



“If Only My Coworker Was More Ethical”: When Ethical and Performance Comparisons Lead to Negative Emotions, Social Undermining, and Ostracism

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Abstract

Drawing on social comparison theory, we investigate employees’ ethical and performance comparisons relative to a similar coworker and subsequent emotional and behavioral responses. We test our theoretically driven hypotheses across two studies. Study 1, a cross-sectional field study ($N = 310$ employee–coworker dyads), reveals that employees who perceive they are more ethical than their coworkers (i.e., more ethical comparison) experience negative emotions toward the comparison coworkers and those feelings are even stronger when the employees perceive they are lower performers than their coworkers (i.e., lower-performance comparison). Results also reveal that negative emotions mediate the indirect relationship between being more ethical than a coworker, but also being a lower performer than that coworker onto (a) social undermining and (b) ostracism. Study 2, a 2×2 between-subjects experimental design ($N = 121$), provides further support for our moderated mediation model. Results reveal that participants experience negative emotions when they receive information that they are more ethical than a comparison participant. Negative emotions are amplified if the participant is told they were a lower performer than the comparison participant. Those participants indicate their desire to mistreat and ignore the comparison participant if given the opportunity. Thus, we find support for our hypotheses using a multi-method design.

Keywords Behavioral ethics · Social comparison theory · Social undermining · Ostracism

“The fact is that a man who wants to act virtuously in every way necessarily comes to grief among so many who are not virtuous.” – Niccolò Machiavelli

Many people care about upholding ethics (i.e., behaving in accordance with “generally accepted moral norms;” Treviño et al. 2006, p. 952) (Aquino and Reed 2002), because they consider it “the right thing to do” for the overall benefit of mankind (Folger 1998; Kant 1785/1948,

1797/1991). Extant research suggests that upholding ethics does indeed produce substantial benefits (Brown and Treviño 2006). The benefits of upholding ethics within organizations are so robust in fact that there tends to be a general assumption that “...ethical behavior in organizations is good...” and should always be encouraged (Treviño et al. 2014, p. 637). Thus, the behavioral ethics literature is built on an underlying assumption that ethical behavior¹ is advantageous and should be promoted, while unethical behavior is harmful and should be avoided (e.g., Gino and Margolis 2011; Mayer et al. 2012; Piccolo et al. 2010).

Although behaving ethically is “good for business,” upholding moral norms can be onerous and labor-intensive, leaving less time to attend to other work demands (Bird and Waters 1989; Carroll 1987; Greenbaum et al. 2015). Indeed, ethical conduct requires a large expenditure of personal resources, such that ethical employees spend a great deal of time and energy “doing the right thing” for the greater good

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¹ Using an adapted definition of ethical leadership (Brown et al. 2005), we define ethical behavior as *the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to others.*

instead of focusing on their own self-interest. As such, ethical employees typically prefer to work with coworkers who exhibit similar commitments to ethics (e.g., Folger 2001; Kant 1785/1948, 1797/1991). They want their coworkers to act ethically so that everyone is operating on an equal playing field in terms of competing for promotions, raises, and favorable work assignments (Peeters 1983; Vonk 1999). In this respect, problems arise when employees compare their ethicality to that of a coworker's and perceive that they are more ethical than the coworker (i.e., more ethical comparison).² This type of ethical comparison reveals that employees and coworkers operate by different moral rules, which can set into motion employees' negative emotional reactions that eventuate in subsequent harmful workplace behaviors.

By studying employees' ethical comparisons, we set out to reveal the complexities of upholding ethics within organizations. To support our theoretical model, we utilize social comparison theory (Festinger 1954) and arguments related to the perceived risks of engaging in ethical behavior (e.g., Bird and Waters 1989; Greenbaum et al. 2015; Kreps and Monin 2011). When employees make more ethical comparisons (i.e., I am more ethical than my coworker), they are expected to experience negative emotions toward that coworker (i.e., a state of negative emotional arousal that occurs due to the social comparison process). Employees' negative emotions indicate that the coworker is a costly interaction partner (e.g., Neuberg and Cottrell 2008) because the two parties operate by different ethical standards. We further argue that viewing oneself as being more ethical, but *also* a lower performer than the coworker (i.e., lower-performance comparison), exacerbates negative emotional reactions toward the comparison coworker. In this case, more ethical, lower-performing employees may conclude that their ethical conduct comes at the expense of high performance (Wojciszke 2005). In turn, these employees may manage their negative emotions toward the coworker by engaging in self-protective actions that allow them to "fight" (i.e., undermine), and "flee" from (i.e., ostracize), the comparison coworker.

Through our research, we intend to make a number of contributions to the literature. First, past theoretical research has noted the possible difficulties in promoting

and sustaining ethical behavior within organizations (Bird and Waters 1989; Greenbaum et al. 2015; Kreps and Monin 2011), suggesting that "doing the right thing" requires a substantial amount of time, energy, and devotion (Treviño and Nelson 2011). We contribute to this work by examining the potential detrimental effects of taking the "high road" by engaging in ethical behavior when others are not maintaining the same level of ethicality. Second, the organizational behavior literature has mostly discussed social comparisons in terms of outcome allocations (e.g., Greenberg et al. 2007). We provide a novel perspective by looking at a more nuanced form of social comparisons, ethical comparisons, and by asserting that people do not always respond positively as a result of being more ethical than their coworkers. This perspective differs from past research that has generally argued that social comparisons that are *superior* in nature (i.e., I am better than him/her) generate positive emotional reactions (e.g., Lyubomirsky and Ross 1997; Wills 1981).

