Social comparison and burnout: The role of relative burnout and received social support

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Abstract

Although there has been a great deal of research concerning myriad aspects of burnout, relatively little of that work has concerned the influence of social comparison processes in the etiology of burnout. We argue that social comparisons, in the form of perceptions of burnout relative to others, can influence the development of burnout, particularly when interacting with social support. A longitudinal study was designed to investigate the role that perceptions of relative burnout play in the development of future burnout. Downward comparison led to decreased levels of burnout and upward comparison led to increased levels of burnout, after a 2-month interval. We find support for the interactive effect of relative burnout and received social support (in the form of supportive conversations with coworkers) in predicting later emotional exhaustion and cynicism. We discuss the implications of this research for burnout theory and reduction and conclude with suggested directions for the future of research on the influence of social comparison on burnout.

Keywords: Burnout, relative burnout, social comparison, social support

Since the recognition of burnout as an important construct, there have been proposals about the processes underlying burnout (cf., Golembiewski & Munzenrider, 1988; Golembiewski, Munzenrider, & Stevenson, 1986; Hobfoll & Freedy, 1993; Maslach, 1982; Maslach, Schaufeli, & Leiter, 2001), many of which have focused on how an individual worker experiences burnout. Moreover, a great deal of that research has focused on the significant dimensions of burnout and their specific causal chain (Golembiewski, 1989; Lee & Ashforth, 1993; Leiter, 1989, 1993). On the other hand, relatively little research has been concerned with the social context of burnout, particularly those elements of social comparison that occur as one experiences burnout (Buunk & Schaufeli, 1993).

Research on the role of social comparison in burnout has largely taken one of two forms. A growing body of research has explored the social comparison processes related to equity and social exchange between a service provider and his or her clients (Buunk & Schaufeli, 1993; Schaufeli, Van Dierendonck, & Van Gorp, 1996; Taris, Peeters, LeBlanc, Schreurs, & Schaufeli, 2001; Truchot & Deregard, 2001; Van Dierendonck, Schaufeli, & Buunk, 2001). On the other hand, comparatively less research attention has been given to the social
comparisons that occur between employees and the influence of these comparisons on burnout (Buunk, Ybema, Gibbons, & Ipenberg, 2001). This paper is an attempt to broaden the existent burnout research by exploring the role of a specific social comparison, perceptions of burnout relative to others, in the experience of burnout.

The purpose of this paper is to illuminate the manner in which social comparison, through perceptions of relative burnout, plays a key role in the process of burnout, particularly as social comparisons can interact with supportive communication in the workplace. Our intent is not to propose a new model of burnout; instead we aim to highlight the mechanisms by which one’s perceptions of the social environment play a critical role in the experience of burnout. To this end, we present a discussion of the process of social comparison (in terms of relative burnout) and how it interfaces with burnout through downward and upward comparison. We discuss the role of social support in the process of social comparison and burnout. Finally, we present the findings of a research study in which we examined relative burnout, social support, and burnout in a sample of American working adults in a variety of industries.

“My coworker are more burned out than me:” Downward comparison and burnout

In terms of social comparisons, while individuals would ideally compare themselves with others that appear equal in terms of the trait being compared (Festinger, 1954), research has suggested that it is common to engage in comparisons with those who are believed to be worse off (downward comparison) or better off (upward comparisons) than the individual making the comparison (Buunk & Gibbons, 2000). The consequences of downward and upward comparison may be positive or negative for those making the comparison and vary depending on the situation (Alicke, 2000; Buunk, Collins, Taylor, van Yperen, & Dakof, 1990; Collins, 1996, 2000; Smith, 2000).

Although the consequences of downward comparison will vary based upon the situation, it is typically assumed that comparisons made between an individual and others who are worse off would result in feelings of positive affect (Major, Testa, & Bylsma, 1991; Smith, 2000). In the case of relative burnout, this would mean that an individual who looks to his or her coworkers and sees that he or she is less burned out might experience positive feelings because of the contrast with negative situations of others (Gibbons & Gerrard, 1991; Heider, 1958). Such a pattern would lead the individual to experience positive affect and result in a perceived superiority over others who are less able to cope with work related demands.

Interestingly, this downward comparison pattern can occur even when individuals are experiencing relatively high levels of burnout. For example, Brenninkmeijer, van Yperen, and Buunk (2001), in their study of secondary education teachers, found that even those who were burned out occasionally believed that others were worse off than themselves. In this case, the individual is experiencing burnout, but still perceives superiority over others. However, Brenninkmeijer et al. did not test the consequences of these perceptions of superiority in terms of the further development and/or coping with burnout; this study is an attempt to fill that void.

One would expect that feelings of superiority, even those of negative superiority of the nature studied by Brenninkmeijer et al. (2001) would lead to positive outcomes for those making such downward comparisons. By feeling that they are in a better situation than their peers, one would expect those individuals to reassess their perceptions of work-related
stressors and coping abilities in a manner that would lead to reduced burnout in the future. This conclusion, that those in difficult situations would be more likely to engage in downward comparison with resulting emotional benefit, is consistent with the findings of others in the area of social comparison targets among those with serious illnesses (e.g., Buunk & Gibbons, 1997, 2000; Buunk, Gibbons, & Reis-Bergan, 1997; Buunk & Ybema, 1997; Tennen, McKie, & Affleck, 2000; Van der Zee et al., 1996).

