	.28**	-	.62**	-.01	-.33**
Negative word of mouth	.39**	.25**	.53**	-	-.07	-.38**
Social comparison orientation	.13*	.19**	.18**	.20**	-	.04
Interactional justice	-.45**	-.23**	-.34**	-.41**	.01	-

The coefficients below/above the diagonal relate to Study 1/Study 2. ** indicates that the coefficient is significant at $p < .01$; * indicates that the coefficient is significant at $p < .05$.
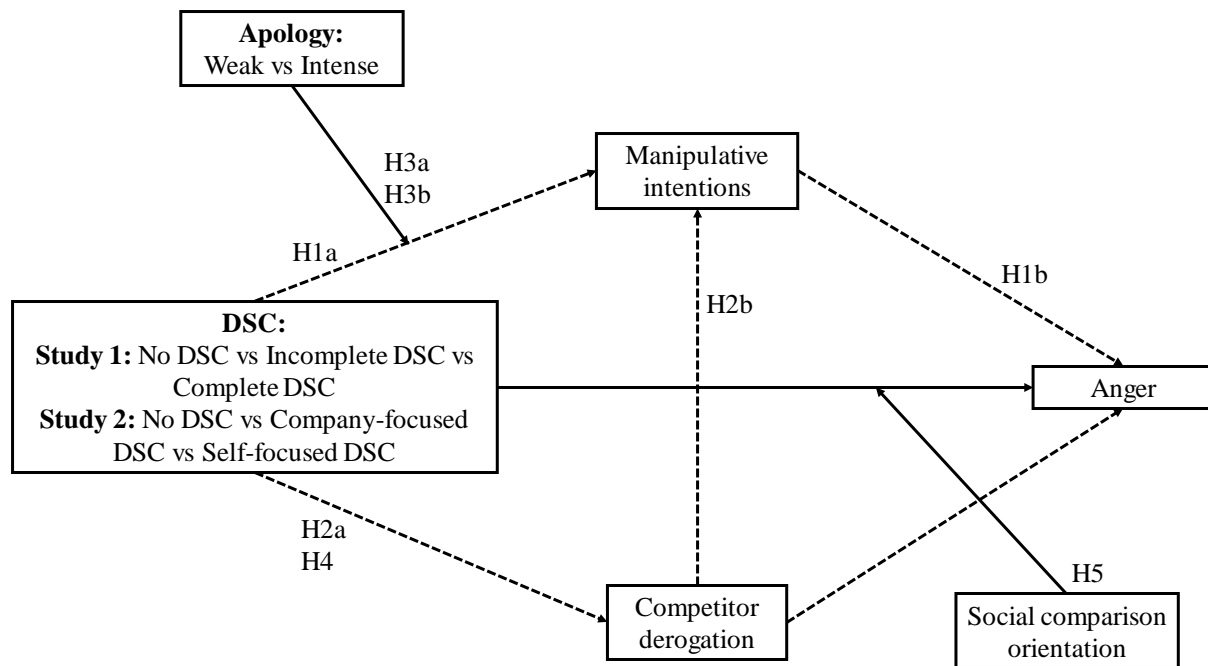
Dashed paths reduce the effectiveness of DSCs as recovery tactic (i.e., increase anger), solid paths increase the effectiveness of DSCs as recovery tactic (i.e., reduce anger). H1a, H1b, H2a, H2b, and H5 are tested in both studies. H3a and H3b are tested only in Study 1 and H4a and H4b are tested only in Study 2. Paths not associated with hypotheses have been theorized and tested in previous research.