Third, we contribute to the literature by examining ethical comparisons as an ethics-related construct that poses risks that are largely internal in nature. To date, research on risky ethical behavior has taken the form of whistleblowing (i.e., reporting another person's wrongdoing; Near and Miceli 1985) and has mainly focused on the external costs of this behavior. Whistleblowing is risky from an external standpoint because the whistleblower could be "found out" and subjected to retaliation by a third party. In contrast, our research focuses on the internal risks of ethical behavior by suggesting that more ethical comparisons create an inherently internal process in which employees' negative emotional reactions indicate that their ethicality is placing them in a vulnerable position relative to a coworker. In this respect, we contribute to the literature by suggesting that beyond whistleblowing, different types of ethicality may pose varying categories of benefits and risks. Finally, we contribute to the literature by demonstrating that employees' emotions trigger an awareness of the "social costs" of interacting with a less ethical, higher-performing coworker (e.g., Neuberg and Cottrell 2008), which can lead to "fight and flight" behaviors toward the coworker in the form of social undermining and ostracism. Please see Fig. 1 for our theoretical model.

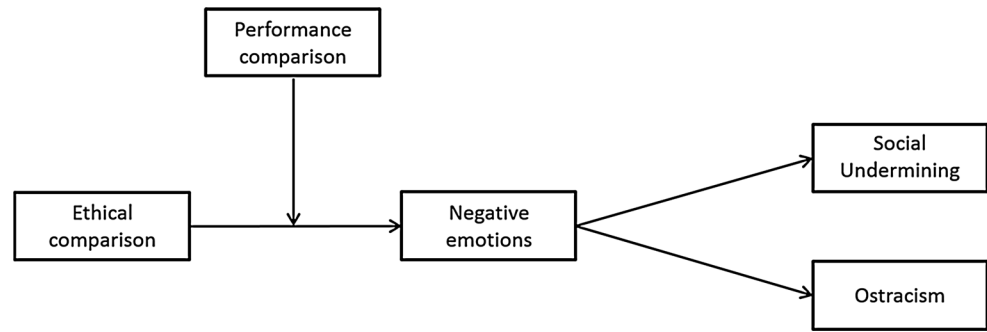
Theoretical Overview and Hypotheses

The Social Comparison Process

Social comparison theory suggests that people are inclined to compare their opinions and abilities against an objective standard; however, when such a standard does not exist, people often compare themselves to "a similar other" (Festinger 1954). Festinger noted that "a person does not

² We define ethical comparisons in terms of "perceptions," but similar to the organizational justice literature (e.g., Folger and Cropanzano 1998, 2001), we contend that these perceptions can arise from actual or imagined accounts. Thus, an employee's level of ethicality may truly be higher than a coworker, or the employee may simply believe that his/her level of ethicality is higher than the coworker's. Regardless of whether these perceptions are derived from real or imagined accounts, we expect our predictions to remain the same because perceptions typically serve as the basis for a person's sense of reality (Jussim 1991).

Fig. 1 Hypothesized theoretical model



tend to evaluate his opinions or his abilities by comparison with others who are too divergent from himself” (1954, p. 120). For example, lower-level employees will not make comparisons with their bosses, members of the top management team, or CEOs. Instead, lower-level employees will compare themselves to other employees who have (a) similar organizational positions, (b) comparable expertise, (c) the same level of education, and/or (d) similar organizational tenures. Although some scholars have noted that there are instances when dissimilar, as opposed to similar, others are preferred when making social comparisons (Goethals and Nelson 1973; Kruglanski and Mayseless 1987; Mettee and Smith 1977), there is ambiguity regarding when and why a similar or dissimilar other is chosen for social comparisons (Kruglanski and Mayseless 1990). In addition, scholars have noted that similar comparisons, as opposed to dissimilar comparisons, tend to generate more profound social comparison effects related to the person’s affect or self-esteem (Tesser 1986; Wood 1989). Thus, for the purposes of our research, we follow the guidance of other organizational behavior, social comparison research (Greenberg et al. 2007), and base social comparisons on similar others.

Social comparison theory further suggests that once a similar other has been identified, people compare themselves to these similar others and those comparisons create emotional responses. More specifically, extant research on social comparisons has demonstrated that upward comparisons (i.e., the person is inferior to the comparison other on some factor of interest) tend to create negative emotional reactions (Cohen-Charash 2009; Tesser et al. 1988; Wood 1989), often in the forms of disgust and/or contempt (Dunn et al. 2012; Tesser and Smith 1980), and downward comparisons (i.e., the person is superior to the comparison other on some factor of interest) induce positive emotions (Buunk et al. 2005; Gibbons 1986; Klein 1997; Wills 1981), such as feelings of pride (Smith 2000). For example, a sales person with fewer sales than a coworker (i.e., upward comparison) may feel upset; yet, a sales person with more sales than a coworker (i.e., downward comparison) may feel proud.

Interestingly, though, research has also suggested that upward or downward social comparisons may elicit

emotional reactions that differ from the norm depending on the behavior, attribute, or situational factor that is being compared (Blanton et al. 2000; Buunk et al. 1990). For example, despite being better off and in a superior position (i.e., a downward comparison), an employed person may feel upset to learn that a comparable other was laid off from his or her job (e.g., Brockner et al. 1985). The comparable other’s misfortune may generate “survivor’s” guilt or concern of eventually suffering a similar fate. Similarly, despite being in a superior position, we suggest that more ethical comparisons³ (i.e., when a person perceives he or she is more ethical than a comparison coworker) may result in negative emotions toward the comparison coworker. We are not proposing one person in the comparison process behaves ethically and the other person behaves unethically. Rather, the employee will experience negative emotions toward the comparison coworker if he or she believes that, by comparison, he or she is more ethical than the comparison coworker.