Indeed, such an interpretation fits well with the three-component conceptualization of burnout (cf., Maslach, 1982). One would expect perceived superiority to lead to lower emotional exhaustion, as the individual realizes that they may actually have more emotional resources to dedicate to their job than they had once thought, at least compared with others. Moreover, one would expect that those individuals would be less likely to pull away from their jobs (reflecting the depersonalization/cynicism component of burnout) as they now realize that they are functioning better than others who are similarly situated. Finally, the notion of perceived superiority is quite consistent with the personal efficacy dimension of burnout, where one would expect higher levels of personal efficacy among those who perceive they are coping better with the job demands and stressors than their peers.

“My coworker are less burned out than me:” Upward comparison and burnout

Although one would predict that downward comparison would lead to reductions in burnout, the opposite might be argued in the case of upward comparison. In this case, the upward comparison reflects a social comparison situation characterized by a belief that others are less burned out than the individual in question. Various authors have proposed that forms of upward comparison play a role in burnout. In their review of burnout in the clergy, Daniel and Rogers (1981) suggested that burnout might be exacerbated by the perceptions that others are less burned out. Their contention was that if an individual perceived that he or she was in a significant minority with regard to his or her experiences of burnout, the person may feel even worse about the situation, and in turn, more burned out. Maslach (1982) suggested that upward comparison would play a similar role, essentially leading the employee to feel isolated in their burnout.

In the case of burnout perceptions, the upward comparison may be exacerbated by a strong desire for the employee to maintain the social identity that they have developed from their job, organization, and work group (Ashforth & Mael, 1989). One aspect of the social identity of most jobs is that those in the job are competent and in control of their work. As a result, there is a strong tendency for employees not to reveal personal information or emotional reactions that might be interpreted as unprofessional by their peers (Maslach, 1982; Buunk & Schaufeli, 1993). Despite their experience of emotional exhaustion associated with burnout, employees may avoid talking about their experiences with others. This occurs despite a desire to affiliate with those who are better off (Buunk, Schaufeli, & Ybema, 1994).

This form of relative burnout perception results in important, often deleterious, consequences for both employees and organizations. Social comparison researchers, particularly in studies of mental health (e.g., depression), have suggested that upward comparison can exacerbate the consequences of negative life events, particularly if the person experiencing the event underestimates the extent to which others have experienced similar problems (Miller & McFarland, 1991; Valins & Nisbett, 1971). Underestimating the prevalence of burnout leads the employee to perceive they are alone with their problems. This perceived isolation leads to the further depletion of emotional resources (emotional
exhaustion), an impetus to pull away from the job (depersonalization/cynicism), and feelings that one cannot perform on the job as competently as he or she was once able (reduced personal efficacy).

The above discussion suggests important relationships between the outcomes of social comparison in a burnout setting and their implications for the development of burnout. Specifically, the literature suggests that downward comparison is associated with lower levels of burnout and upward comparison is associated with higher levels of burnout.

Hypothesis 1: Relative burnout perceptions are associated with the development of burnout, where upward comparison is related to higher levels of burnout and downward comparison is associated with lower levels of burnout

The role of social support

The implication that this process has for social support is critical. Although some authors have argued that the link between social support and burnout is equivocal (Burisch, 2002; Rafferty, Friend, & Landsbergis, 2001), there appears to be some evidence that support – whether from supervisors, coworkers, or family members – can serve as a buffer against stress and burnout (Baruch-Feldman, Brondolo, Ben-Dayan, & Schwarz, 2002; Carlson & Perrewé, 1999; Greenglass, Burke, & Konarski, 1997; Lloyd, King, & Chenowith, 2002; Sargent & Terry, 2000; Tamara & Ishikuma, 2001; Winnubst, 1993; Winnubst, Marcelissen, & Kleber, 1982). If employees are avoiding utilizing social support because of perceptions of relative burnout, they may be more susceptible to future burnout.

Furthermore, some perceptions of relative burnout, in particular upward comparisons, tend to keep individuals from sharing their true feelings about a situation (Prentice & Miller, 1993, 1996). Coupled with the finding that burned-out employees are less likely to discuss their problems with coworkers (Buunk et al., 1994), it would seem that burned-out employees end up in a vicious cycle whereby their mistaken perceptions about the prevalence of burnout leads them to feel worse about their situation while concurrently reducing the available social support because of self-imposed isolation from coworkers. In this sense, the relationship between help-seeking behavior and upward social comparison is iterative, whereby burned-out employees want to seek out help from those who are better off but do not (Buunk et al., 1994) and, as a result, the employees become more burned out (Tamara & Ishikuma, 2001).