Figure 1: Research model
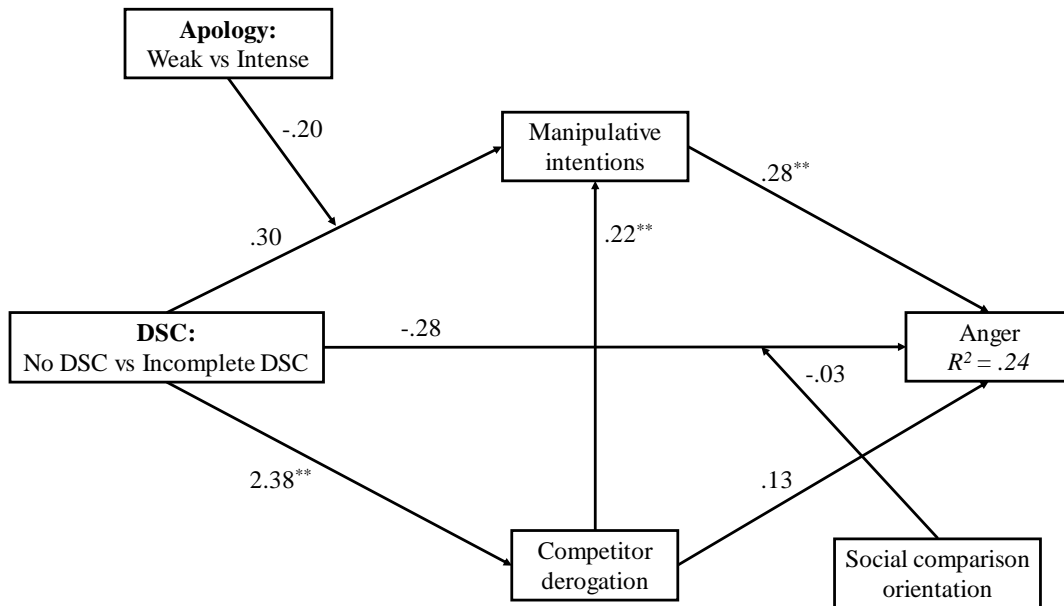
Controls included in the model:

Age → Derogation	.02	Gender → Derogation	-.37	Interactional justice → Derogation	-.20**
Age → Manipulative intentions	.01	Gender → Manipulative intentions	.10	Interactional justice → Manipulative intentions	-.27**
Age → Anger	-.17	Gender → Anger	.12	Interactional justice → Anger	-.29**
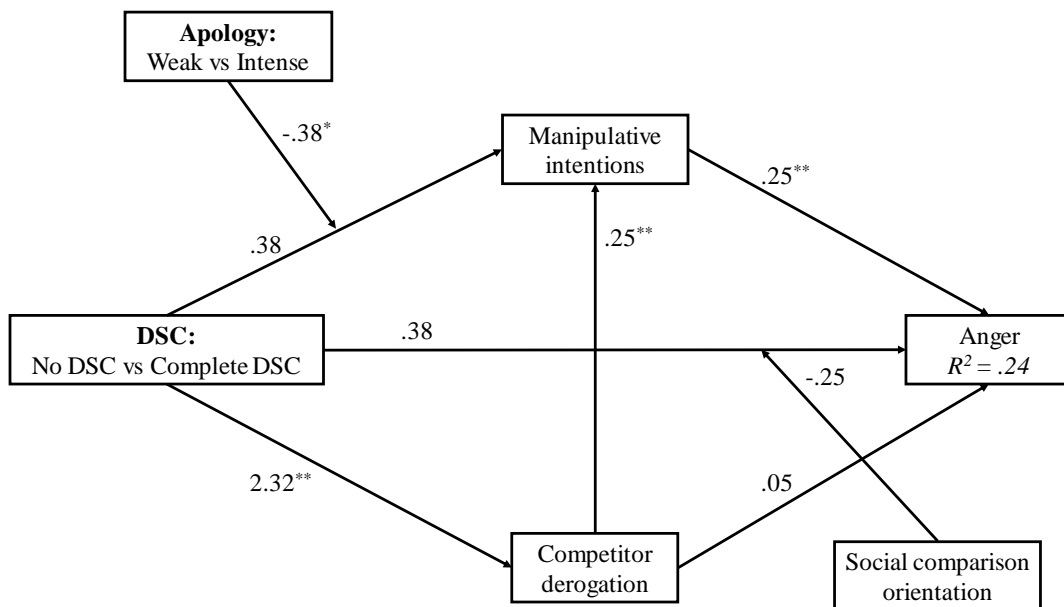
Controls included in the model:

Age → Derogation	-.02	Gender → Derogation	-.14	Interactional justice → Derogation	-.07
Age → Manipulative intentions	.15	Gender → Manipulative intentions	-.04	Interactional justice → Manipulative intentions	-.40**
Age → Anger	.09	Gender → Anger	-.02	Interactional justice → Anger	-.29**

** indicates that the coefficient is significant at $p < .01$; * indicates that the coefficient is significant at $p < .05$. Unstandardized betas are reported.