More Ethical Comparisons and Negative Emotions

When relationships are unbalanced in terms of ethical contributions, the more ethical individual experiences negative emotional reactions (Buunk and Gibbons 2007; Cuddy et al. 2011; Wojciszke and Dowhlyuk 2003; Wojciszke and Szymków 2003) that serve as an internal warning system that the social relationship could be costly (Neuberg and Cottrell 2008). The more ethical person’s negative emotions indicate that the less ethical person is harmful because he or she does not play by the same set of ethical rules. These negative emotions stem from perceptions that ethical behavior can put the more ethical person at a disadvantage to his or her less ethical counterpart in that abiding by high ethical standards

³ Research on social comparisons commonly uses the terms *downward comparison* (i.e., I am superior) and *upward comparison* (i.e., I am inferior) (Wood 1989). For the sake of clarity in describing the predictor variables in our theoretical model, we refer to downward comparisons as *more ethical or higher-performance comparisons* and upward comparisons as *less ethical or lower-performance comparisons*.

can come at the expense of competence, can hinder adaptability, and can undermine one's self-interests.

Extant research suggests that behaving ethically may come at the expense of appearing competent (see Cuddy et al. 2007; Fiske et al. 2002; Wojciszke 2005), in part because upholding ethics is time-consuming and could create inefficiencies (Bird and Waters 1989; Greenbaum et al. 2015; Kreps and Monin 2011). Having an ethical agenda may slow down decision-making processes (Brown et al. 2005) and may be considered a waste of time when making important financial, technical, and administrative decisions (Bird and Waters 1989). For example, when deciding on strategies for enhancing year-end sales goals, a more ethical employee may avoid high-pressure sales tactics that may be effective and efficient, but also potentially unethical. On the other hand, a less ethical coworker may have no qualms about utilizing these tactics as an efficient way of increasing productivity. As a result, the more ethical employee may experience negative emotions toward the comparison coworker who abides by less stringent ethical standards. The more ethical employee is expected to feel stressed, repulsed, contemptuous, and disgusted by the less ethical coworker (Dunn et al. 2012).

Furthermore, more ethical employees may believe that they will be held to higher standards than less ethical coworkers, which may limit their abilities to adapt and be flexible. Because more ethical employees are more active in promoting and endorsing ethical standards, they may feel concerned that others will regularly evaluate their word-deed alignment with respect to upholding ethical standards, more so than their less ethical counterparts (e.g., Bird and Waters 1989; Greenbaum et al. 2015). Although organizational settings require a certain degree of adaptability and flexibility, those who espouse a strong ethical stance may have limited abilities to change their positions because of the risk of being perceived as hypocritical (i.e., lacking word-deed alignment; Simons 2002) (Barden et al. 2005; Efron and Monin 2010). Thus, employees who believe they are more ethical than a comparison coworker may find it difficult to make functional changes at work because of their need to act in accordance with their espoused values, whereas less ethical coworkers are not as constrained by prior ethical comments or actions. In this regard, more ethical employees may experience negative emotions, such as stress and contempt, toward less ethical coworkers because more ethical employees are comparatively more constrained in their abilities to adapt.

Finally, ethical actions often require forgoing one's own short-term interests (e.g., profits) for the benefit of others (i.e., upholding rules to create a level playing field) (Wojciszke 2005). In this vein, more ethical employees invest in "doing the right thing" on the part of others, with no guarantee that their less ethical coworkers will do the same.

Additionally, behaving ethically may leave an employee open to exploitation, especially from those who are less ethical (Wojciszke 2005). For example, less ethical coworkers may take advantage of more ethical employees by asking them to complete tedious assignments, knowing that more ethical employees are likely to take on the assignments and get the job done right without cutting corners (Turnipseed 2002). Here again, more ethical employees may respond to this imbalance in ethical standards by experiencing negative emotions that serve as a signal that the comparison other is a potentially harmful interaction partner (Neuberg and Cottrell 2008).

In sum, more ethical employees experience negative emotions toward comparison coworkers because "taking the high road" makes them seem less competent, in part because their jobs are more difficult and time-consuming than the comparison coworkers'. They may feel more scrutinized in terms of upholding ethical standards, and therefore, may be less adaptable, than the less ethical coworker. They may also worry that they cannot focus on their own self-interests and that the less ethical coworker will take advantage of them. Thus, social arrangements in which employees believe they are more ethical than a coworker will provoke negative emotional states characterized by stress, apprehension, and contempt toward the less ethical comparison coworker. These emotions indicate that the more ethical employee is in a risky social relationship in terms of working with someone who does not uphold the same ethical standards.

Hypothesis 1 A more ethical comparison is positively related to negative emotions toward the comparison coworker.

The Moderating Role of Performance Comparisons

We further suggest that the relationship between more ethical comparisons and negative emotions will be exacerbated when more ethical employees view themselves as being lower performers than the comparison coworker, because together, these comparisons suggest that the more ethical employee's ethical standards come at the expense of his or her performance. Performance is often considered the most important consideration within an organization (Brenner and Molander 1977). Employees earn the majority of rewards in organizations based on their performance (Kerr 1975; Latham and Locke 2007). Scholars have even suggested that some people may view performance as being more important than morality in organizations (Bird and Waters 1989; Greenbaum et al. 2015; Kreps and Monin 2011), with performance being an indicator of one's competence (Cuddy et al. 2011). For example, theoretical work by Wojciszke (2005) on the differences between perceptions of morality and competence has suggested that competence is more

important and salient to an actor than morality, because competence is self-oriented such that the actor can more directly and immediately benefit from competence (e.g., higher-performance evaluations, bonuses) than from ethical actions directed toward others.

In this regard, employees who are more ethical than a comparison coworker, but also a lower performer than the comparison coworker, may feel troubled by the fact that their lower-performance confirms their beliefs that upholding morality comes at the expense of effectiveness and competence (e.g., Wojciszke 2005). The less ethical, higher-performing coworker may come across as doing less work because he or she does not have to deal with the practical and social difficulties that come with promoting and endorsing ethical standards. All the while, this employee can reap the benefits of higher-performance (e.g., prestige, promotions, rewards).