Along these lines, Buunk and Schaufeli (1993) linked social comparison and social support in the context of burnout when explaining why nurses would be less likely to associate with others when they experience stress. They proposed that when experiencing the uncertainty associated with stress, nurses would want to talk to others about the situation but would refrain from doing so because they misperceive that they are the only individual who is experiencing burnout. This might be in part because of lower identification with those who are perceived to be coping well with burnout (Buunk et al., 2001).

Based on the work of Buunk and his colleagues (2001), we specifically sought to understand how social support in the form of supportive conversations with coworkers would be related to perceptions of relative burnout and subsequent burnout. Fenlason and Beehr (1994) found that exploring the nature of conversations individuals have at work will better account for variance in strains than more general measures of social support. Moreover, given the implications of relative burnout for the nature of communication in the
workplace as discussed above, thinking of social support in terms of the manner in which it is received through conversations with coworkers is particularly valuable.

Researchers have proposed a number of different mechanisms for understanding the relationship between social support and burnout (see Beehr, 1985). The dominant hypothesis has been a "buffering effect," whereby social support interacts with a stressor to predict strain (Ganster, Fusilier, & Mayes, 1986). In the present context, this would suggest that those individuals who experience high levels of received social support at work through positive conversations with coworkers will be less likely to experience the potentially negative influence of relative burnout perceptions on the development of burnout. Instead, these conversations will buffer the relationship between potentially negative relative burnout information and subsequent burnout, such that the influence of relative burnout on subsequent burnout is lower among those who engage in more supportive conversations with coworkers.

**Hypothesis 2:** Relative burnout and supportive work conversations will interact in predicting burnout, such that the influence of relative burnout on subsequent burnout is lower among those who experience more supportive conversations with coworkers.

### Method

**Pilot study**

As an initial test of the role of relative burnout in burnout, we conducted a pilot study with a sample of Roman Catholic priests. Burnout has important implications for most positions; the clergy is certainly no exception. It has been reported that a sample of priests had a higher rate of burnout than a non-pastoral control group (Strumpfer & Bands, 1996). Another study reported that, among the different types of Roman Catholic priests, secular priests (those working most often with the public) had the highest levels of burnout (Virginia, 1998). Many reasons have been suggested for the high levels of burnout among priests, including the physical isolation of many priests as well as the involvement in a vocation where they must be all things to all parishioners and their duties are not clearly defined. This may result in reduced feelings of efficacy with a diminished possibility of successful outcomes (Daniel & Rogers, 1981). A competitive atmosphere during pastoral meetings that "inhibits sharing of problems" (Daniel & Rogers, 1981, p. 245) may also contribute to the isolation of priests. The identification of clergy as models for calmness, infallibility, and perfection may exacerbate the perception of isolation (Grosch & Olsen, 2000).

Overall, because of their increased incidence of burnout, we believed that priests might offer a reasonable starting point for the investigation of social comparison in perceptions of burnout. In the next section, we describe a study of the role of social comparison in burnout in a sample of Roman Catholic priests in the USA. The purpose of the study was to establish a pattern of relative burnout whereby the priests who were more burned out believed that others were less burned out.

**Participants and procedure.** The pilot study participants were Roman Catholic priests derived from a nationwide stratified sampling technique. Four priests from every state in the USA (and two from the District of Columbia) were randomly mailed a burnout survey. The priests’ addresses were obtained from an Internet-based directory of US Catholic parishes.
A total of 195 priests received surveys and 74 surveys were returned, giving a response rate of 38%.

The mean age for the sample was 56.31 (SD = 9.90) years with a mean of 27.86 (SD = 11.02) years of experience as a Catholic priest. The priests celebrated Mass at a mean of 1.63 (SD = 0.98) parishes and had spent a mean of 8.03 (SD = 6.31) years at their current primary parish. The number of other priests working at their primary parish ranged from zero (the mode) to four, with a mean of 0.59 (SD = 0.86).

The surveys were mailed to the priests with an informed consent cover letter that asked the priest to fill out the survey and return it in the postage-paid envelope that was provided. They were also thanked for their time and participation. A follow-up letter (with another copy of the survey) was mailed to priests about 6 weeks after the first mailing to encourage those that had not already returned the survey to do so.

**Measures.** The Maslach Burnout Inventory General Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996) was used as the primary assessment of burnout in the priests. The overall MBI-GS contains three subscales tapping three latent burnout constructs that are commonly identified in the burnout literature: emotional exhaustion (EE), cynicism (CY), and personal efficacy (PE). The MBI-GS contains 16 statements where the respondent is asked how frequently the statement applies to him or her on a seven-point frequency scale from “never” (0) to “every day” (6). Table I shows descriptive statistics for the three MBI-GS subscales, including mean scores, standard deviations, and Cronbach’s coefficient alpha.