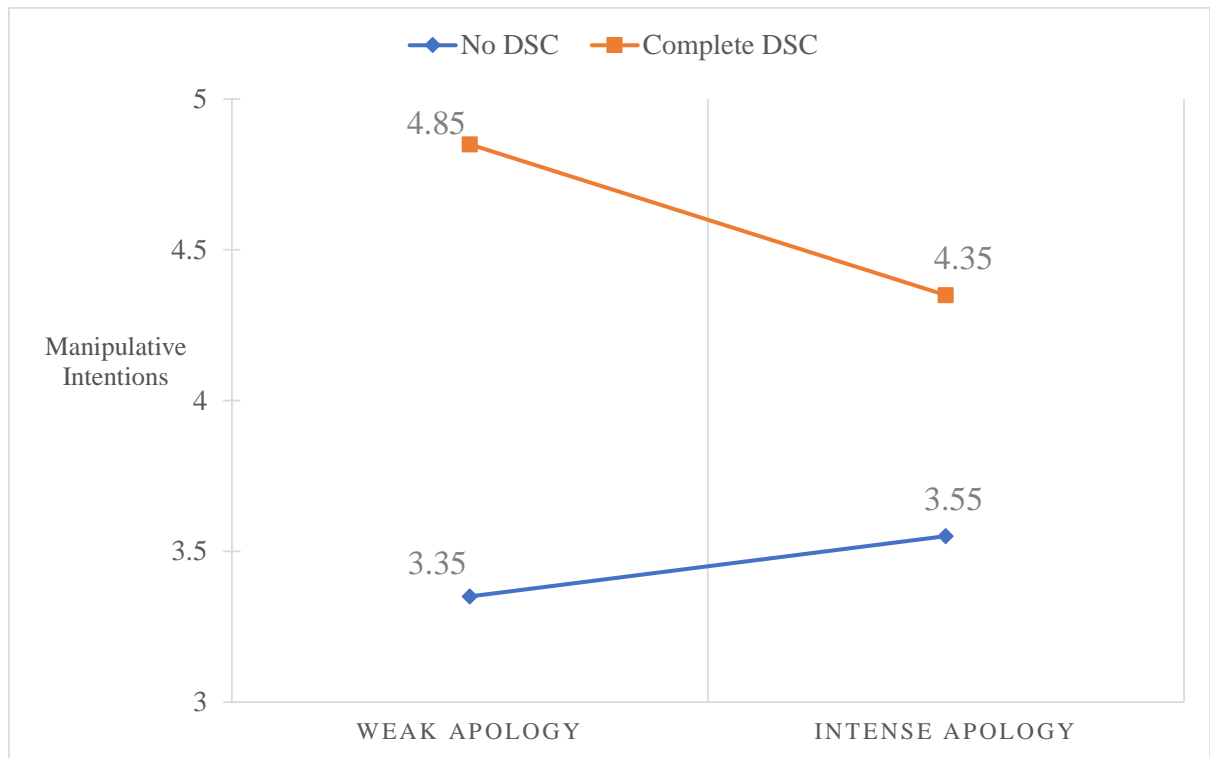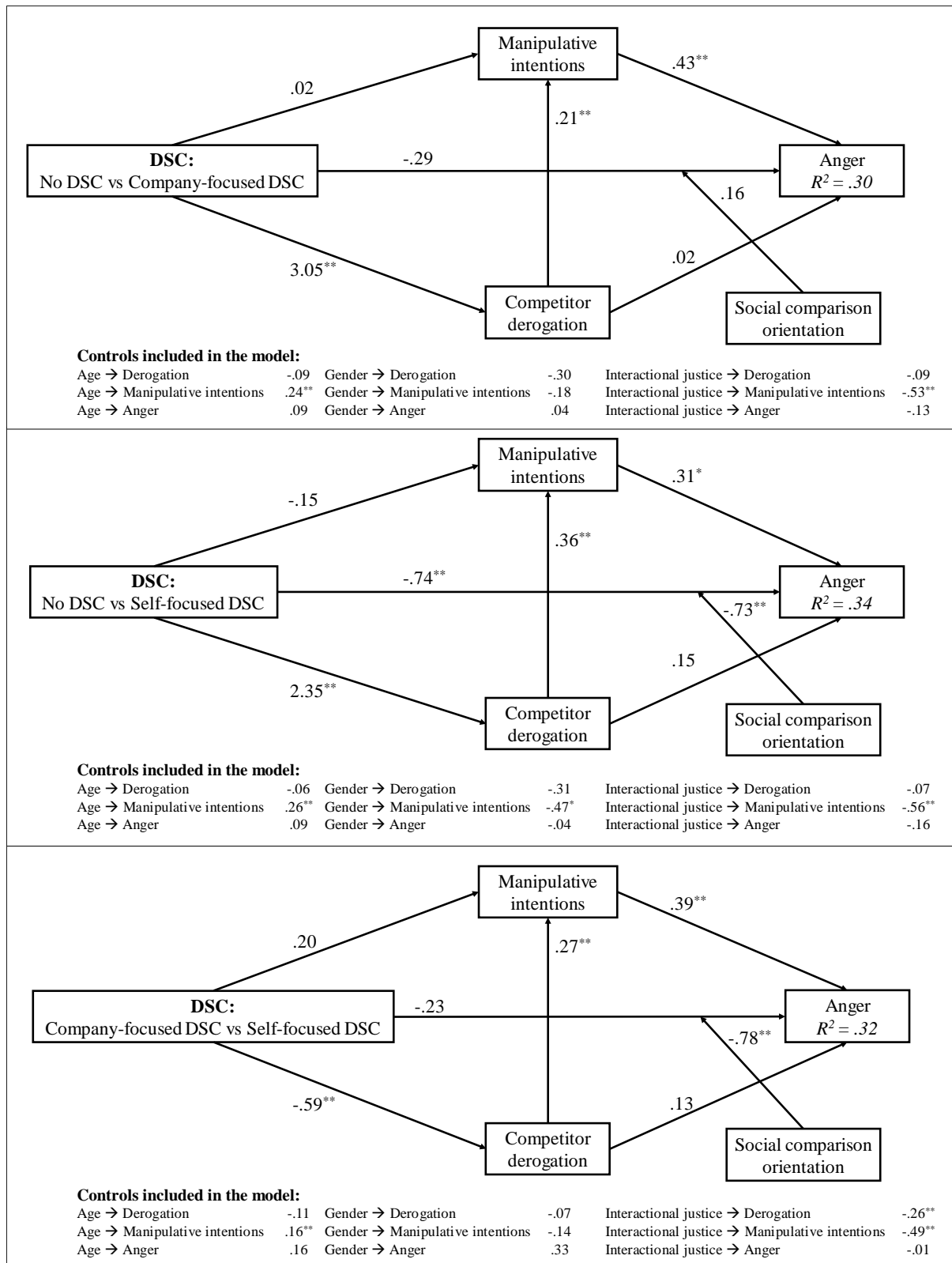**Figure 2:** Moderated mediation model (Study 1)