With organizations commonly espousing the importance of performance above all else (Greenbaum et al. 2012; Wolfe 1988), more ethical, lower-performing employees may question their ability to survive within the organization relative to the less ethical coworker who is able to secure higher-performance. Furthermore, a great deal of research has emphasized the important role of competence and successful actions in driving positive self-evaluations (Tafarodi and Swann 1995). Hence, the more ethical employees' perceptions that they are less competent (i.e., lower performers) may exacerbate their negative emotional reactions of stress, contempt, or disgust, because their perceived lower competence may damage their positive self-image by making them feel as though they are "less than" the comparison coworker in a business context (e.g., Ellemers et al. 2008). Thus, more ethical, lower-performing employees are likely to experience stronger negative emotions toward less ethical coworkers who reap the benefits of being higher performers. As such, we suggest that a more ethical comparison, combined with a lower-performance comparison (i.e., I believe I am a lower performer than my coworker), will invoke stronger negative emotions toward the comparison coworker.

Hypothesis 2 The relationship between a more ethical comparison and negative emotions toward the comparison coworker is moderated by performance comparison, such that a lower-performance comparison strengthens this positive relationship.

Negative Emotions to Social Undermining and Ostracism

Finally, we argue that more ethical comparisons and lower-performance comparisons interact to produce heightened levels of negative emotions, which then eventuates in

behaviors that serve to protect the self from the coworker. When exposed to precarious, costly social arrangements, and subsequent negative emotions, people typically respond by exhibiting two types of protective behaviors; their instincts tell them to protect themselves by "fighting" back or by "fleeing" from the situation (Elliot 2006). The "fight or flight" instinct is so engrained in human neurology that it is often described as a universal reaction to potentially risky or dangerous situations (Elliot and Covington 2001).

With respect to the organizational sciences, recent research suggests that employees respond to mistreatment from their bosses by experiencing fight and flight instincts as reflected by target-specific retaliation (i.e., fight) and avoidance behaviors (i.e., flight) (Ferris et al. 2016). As a precursor to fight and flight behaviors, people usually experience emotional reactions that trigger the need to engage in self-protective actions (Gray 1990). Hence, we propose that more ethical, lower-performing employees may manage their negative emotions toward less ethical, higher-performing employees by fighting back through social undermining and by fleeing from the situation through ostracism. Indeed, extant social comparison research suggests that people manage their negative emotions by harming, and distancing themselves from, comparison others (e.g., Moran and Schweitzer 2008; Tesser 1988; Tesser and Smith 1980).

Employees experience stronger negative emotions when more ethical comparisons are accompanied by lower-performance comparisons. Employees feel upset and resentful toward the less ethical coworker who reaps the benefits of higher job performance. As a result of these social comparisons, employees' negative emotions kick into protect them from the possibly harmful comparison coworker (Neuberg and Cottrell 2008). In turn, employees are expected to manage their negative emotions toward the comparison coworker by engaging in "fight"-oriented behaviors by intentionally trying to hinder the coworker's work-related success, reputation, and social relationships through social undermining behaviors (see Duffy et al. 2002). By engaging in social undermining behaviors, such as by spreading rumors about the coworker, delaying the coworker's work to make him or her look bad, and by giving the coworker incorrect or misleading information, employees can manage their negative emotions and exhibit retribution by stripping the comparison coworker of his or her undeserved success. Indeed, extant research demonstrates that social comparisons resulting in heightened negative emotions toward a comparison other typically produce punitive behaviors (e.g., Cohen-Charash 2009; Moran and Schweitzer 2008; Vecchio 2000). Employees respond to their tension and apprehension toward the coworker and reduce the costliness of the social arrangement, by not defending the coworker, not helping the coworker, and by more generally, deterring the coworker's success.

Additionally, employees may manage their negative emotions toward the comparison coworker by “fleeing” from the situation through workplace ostracism (i.e., by ignoring or excluding the coworker; Ferris et al. 2008). The purpose of flight, or avoidance, reactions is to minimize a person’s exposure to an unfavorable situation, thereby allowing the person to continue to survive (Elliot 2006). More ethical, lower-performing employees are likely to manage their negative emotions toward less ethical, higher-performing coworkers by limiting their exposure to this potentially harmful coworker. Workplace ostracism alleviates the costliness of this type of social arrangement by reducing or eliminating the number of interactions between the two parties. Extant research consistently demonstrates that people’s negative emotions trigger them to manage social threats by avoiding the risky interaction partner as much as possible (Crocker et al. 1998; Neuberg and Cottrell 2008; Roseman et al. 1994). The employee manages his/her stress and apprehension toward the comparison coworker by leaving the room when he/she enters, not including him/her in work conversations, and not inviting him/her out to lunch or to coffee.

Taken together, we predict that in response to particularly troubling, costly social comparisons, people will manage their negative emotions toward the comparison coworker by engaging in fight reactions through social undermining and flight reactions through workplace ostracism. Due to the inherent risk of being more ethical, yet a lower performer, than a comparison coworker, we expect lower (higher)-performance comparisons to strengthen (weaken) the relationship between more ethical comparisons and negative emotions, which then leads to social undermining and ostracism as ways of managing the risks of working with this type of coworker.

Hypothesis 3 Negative emotions toward the comparison coworker mediate the relationship between the interactive effect of a more ethical comparison and a lower-performance comparison onto (a) social undermining and (b) ostracism.