We chose the MBI-GS over other forms of the MBI (e.g., the MBI-Human Services Survey; MBI-HSS) for a number of reasons. First, the MBI-HSS refers to recipients in the sense of recipients of services. We felt that this may be confusing to the priests, as many of them do not see parishioners as “recipients” of pastoral services in the same manner that people may view their service relationship with other occupations such as therapists or nurses. While we could reword the survey, replacing “recipients” with “parishioners,” this could potentially influence the standardization of the scale. Second, the MBI-HSS would be better suited for priests that work with the public on a regular basis (secular priests). We did not restrict the study to secular priests, and as such, thought the MBI-HSS survey would be inappropriate for religious and monastic clergy that do not have much contact with the public in a counseling role. Third, while offering counseling assistance to parish members is a critical component of the secular pastorate, there are many other important aspects of their job that could also lead them to experience stress, strain, and burnout.

Table I. Descriptive statistics for pilot study sample.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>1.</th>
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</thead>
<tbody>
<tr>
<td>1. Exhaustion</td>
<td>1.90</td>
<td>1.31</td>
<td>.91</td>
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<tr>
<td>2. Cynicism</td>
<td>1.36</td>
<td>1.16</td>
<td>.64</td>
<td>.82</td>
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<td>3. Personal efficacy</td>
<td>4.96</td>
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<td>-.43</td>
<td>-.38</td>
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<td>Relative burnout (self-other comparison)</td>
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<tr>
<td>4. Exhaustion</td>
<td>2.50</td>
<td>1.17</td>
<td>.60</td>
<td>.30</td>
<td>-.16</td>
<td>.91</td>
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<tr>
<td>5. Cynicism</td>
<td>2.71</td>
<td>.83</td>
<td>.37</td>
<td>.48</td>
<td>.006</td>
<td>.60</td>
<td>.83</td>
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<tr>
<td>6. Personal efficacy</td>
<td>4.65</td>
<td>.83</td>
<td>-.26</td>
<td>-.10</td>
<td>.58</td>
<td>-.36</td>
<td>-.19</td>
<td>.87</td>
</tr>
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</table>

Note: n = 74. Scores along the diagonal are internal consistency estimates (Cronbach’s coefficient alpha). Correlations larger than .24 are p < .05; correlations larger than .30 are p < .01; correlations larger than .37 are p < .001.
Finally, the MBI-GS and MBI-HSS appear to measure very similar latent constructs of burnout (Maslach, Jackson, & Leiter, 1996). Overall, we felt that the MBI-GS would be an acceptable measure of burnout for this study.

Relative burnout. In addition to the regular MBI-GS, the questions on the scale were modified to measure relative burnout, in terms of the perceived burnout of the participant compared to the average Catholic priest. Generally speaking, these questions were identical to the MBI-GS questions except for minor wording changes. An example modification was rewriting “I feel emotionally drained from my work” to “Compared to the average priest, I feel more emotionally drained from my work.” The scaling for the 16 new questions was consistent with the scaling of the original MBI-GS questions. Higher scores on this measure would indicate that the participant feels that he is more burned out than others; lower scores indicate that the participant feels he is less burned out than others. Table I gives descriptive statistics for the three MBI-GS subscales for the comparison to average priest.

Results and discussion. Table I contains the Pearson correlations between the variables of study. These findings offer initial support of Hypothesis 1, where higher burnout scores are associated with relative burnout. They suggest that those with an upward social comparison pattern have higher levels of burnout and those with a downward social comparison pattern have lower levels of burnout.

Despite these encouraging findings, we recognized that there were a number of limitations to the pilot study. The most significant limitation comes in the potential interpretation that those who are more burned out show greater self-other differences where they perceive that others are less burned out. Without considering the role upward comparison can play in perceptions of burnout, one might argue that this is simply an accurate perception – those that are more burned out accurately perceive that others are less burned out. We acknowledge that with the present dataset, we simply cannot rule out that possibility. However, the data do not rule out upward comparison as a possible explanation either.

Also problematic are a number of methodological concerns. The response rate raises questions in the context of burnout research. Although the relatively wide ranges of scores on the burnout dimensions suggest that a number of burned out individuals did complete the survey, we cannot rule out the possibility that the most burned out individuals simply did not respond to the survey, restricting our range. Moreover, the cross-sectional nature of our data collection limits the conclusions that we can draw with regard to the causal direction of the self-other perception and burnout. Finally, while the clergy represents a potentially interesting and important population for the study of burnout, there are clear limitations in the extent to which these findings might be generalized to a more typical working population. To address these concerns, we conducted a more complete, longitudinal study design to provide evidence that self-other comparisons in burnout lead to heightened levels of burnout.

Participants and procedure

A second sample of participants included a group of 360 working adults. The sample was 75% female (with ten participants not providing a gender), 75% were White, and the mean age was 38.99 years. The participants had held their current positions for an average of 5.05 years and had been working for their current organization for 7.84 years. A wide variety of industries were represented, including education (n = 51), healthcare (n = 36), banking or
financial services \((n = 28)\), government \((n = 24)\), manufacturing \((n = 20)\), retail \((n = 18)\), and telecommunications \((n = 14)\).