Figure 3: Interaction of apology intensity and DSC conditions

In the comparison between types of DSCs the Self-focused DSC was coded '1' and the Company-focused DSC was coded '0'. ** indicates that the coefficient is significant at $p < .01$; * indicates that the coefficient is significant at $p < .05$. Unstandardized betas are reported.

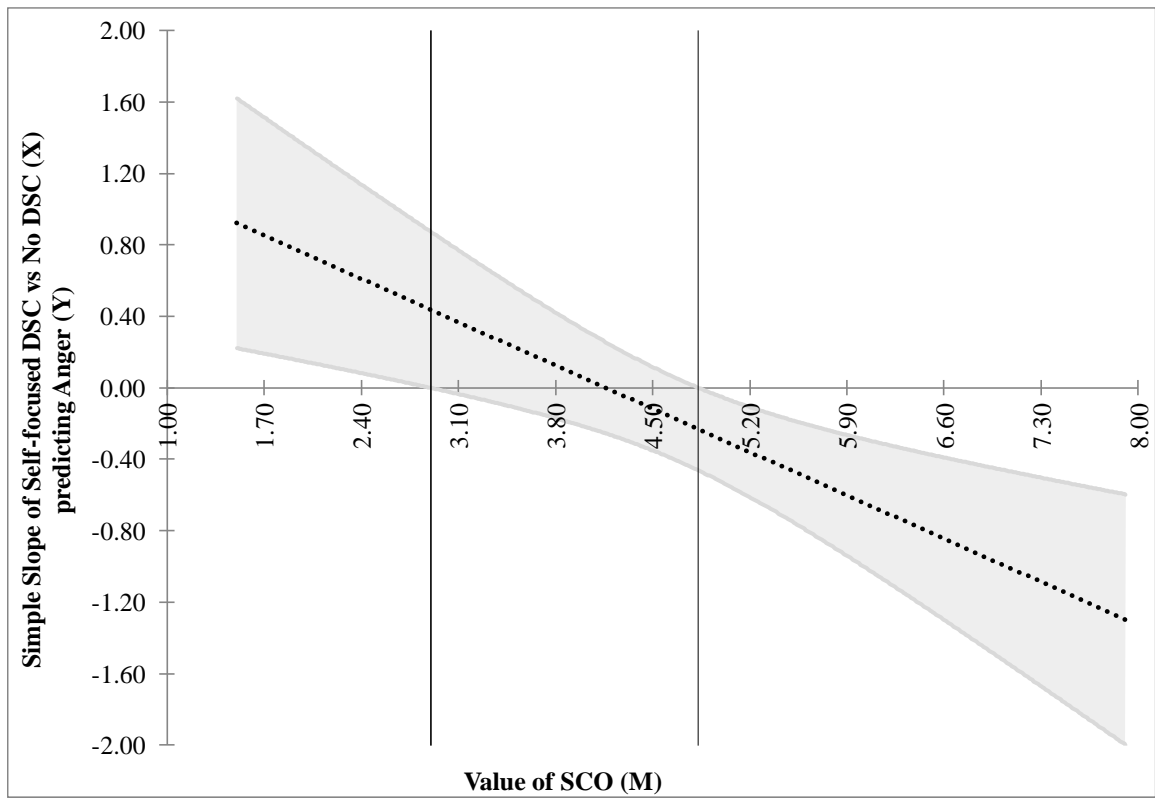**Figure 4:** Moderated mediation model (Study 2)

Figure 5: The effect of Self-focused DSC on Anger at different levels of SCO

Table 1: DSC types

DSC types	Comparison target	Derogation target
DSC	Another customer, introduced by the FSE, who had an even worse experience.	Implicit company derogation.
Company-focused DSC	Another customer, introduced by the FSE, who had an even worse experience.	Explicit company derogation.
Self-focused DSC	Another customer, introduced by the FSE, who had an even worse experience.	Explicit FSE self-derogation. Implicit company derogation.

Table 2: Indirect effects (Study 1)

Hypothesized indirect effect	Path coefficient	95% CI
Incomplete DSC → Derogation → Anger	.30	-.08 to .69
Incomplete DSC → Manipulative intentions → Anger *Weak Apology:* **Incomplete DSC → Manipulative intentions → Anger** *Intense Apology:* Incomplete DSC → Manipulative intentions → Anger	 **.14** .03	 **.003 to .32** -.09 to .17
Incomplete DSC → Derogation → Manipulative intentions → Anger	**.14**	**.03 to .29**
Complete DSC → Derogation → Anger	.13	-.21 to .48
Complete DSC → Manipulative intentions → Anger *Weak Apology:* **Complete DSC → Manipulative intentions → Anger** *Intense Apology:* Complete DSC → Manipulative intentions → Anger	 **.18** .01	 **.03 to .30** -.14 to .13
Complete DSC → Derogation → Manipulative intentions → Anger	**.14**	**.03 to .30**

Incomplete DSC/Complete DSC indicates the comparison between Incomplete DSC/Complete DSC condition and the No DSC condition. Statistically significant effects are highlighted in bold.

Table 3: Indirect effects (Study 2)

Hypothesized indirect effect	Path coefficient	95% CI
Company-focused DSC → Derogation → Anger	.07	-.25 to .87
Company-focused DSC → Manipulative intentions → Anger	.01	-.24 to .25
Company-focused DSC → Derogation → Manipulative intentions → Anger	**.27**	**.07 to .57**
Self-focused DSC → Derogation → Anger	.35	-.05 to .76
Self-focused DSC → Manipulative intentions → Anger	-.05	-.21 to .06
Self-focused DSC → Derogation → Manipulative intentions → Anger	**.26**	**.06 to .51**
Alternative DSCs → Derogation → Anger	-.08	-.20 to .03
Alternative DSCs → Manipulative intentions → Anger	.08	-.05 to .24
Alternative DSCs → Derogation → Manipulative intentions → Anger	**-.07**	**-.15 to -.01**

Company-focused DSC/Self-focused DSC indicates the comparison between the Company-focused DSC/Self-focused DSC condition and the No DSC condition. Alternative DSCs indicate the comparison between Self-focused DSC (coded '1') and Company-focused DSC (coded '0'). Statistically significant effects are highlighted in bold.