Method

Study 1

Sample and Procedure

We emailed 630 students from a university in the south-central USA and invited them to participate in a research study in exchange for extra credit. Sixty-one percent (61%) of the invited participants were distance-learning MBA students who were full-time working adults. The additional 39% of invited participants were upper-level undergraduate students, 80% of whom were also distance-learning

students. Students who were not working at least 20 h per week were asked to recruit a friend or family member who worked 40 h per week or more.

The participating student or the person he or she recruited served as the focal employee in our study. The employee was given the following instructions with regard to selecting a coworker to complete a separate survey:

Choose a person in your organization with whom you work frequently. This person should also be in a comparable position, have a similar educational background, and have approximately the same organizational tenure.

The first sentence of these instructions was adapted from previous work done on social comparisons in the workplace (Cohen-Charash and Mueller 2007). We included these detailed instructions to ensure that participants were making a social comparison in line with Festinger’s (1954) theory.

In addition to extra credit for the students, there was a drawing for four separate cash prizes of \$101 for all employees who participated and four identical prizes for all coworkers who participated. In total, 353 employee participants completed the employee survey, and 319 coworker participants completed the coworker survey. The final sample size of matched responses was 310 employee–coworker dyads, which produced a 49% response rate. Furthermore, this data collection technique allowed us to span a wide variety of jobs across many organizations (Mayer et al. 2012) and industries such as health care, manufacturing, higher education, finance, armed services, energy, and technology.

By using multi-source data, we attempted to reduce the same source biases (Podsakoff et al. 2003). Additional steps to help avoid common method bias were taken (Podsakoff et al. 2003). First, respondents were encouraged to answer each item as honestly as possible. Second, respondents were assured their answers would remain confidential. They were specifically told no responses from participants would ever be shared with the other member of their dyad or with any representative of their organization.

Among employee respondents, 65.2% were male, 79.9% were Caucasian, and the average age was 31.3 years (SD 9.8). Eighty-nine percent (89%) of employees reported working full time. Employees reported an average organizational tenure of 5.0 years (SD 5.4) and that they had worked with the comparison coworker an average of 2.9 years (SD 3.0). Among coworker respondents, 61.5% were male, 76.9% were Caucasian, and the average age was 32.5 years (SD 10.0). The coworker respondents were also primarily full-time workers (88.6%), and they reported an average organizational tenure of 5.1 years (SD 5.1).

Measures

All items from both studies are included in "Appendix A." All ratings were made on seven-point Likert-type scales.

Ethical comparisons We asked participants to make ratings regarding their perceived level of ethicality compared to the comparison coworker using an adapted version of Brown et al.'s (2005) ten-item scale ($\alpha = .93$). Three items were adapted to remove the supervisory nature of the scale. Two of these items were adapted by substituting the word "others" for "employees," and another item was modified from "disciplines employees who violate ethical standards" to "believe others should be disciplined for violating ethical standards." The respondent was given the following instructions, "compared to the coworker you invited to participate in this study, are you more or less likely to..." (1 = *much less likely compared with coworker*; 7 = *much more likely compared with coworker*). High ratings on these items indicated the focal employee perceived him/herself as more ethical than the coworker (i.e., more ethical comparison).

Performance comparisons Focal employees rated their perceptions of their own in-role performance compared to that of the coworker ($\alpha = .91$) using Williams and Anderson's (1991) seven-item scale. The respondent was given the same prompt and used the same scale as was used for the ethical comparisons scale. Thus, lower ratings indicate the focal employee perceived him/herself as a lower performer than the coworker (i.e., lower-performance comparison).

Negative emotions Focal employees rated their level of negative emotions ($\alpha = .91$) toward the comparison coworker using six items from Dunn et al.'s (2012) scale. These six items capture negative emotions in the forms of repulsion, contempt, and threat. Respondents read the following stem: "indicate how strongly you agree with the following when thinking about yourself in comparison to the coworker you asked to complete the coworker survey" (1 = *strongly disagree*; 7 = *strongly agree*).

Social undermining The comparison coworker rated how often (1 = *never*; 7 = *always*) he or she experiences social undermining ($\alpha = .95$) from the focal employee using Duffy et al.'s (2002) thirteen-item scale.

Ostracism The comparison coworker also rated how often (1 = *never*; 7 = *always*) he or she is ostracized ($\alpha = .95$) by the focal employee using Ferris et al.'s (2008) ten-item workplace ostracism scale.

Control variables The social comparison literature has shown that people who evaluate themselves as superior than a comparison person on some dimension experience positive affect (Gibbons 1986; Klein 1997), pride (Smith 2000), and increased self-esteem (Morse and Gergen 1970). In this vein, Wills demonstrated that social comparisons that lead to superiority conclusions entail a "self-enhancing process" (1981, p. 245). Thus, prior social comparison research

suggests that more ethical comparisons may induce positive emotions. As such, we control for positive emotions toward the comparison coworker in our analyses. By doing so, we demonstrate the incremental validity of our predictions regarding negative emotions, above and beyond positive emotions as the traditional explanation for downward social comparisons.

In line with Dunn et al.'s (2012) approach to measuring negative emotions, we created a three-item measure of *positive emotions toward the comparison coworker* ($\alpha = .76$) using items from existing scales that capture the essence of positive emotions (Emmons 1987; Raskin and Hall 1979; Tracy and Robins 2007). Employee respondents were given the same stem as for the negative emotions items (1 = *strongly disagree*; 7 = *strongly agree*).

We also controlled for *gender* of the focal employee. Research has shown that women are more likely to experience negative affect after an upward comparison than men (Buunk et al. 1990). Additionally, other studies that have looked at negative emotions as an emotional response to social comparisons have controlled for gender (Dunn et al. 2012). Therefore, we wanted to account for the possibility that the employees' gender could affect their emotional and behavioral responses to ethical and performance comparisons.