The data from the second sample were collected with the assistance of undergraduate management students as part of a research experience assignment. The students collected measures from three working adults at two points during the semester (with approximately two months separating time 1 and time 2). To ensure that the surveys were indeed completed by the working adults, we randomly selected 30% of the surveys and directly contacted the participants to verify their participation. Of those contacted, all of the participants verified that they had completed the survey. This method of survey collection has been effectively used by field researchers in organizational settings, especially when used in conjunction with samples drawn from a single organization or occupation (Halbesleben & Bowler, in press; Kolodinsky, Hochwarter, & Ferris, 2004).

**Measures**

Similar to the pilot study, we employed the MBI-GS as our measure of burnout, and also administered the reworded MBI questions to assess social comparisons. Again, the MBI-GS was utilized because of its applicability to a wide variety of occupations, which freed us from the limitation of utilizing only human services workers. The relative burnout questions were worded in terms of coworkers at the participant’s present workplace because of the varied nature of the industries represented (e.g., “Compared to my average coworker, I feel _____ burned out from my work”); the relative burnout scale was completed following completion of the MBI-GS. Respondents used a five-point scale, from much less (1) to no more or less (3) to more (5). Higher scores on this measure would indicate that the participant feels that he or she is more burned out than others; lower scores indicate that the participant feels he or she is less burned out than others. These scales were collected at both time 1 and time 2 of the data collection. The descriptive statistics for these scales can be found in Table II.

**Supportive work conversations.** Following the burnout and relative burnout measures, we administered a social support scale developed by Fenlason and Beehr (1994) during the time 2 data collection. Their scale focuses on the content of conversations between employees and important individuals at work as a more specific indicator of received support in the workplace. They found that their more specific scale of received social support accounted for more variance in job-related strains than did global measures of support. Moreover, the nature of the conversations assessed represents more tangible forms of social support (e.g., discussions about how to improve performance) than are typically represented in social support measures. Given that finding, we utilized the eight work-related conversation questions (both the positive and negative conversation content items; the negative items were reverse scored so that all questions in the scale were scored in the same direction). We modified the items slightly to reflect conversations with coworkers specifically, more general wording of occupation (the original items were written for secretaries), and added a specific timeframe of the previous 2 months. An example item from this scale is “In conversations with my coworkers over the past two months, we shared interesting ideas about performing our jobs.” The items were scaled on a five-point, Likert-type scale, from strongly disagree (1) to strongly agree (5). The descriptive statistics for this scale are shown in Table II.
### Table II. Descriptive statistics for full study sample.

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<th>Variable</th>
<th>Mean</th>
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<tr>
<td><strong>Control variables (collected at Time 1)</strong></td>
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<td>1. Gender</td>
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<td>2. Age</td>
<td>38.99</td>
<td>6.54</td>
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<td>3. Tenure</td>
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<td>4. Role Ambiguity</td>
<td>3.52</td>
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<td>5. Exhaustion</td>
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<td>6. Cynicism</td>
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<td>7. Pers Efficacy</td>
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<td>8. Exhaustion</td>
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<td>9. Cynicism</td>
<td>2.54</td>
<td>.78</td>
<td>.03</td>
<td>.07</td>
<td>.20</td>
<td>.36</td>
<td>.53</td>
<td>-.31</td>
<td>.64</td>
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<td>10. Pers Efficacy</td>
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<td>.66</td>
<td>.02</td>
<td>.00</td>
<td>.09</td>
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<td><strong>Relative burnout (self-other comparison)</strong></td>
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<td>11. Exhaustion</td>
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<td>.15</td>
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<td>12. Cynicism</td>
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<td>.05</td>
<td>.02</td>
<td>.11</td>
<td>.44</td>
<td>.55</td>
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<td>-.11</td>
<td>.50</td>
<td>.73</td>
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<td>13. Pers Efficacy</td>
<td>3.68</td>
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<td>.02</td>
<td>.14</td>
<td>-.13</td>
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<td>-.14</td>
<td>-.24</td>
<td>.69</td>
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<td>14. Coworker conversations</td>
<td>3.28</td>
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<td>.10</td>
<td>.08</td>
<td>.09</td>
<td>-.12</td>
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<td>.28</td>
<td>-.27</td>
<td>-.37</td>
<td>.17</td>
<td>.75</td>
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**Note:** Personal Efficacy, \( n=366 \). For gender, 0 = male, 1 = female. Scores along the diagonal are internal consistency estimates (Cronbach’s coefficient alpha). Correlations larger than .10 are \( p < .05 \); correlations larger than .13 are \( p < .01 \); correlations larger than .20 are \( p < .001 \).
Control variables. Because of the heterogeneity of the sample and because of potential relationships with burnout dimensions, we controlled for gender, age, and job tenure in the analysis. These were assessed with one-item measures. Additionally, we controlled for the existence of stressors on the job by asking the participants to complete the six-item role ambiguity scale of Rizzo, House, and Lirtzman (1970). An example item from this scale is “I know exactly what is expected of me.” The items were scaled on a five-point, Likert-type scale, from strongly disagree (1) to strongly agree (5). The control variables were placed in the survey after the burnout and social support measures. The descriptive statistics for this scale can be found in Table II.