Study 1 Results

The means, standard deviations, reliabilities, and intercorrelations among the study's variables are included in Table 1. First, to ensure that ethical comparison is distinct from performance comparison, we conducted a confirmatory factor analysis (CFA) using maximum likelihood estimation in JMP Pro 10 from SAS. We first analyzed a two-factor model in which all items were set to load onto their intended factor. The results indicated that the two-factor model provided an acceptable fit ($\chi^2(118) = 496.7, p < .001$; CFI = .91; SRMR = .05) (Hu and Bentler 1999). There were no cross-loadings among any of the indicators, and all indicators were statistically significant ($p < .01$). This two-factor model was compared to a one-factor model in which all items were specified to load onto a single factor ($\chi^2(119) = 1140.0, p < .001$; CFI = .74; SRMR = .09). A change in Chi-square test indicated the two-factor model was a significant improvement over the one-factor model [$\Delta\chi^2(1) = 643.3, p < .001$], thus providing evidence that ethical comparison and performance comparison are distinct constructs.

We also conducted a CFA to ensure social undermining is distinct from ostracism. First, a two-factor model in which all items were set to load onto their intended factor was analyzed ($\chi^2(229) = 1278.5, p < .001$; CFI = .86; SRMR = .05). All indicators were statistically significant, and there were also no cross-loadings among any of the indicators. We then

Table 1 Study 1—descriptive statistics, reliability estimates, and study variable intercorrelations

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Ethical comparison	4.54	.83	(.93)					
2. Performance comparison	4.50	.90	.68**	(.91)				
3. Negative emotions	1.77	1.00	.31**	.20**	(.91)			
4. Social undermining	1.35	.72	.19**	.10	.49**	(.95)		
5. Ostracism	1.21	.59	.13*	.09	.45**	.83**	(.95)	
6. Positive emotions	4.31	1.12	.36**	.41**	.21**	.14*	.09	(.76)
7. Gender (1 = female)	.35	.48	.03	.05	-.07	-.05	-.09	-.18**

N = 310. Cronbach's alphas are shown on the diagonal

***p* < .01; **p* < .05

compared this two-factor model to a one-factor model in which all indicators were specified to load onto a single factor. A change in Chi-square test demonstrated the two-factor model provided a significantly better fit than the one-factor model [$\Delta\chi^2(1) = 460.1, p < .001$], thus providing evidence of discriminant validity for these two measures.

Next, all of our hypotheses were tested using Hayes' (2018) PROCESS macro (Model 7) for SPSS. We obtained 95% bias-corrected bootstrapped confidence intervals (5000 bootstrap samples) (Edwards and Lambert 2007). Additionally, the predictor and moderating variables were mean centered (Aiken and West 1991) as part of the analysis. Using the PROCESS macro allowed us to look at the conditional indirect effect of more ethical comparisons on both social undermining and ostracism through negative emotions at varying levels of performance comparison. The PROCESS macro requires we run two separate Model 7 "commands" (Hayes 2018), one for each of our dependent variables.

Hypothesis 1 predicted that more ethical comparisons are positively related to negative emotions. In support of Hypothesis 1, the results (shown in Table 2) revealed that perceiving oneself as more ethical than a coworker instigates negative emotions toward the comparison coworker ($B = .42, p < .001$). Importantly, our results demonstrated that more ethical employees experience negative emotions toward the comparison coworker even while controlling for positive emotions. Hypothesis 2 predicted that lower-performance comparisons make the relationship between more ethical comparisons and negative emotions more strongly positive. Our results, shown in Table 2, revealed the interaction between ethical comparison and performance comparison onto negative emotions was negative and significant ($B = -.14, p < .05; \Delta R^2 = .012, p < .05$). We plotted the interaction to further explore this relationship. As Fig. 2 shows, the positive relationship between a more ethical comparison and negative emotions toward that coworker is more strongly positive when the employee is a lower performer than the coworker. We also conducted a simple slopes analysis to further assess the interaction (Aiken and West 1991; Preacher et al. 2006). The relationship between ethical comparisons

and negative emotions was more strongly positive when the employee was a lower performer than the coworker ($t = 4.26, p < .01$) as opposed to when he/she was a higher performer than the coworker ($t = 3.06, p < .01$). In sum, Hypothesis 2 was supported.

Hypothesis 3 predicted that negative emotions mediate the relationship between the interactive effect of ethical comparisons and lower-performance comparisons onto (a) social undermining and (b) ostracism. The estimates and bias-corrected bootstrapped (95%) confidence intervals for all the conditional indirect effects supporting Hypotheses 3a and 3b are discussed in Table 2. The dependent variable models from the PROCESS models revealed that there is a positive relationship between negative emotions and (a) social undermining ($B = .35, p < .001$) and (b) ostracism ($B = .26, p < .001$). This, along with the support for Hypothesis 1, satisfies the first two steps for determining mediation. The direct effects between ethical comparison and social undermining ($B = .03, ns$) and ostracism ($B = .00, ns$) are not significant, suggesting the predicted mediated effects described below are supported.

Results demonstrated that the conditional indirect effects of more ethical comparisons onto social undermining and ostracism, as mediated by negative emotions, are significant when the performance comparison is lower (-1 standard deviation from the mean) (social undermining: $B = .19 (.08), CI [.067, .425]$; ostracism: $B = .14 (.07), CI [.046, .328]$), but approaches non-significance when the performance comparison is higher ($+1$ standard deviation from the mean) (social undermining: $B = .10 (.06), CI [.021, .242]$, ostracism: $B = .08 (.05), CI [.014, .201]$). Additionally, the confidence interval for the index of moderated mediation (IOMM) does not cross zero for both (a) social undermining ($B = -.05 (.03), CI [-.132, -.002]$) and (b) ostracism ($B = -.04 (.02), CI [-.103, -.001]$) and shows there is a negative effect between the interactive effects of being more ethical and a lower performer than a comparison coworker onto social undermining and ostracism as mediated by negative emotions toward that coworker. Thus, our results provide support for Hypotheses 3a and 3b.

Table 2 Study 1—moderated mediation analyses using Hayes' (2018) PROCESS Macro (Model 7)

	Mediator model		Dependent variable models			
	Negative emotions		Social undermining		Ostracism	
	B	SE	B	SE	B	SE
Constant	1.50***	.26	.68***	.17	.81***	.14
Ethical comparison ^a	.42***	.09	.03	.05	.00	.04
Performance comparison ^a	.01	.09				
EC × PC	−.14*	.07				
Positive emotions	.09	.05	.02	.04	−.01	.03
Gender (1 = female)	−.11**	.12	−.03	.08	−.07	.06
Negative emotions			.35***	.04	.26***	.03
R ²	.12***		.25***		.20***	

For social undermining, the index of moderated mediation = −.05 (SE = .03). The bootstrap confidence interval, based on 5000 bootstrap samples, was entirely below zero (−.132 to −.002). This means the moderated mediation model was significant and supportive of Hypothesis 3a. For ostracism, the index of moderated mediation = −.04 (SE = .02) and the bootstrap confidence interval was entirely below zero (−.103 to −.001). This means the moderated mediation model was significant and supportive of Hypothesis 3b. Taken together, the conditional indirect effect of ethical comparisons on both social undermining and ostracism through negative emotions differs significantly according to the level of performance comparison.

Conditional indirect effect of ethical comparison on social undermining and ostracism

When the performance comparison is a lower-performance comparison (−1 SD below the mean), the effect of ethical comparison on social undermining through negative emotions is positive (.19; SE = .08) and significant (CI [.067, .425]). The effect on ostracism is similar as it is positive (.14; SE = .07) and significant (CI [.046, .328]). When the performance comparison is a higher-performance comparison (+1 SD above the mean), the effect of ethical comparison on social undermining through negative emotions remains positive (.10; SE = .06) and significant (CI [.021, .242]), but it gets smaller. The effect on ostracism is similar in that it is positive (.08; SE = .05) and significant (CI [.014, .201]), yet it gets smaller

N = 310. ^aVariables were mean centered prior to analyses

EC ethical comparison, PC performance comparison

***p < .001; **p < .01; *p < .05

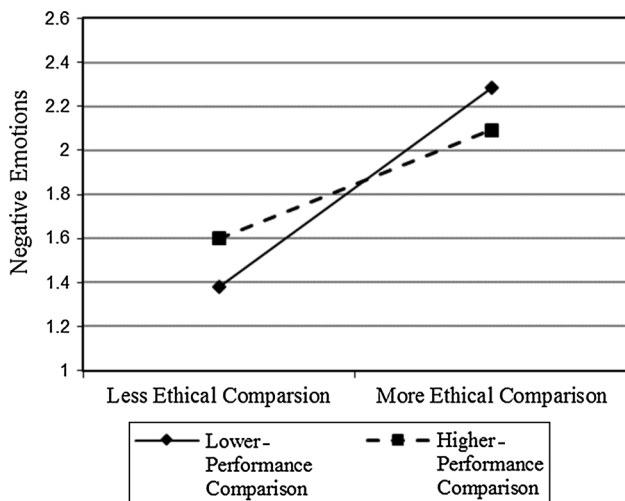


Fig. 2 Study 1—interaction of ethical comparison and performance comparison on negative emotions

Study 2

We conducted Study 2, an experimental study, to provide evidence in support for the direction of our hypothesized relationships. Additionally, our experimental study design builds on Study 1 by operationalizing ethical comparisons differently. Study 1 captured ethical comparison by asking participants their perceived level of ethicality compared to a coworker. In Study 2, we induced social comparisons through a more objective scoring process to provide further support of our social comparison arguments and hypotheses.

Sample and Procedure

We invited 239 undergraduate students enrolled in an upper-level management course at a university in the south-central USA to participate in a two-part experiment in exchange for extra credit. Of these invited students, 158 agreed to participate. Following recommendations for removing careless responses (Meade and Craig 2012) and in line with past research (e.g., Dunn et al. 2012), 12 participants were

removed from the study because (a) they did not follow the rules for the anagram task performance activity described below, (b) they did not identify a comparison classmate at the beginning of the study, or (c) they failed an attention check item. After matching the Day 1 and Day 2 surveys, the final sample of participants was 121. The average age of the participants was 20.33 years (SD .70). Of the participants, 62.0% were female and 75.2% were Caucasian.

We employed a 2 (more vs. less ethical comparison) \times 2 (higher- vs. lower-performance comparison) between-subjects experimental design. The experiment took place via two online surveys conducted on consecutive days. On the first day, students received an email invitation in the mid-afternoon and had until 11:59 PM to complete the Day 1 survey. Students who opened the Day 1 survey were first asked to identify a classmate they felt was similar to them, because we were interested in understanding social comparisons of similar others. Therefore, participants were given the following prompt:

At this point in the semester, you have had the opportunity to interact with several classmates in your management class. Please think about your classmates and identify one person who you feel is similar to you in terms of age, major or career interest, and academic performance. Please write their name in the blank below.

After responding to a few demographic questions, participants were told that the researchers were interested in student responses to ethical dilemmas and how students' ethical judgments and performance are similar and different than other, comparable students. As such, their responses would be compared to the classmate they previously identified.