Results
To test the hypotheses of the study, we utilized moderated multiple regression analysis (Aiken & West, 1991; Cohen & Cohen, 1983). For each burnout dimension, this involved a three-step procedure. First, we tested a multiple regression equation with the control variables (gender, age, tenure, role ambiguity, and time 1 score of the burnout dimension; step 1) and the relative burnout score predicting the time 2 score on the burnout dimension (step 2). In the third step, we added the coworker work conversation scale. Finally, in the fourth step, we added the interaction between relative burnout and supportive coworker work conversations. The interaction terms were calculated by first mean centering burnout score and coworker conversation score, then multiplying each participant’s mean-centered relative burnout score by his or her mean-centered score on the coworker conversation scale. The results of the moderated regression analysis are shown in Table III.

Hypothesis 1 predicted that relative burnout would be associated with time 2 burnout, such that those engaging in downward comparison would experience a decrease in burnout and those engaging in upward comparison would experience an increase in burnout. After controlling for gender, age, tenure, role ambiguity, and time 1 burnout, relative burnout was significantly positively associated with exhaustion ($\beta = .39, p < .001, \Delta R^2 = .11$), cynicism ($\beta = .22, p < .01, \Delta R^2 = .10$), and reduced personal efficacy ($\beta = .22, p < .01, \Delta R^2 = .09$). These findings support Hypothesis 1.

Hypothesis 2 predicted that relative burnout and supportive conversations would interact in predicting burnout, such that the influence of relative burnout on burnout would be lower among those who have high levels of supportive conversations. After entering the main effect of the conversations to the regression equations (in step 3) and then the interaction between relative burnout and coworker conversations (in step 4), the interaction term was significant for both exhaustion ($\beta = .31, p < .001, \Delta R^2 = .10$) and cynicism ($\beta = .23, p < .01, \Delta R^2 = .07$). In both of these cases, the addition of the interaction term explained a significant amount of additional variance in time 2 burnout (beyond that explained by the control variables, relative burnout, and the coworker conversion scale). The interaction term for reduced personal efficacy was not significant ($\beta = .03, ns$).

Figures 1 and 2 are graphical depictions of the interaction found between social comparison and coworker conversations in predicting time 2 exhaustion and cynicism. To create the figures, we dichotomized social comparison by placing those who had a mean relative score for the respective burnout dimension above three in upward comparison group and those with a mean relative burnout score for the respective burnout dimension below three in downward comparison group. Moreover, we dichotomized coworker conversations by forming two groups based on scores above and below one standard deviation of the mean conversation scale score (Aiken & West, 1991).
interaction is consistent across emotional exhaustion and cynicism. It suggests that for those participants who engage in more supportive work conversations with their coworkers, the nature of their social comparison is not significantly related to time 2 emotional exhaustion or cynicism. However, for those who have had less supportive conversations with coworkers, those who think they are more burned out than others tend to have higher time 2 emotional exhaustion or cynicism than those who think they experience less burnout than others.

**Discussion**

This study found support for the contention that downward comparison led to decreased levels of burnout and upward comparison led to increased levels of burnout after a 2-month
interval. Moreover, we found support for the interactive effect of relative burnout and received social support (in the form of supportive conversations) in predicting later emotional exhaustion and cynicism.

The predictions concerning the effect of the interaction between relative burnout and supportive work conversations on personal efficacy dimension of burnout were not supported. However, while the interaction was not significant, we note that the main effect of the supportive conversations was significant after accounting for the effects of relative burnout. This is in line with previous research that has found support for the main effect of

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**Figure 1.** Time 2 emotional exhaustion as a function of social comparison and work conversations.

**Figure 2.** Time 2 cynicism as a function of social comparison and work conversations.
job resources on personal accomplishment, and suggests that social comparisons and social support serve as independent predictors of this particular dimension of burnout.

**Implications for theory and practice**

The notion that relative burnout plays a role in the experience of burnout extends models of burnout to include social comparison as an important contextual factor. Moreover, it sheds light on the processes underlying and perpetuating burnout.

This research provides an important link to other research on the perpetuation of burnout through emotional contagion. Researchers have suggested that burnout can be related to social contagion processes, whereby one becomes burned out in part because of the presence of others who are burned out (cf., Bakker, Demerouti, & Schaufeli, 2003; Bakker & Schaufeli, 2000; Bakker, Schaufeli, Sixma, & Bosveld, 2001). Interestingly, Bakker and Schaufeli (2000) found that exposure to colleagues with work-related problems increased the likelihood of burnout, which appears to run contrary to the findings of the present research, in that we found that the perception that others have fewer problems (e.g., they have less burnout relative to the participant) was associated with higher burnout. A key difference between their work and the present study is that they were focused more on the absolute levels of burnout among coworkers, while we focused on individual perceptions of burnout relative to coworkers (without accounting for their actual level of burnout). Additionally, they (as well as Bakker et al., 2001) noted that susceptibility to emotional stimuli serves a moderating factor, whereby those more susceptible are more likely to experience burnout contagion. Taken together with the present research, this suggests that the social cognitive processes underlying burnout contagion, particularly as they relate to personality variables and social comparison, will help to increase our understanding of the dynamics of burnout perpetuation between individuals in the workplace. The key issue seems to be who the participant affiliates with (and thus compares with), the manner that affiliate choice interacts with their susceptibility to emotional stimuli, and the extent to which the affiliate is experiencing burnout. The present study was not designed to capture such an effect, but future research that accounts for specific burnout levels of affiliates in addition to perceptions of relative burnout may help to sort out the underlying factors that explain this effect.

Along those lines, one avenue for increasing our understanding of social contagion in burnout would be to consider Kulik and Mahler’s (2000) recent work on the role that social comparison and affiliation play in emotional contagion under threatening conditions. For example, they suggest that when facing a threat, an individual will likely affiliate with someone who has experienced the threat in the past (not someone currently experiencing the threat) and has recovered or is recovering from the threat. For example, they found that hospitalized patients awaiting surgery preferred to share a hospital room with a patient who had completed and was in recovery (Kulik & Mahler, 1989). Moreover, they suggest that this process then leads to emotional contagion as we mimic the emotional reaction of those individuals who have experienced and recovered from the threat (Kulik & Mahler, 2000; see also Schachter, 1959). In the context of burnout, this suggests that those who are burned out may seek out those they perceive to have experienced burnout in the past (assuming they can find someone, this is a tenuous assumption given the relationship between burnout and turnover, cf., Drake and Yadama, 1996) as a source of coping. This would suggest that emotional contagion may work to positively ameliorate burnout. We would suggest that this is an area in need of empirical verification, but a potentially useful avenue for understanding the etiology and reduction of burnout.
This research also underscores the importance of the trend of looking at upward and downward comparison and their affective consequences. Nonetheless, a number of issues are implied by this study that must be addressed in future research efforts. First, this research does not address the question of the likelihood of upward or downward comparison as the function of burnout; we focused on the outcome of relative burnout rather than the choice of a social comparison target. Work by Wheeler and Miyake (1992) would suggest that those who are burned out, because of priming of negative thoughts, would be more likely to engage in upward comparison (which our study suggests would lead to a spiral of increasing burnout). Nonetheless, this is an empirical question, one that can be addressed through further longitudinal study of the relationship between burnout and social comparison processes.

More research is also needed on the potential negative outcomes of downward comparison. For example, Smith (2000) suggested that one consequence of downward comparison is Schadenfreude, the feeling of pleasure that is the result of another’s misfortune (see also Brigham, Kelso, Jackson, & Smith, 1997; Smith et al., 1996). One might suspect that drawing pleasure from the burnout of others, particularly if coupled with a lack of support provided to those experiencing the burnout, might lead one to experience guilt over time. It is unclear whether such a process could serve as a stressor, such that it might actually increase burnout over time.

This study also suggests other broader implications in terms of the study of social support and burnout. In this study, we have focused on received social support in the form of supportive conversations with coworkers rather than the more typical variable of perceived social support (the belief that support would be there for an individual in a time of need). The distinction in this study is notable, in part because of the interaction between a psychological stressor (relative burnout) and received support on subsequent burnout. Kaniasty (2005) noted that stress-strain buffering effects with received support are relatively rare, emphasizing the importance in considering the differences between perceived and received support. The findings of this research suggest that received support can be helpful in reducing strain; however, more research looks at the mechanisms underlying the benefits of received support. For example, the work of Norris and Kaniasty (1996) suggests that received support may be helpful to the extent that it maintains perceived support in the face of a traumatic experience. Moreover, the findings extend continued research suggesting that for optimal outcomes, the type and source of support should match the types of stressors encountered (Cutrona & Russell, 1990; Halbesleben, in press; Kanisty & Norris, 1992) and characteristics of the employee (Luszcynska & Cieslak, 2005) by noting the potential benefits of receiving support from coworkers through conversations that might allow the employee to better cope with and address stress at work. This effect is augmented for individuals who make certain types of social comparisons, reflecting Luszcynska and Cieslak’s (2005) work suggesting the need to consider characteristics of the individual in interpreting the effects of social support.

Along those lines, our findings suggest an avenue of future exploration with regard to social support buffering effects. Based on the present work, it is unclear of the specific nature of the buffering effect, in other words, it is unclear whether the buffering effect exists because the conversations we assessed create more accurate perceptions regarding social comparisons or if there is a more general buffering effect. In other words, we cannot necessarily determine whether the conversations helped to improve the accuracy of the information used in social comparison or whether the conversations, regardless of their effect on social comparison, simply lead to reductions in burnout through a more general
support process. While we recognize this as a limitation of our study, it also reflects a broader concern within the burnout literature, specifically, the need for better theoretical integration of social support (Halbesleben & Buckley, 2004a; Sargent & Terry, 2000). In particular, there is a need to better understand the specific processes that lead support to reduce strains. While the use of more specific measures of social support (e.g., our use of supportive conversations as a specific operationalization of support) helps move us in the right direction, more work is needed to understand how support operates to reduce burnout and other strains.

Moreover, the findings underscore a need to direct more attention to the role of communication in burnout (Becker, Halbesleben, & O’Hair, in press). Despite clear relevance to the development of burnout, relatively little research has explored the specific nature of communication in terms of social support, interpersonal relationships at work, and burnout (cf., Ray & Miller, 1994). Given the findings of this study and others that have found meaningful relationships between communication and burnout (i.e., Fenlason & Beehr, 1994; Leiter, 1991), more research is needed that integrates communication as a key component of occupational strains in general and burnout in particular. Of particular interest are conversations about burnout between coworkers. While the present study investigated positive conversations, there was no attempt to assess whether they actually discussed burnout; such measurement would be valuable.

From an organizational perspective, there are a number of potential negative consequences of social comparison, particularly in terms of upward comparison, in perceptions of burnout. If those employees experiencing higher burnout and upward comparison begin to inhibit their problems, it may appear that an organization’s workforce is functioning normally, when indeed they are experiencing burnout. Consequentially, if the employees begin to turnover, request leaves of absence, or perform poorly because of their inhibited burnout and stress, organizations may have a difficult time determining the source of the human resource problem and alternatives that may resolve these problems.

The possibility of social comparison errors

The findings with regard to upward comparison and its long-term effects on burnout may be the result of a specific upward comparison error known as pluralistic ignorance. Pluralistic ignorance represents a mismatch between one’s attributes and their perceptions of the group norm (Allport, 1924; Katz & Allport, 1931; Prentice & Miller, 1996). While pluralistic ignorance has been studied in a variety of social contexts (cf., Miller & McFarland, 1987; Miller, Monin, & Prentice, 2000; O’Gorman, 1975, 1980; Prentice & Miller, 1993), it has not seen widespread application in organizational contexts (Halbesleben & Buckley, 2004b; Harvey, Novicevic, Buckley, & Ferris, 2001). In the case of burnout, it would represent a pattern whereby individuals are burned out, but mistakenly believe that others are not burned out.

Due to the general nature of the present sample, we are unable to provide conclusive evidence that pluralistic ignorance is the process underlying those making upward comparisons in this sample. Testing for pluralistic ignorance would require the ability to isolate the group-level data in order to create a mean level of burnout with which perceptions of others’ burnout could be compared. Nonetheless, it would be interesting for future research efforts to explore the extent to which social comparison of burnout is done in error and the implications of such errors for those experiencing burnout.
Remedies for pluralistic ignorance in burnout perceptions. Given the deleterious effects of pluralistic ignorance in the perception of burnout, organizations may seek strategies for reducing the impact of social comparison errors in burnout perceptions. Schroeder and Prentice (1998) have proposed that pluralistic ignorance can be reduced if people are taught about pluralistic ignorance and its effects on perception and decision-making. They found that a training program designed to reduce pluralistic ignorance in perceptions of college student alcohol consumption was effective in reducing pluralistic ignorance, primarily because of improvements in estimating the prevalence of drinking among their peers. Their work, in concert with the findings of the present study, suggests that if organizations have a culture that supports discussing problems related to burnout, pluralistic ignorance will be reduced, effectively reducing burnout as well. This thinking reinforces the aforementioned notion that conversations with coworkers facilitate the buffering effect of social support by increasing the accuracy of social comparison information.

Despite the interesting findings of the present work, there are a number of limitations that must be addressed. First, because the data are self-report and from a single participant source, we cannot rule out the possibility that common method bias is influencing the statistical analysis presented. Second, while we have accounted for as much as 46% of the variance in time 2 burnout by including the variables of interest to this study, there are clearly exogenous variables that could potentially influence time 2 burnout that have not been accounted for in our model.

The objective of this study was to explicate the role of social comparisons in the process of burnout, with particular consideration given to the role that social support plays in moderating the effect of social comparisons on burnout. The findings of the present study suggest a relationship between self-other perceptions of burnout and the development of burnout two months later. Moreover, we found that social support moderates the relationship such that those who experience social support, in the form of conversations with their coworkers, exhibit a reduced influence of social comparison on their later burnout.

This paper makes a number of important contributions. First, it offers a theoretically grounded framework that advances our understanding of the experience of burnout. In doing so, the notions of social comparison do not replace current process models of burnout but instead complement them by identifying the social context of burnout. It also sets forth an agenda for this potentially important stream of burnout research. Second, the paper offers an initial investigation of the role that relative burnout, particularly when interacting with social support, may play in predicting burnout among a generalized sample. Taken together, this paper blends a conceptual argument with empirical findings to illustrate the significant role that social comparison plays in the experience of burnout.

Acknowledgements

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Notes

1 Note that the terms downward and upward comparison typically refer to the choice of a social comparison target. In the present paper, we use those terms to refer to the outcome of the comparison; we are not assessing who the individual has chosen to compare himself or herself with.
Note that in the analyses reported above, these scores were not dichotomized but instead treated as continuous variables; dichotomization was only done for explanatory purposes and the cut-off point of 3 on the relative burnout scale was arbitrarily chosen to reflect the nature of the scaling of the measure.

References