Next, participants responded to a series of six ethical dilemmas that have been used in prior research (Flynn and Wiltermuth 2010; Pitesa and Thau 2013). Students first read the following instructions: "The researchers are interested in student responses to ethical dilemmas. On the following pages you will read six ethical dilemmas. For each one, you will be asked to respond with the action you believe is most ethical." For our experimental manipulation, we created four response options for each ethical dilemma. In this way, students were led to believe that the response options varied in their level of ethicality and that their responses could be more or less ethical than the comparison classmate. The ethical dilemmas are shown in "Appendix B."

After providing responses to the six ethical dilemmas, participants were told their task performance would be determined by completing an anagram task and that the number of words they created across five competitive rounds would be counted and compared to the classmate they had identified. Further, participants were told that if they created more valid words than their identified classmate, they would

receive \$2.00 in class the following week. The anagram task has been used in past research to represent task performance among undergraduate student participants (Cadsby et al. 2007; Vance and Colella 1990). Furthermore, anagram tasks have been successfully used in this way to induce performance comparisons (Dunn et al. 2012; Lyubomirsky and Ross 1997). Given that this task was not extremely difficult, participants were not expected to get discouraged and therefore their effort was expected to remain high. Yet, even if a participant did well on the task, the activity would still make it possible for the comparison classmate to perform better than the participant.

Participants were given six rules: (1) all words must be English words, (2) a word must be at least two or more letters long, (3) cannot use proper nouns (Ed, Texas, Sue, etc.), (4) cannot use both the singular and plural form of a word (dog, dogs), (5) letters may only be used once in the same word, and (6) may not use any external source for assistance (Internet, people). Each participant then completed one practice round and five competitive rounds. Each round was displayed on a new screen within the survey, and each screen was timed so that a student had 75 s to complete a round. After the anagram task, participants were told that the researchers would score and compare their responses to those of their identified classmates, and they would receive an invitation to the Day 2 survey the next afternoon.

On Day 2 at mid-day, participants received the second survey. They had until 11:59 PM to complete the Day 2 survey. The timing of the Day 1 and Day 2 surveys made it so that participants did not attend class during the administration of the study. At the beginning of the Day 2 survey, students were reminded that their responses to the ethical dilemmas and their task performance on the anagrams had been compared to the classmate they identified. The next screen provided what they believed were their comparison results, but was actually our experimental manipulation. As such, in reality, the participants did not receive true scores, but were instead, via random assignment, led to believe that they were more or less ethical and higher or lower performing than their comparison classmates. The online survey randomly assigned each participant into one of the four experimental conditions. As an example, the reporting screen for the more ethical, lower-performance condition said:

Your ethical decision making was shown to be more ethical than [comparison student's name]. Your anagram task performance was shown to be lower than [comparison student's name]. Because you did not perform better than [comparison student's name] on the anagram task you will not receive \$2.00 next week in class. However, [comparison student's name] will receive \$2.00 next week in class.

After viewing the reporting screen, participants completed the rest of the Day 2 survey, which contained manipulation checks of ethical comparison and performance comparison and measures of negative emotions, positive emotions, social undermining, and ostracism.

Measures

Negative emotions Negative emotions toward the comparison classmate ($\alpha = .79$) were measured using the same six-item scale used in Study 1. Respondents were asked to indicate how strongly they agreed with each statement "when thinking about yourself compared to [comparison classmate's name]."

Social undermining Although Duffy et al. (2002) created a measure of social undermining in the workplace, our sample included undergraduate students who had only been in class together for 2 months and may not have interacted regularly outside of class. Therefore, we created a three-item measure of social undermining based on Duffy et al.'s definition that would be appropriate for our sample ($\alpha = .95$) (see "Appendix A"). Participants were asked to indicate how strongly they agreed that they would engage in the following behaviors toward their comparison classmate, if given the opportunity (1 = *strongly disagree*; 7 = *strongly agree*).

Ostracism Using Ferris et al.'s (2008) conceptualization of ostracism (i.e., ignoring or excluding someone), we also created a three-item measure of ostracism that fit with our undergraduate sample and experimental study design ($\alpha = .90$) (see "Appendix A"). Participants were given the same prompt and same response scale as for social undermining.

Control variables We controlled for *positive emotions toward the comparison classmate* ($\alpha = .73$) using the same 3-item measure as in Study 1. We also controlled for *gender* of the focal participant as in Study 1.

Manipulation Checks

Prior to testing our hypotheses, we analyzed whether our manipulations were successful using one-way ANOVAs. The *ethical comparison* manipulation check included a three-item measure ($\alpha = .76$). Participants were asked to indicate the extent to which they agreed that based on the comparative results on the ethics portion of the study, they were more or less ethical than their classmate. The items used were "my responses were more ethical than," "my morality was higher than," and "my professor would be likely to use me as an example of ethical decision making, rather than" their comparison classmate (1 = *strongly disagree*; 7 = *strongly agree*). The ethical dilemmas manipulation did have a significant effect on participants' perceptions of whether they were more or less ethical than the classmate to

which they were compared, $F(1, 119) = 3.78, p \leq .05$. Results indicated that participants in the more ethical comparison condition reported significantly higher ethical comparison scores ($N = 58, M = 4.21, SD 1.09$) than did those who were in the less ethical comparison condition ($N = 63, M = 3.87, SD .85$).

The *performance comparison* manipulation check included a three-item measure ($\alpha = .94$). Participants were asked to indicate the extent to which they agreed that based on the comparative results on their anagram task performance, they were a higher or lower performer than their classmate. The items used were "I performed better than," "my performance was higher than," and "my performance was superior to" the comparison classmate (1 = *strongly disagree*; 7 = *strongly agree*). Results of the one-way ANOVA for the performance comparison manipulation had a significant effect on participants' perceptions that they were a higher or lower performer than the classmate, $F(1, 119) = 98.20, p < .001$. The results demonstrated that participants in the higher-performance comparison condition reported significantly higher-performance comparison scores ($N = 62, M = 5.11, SD 1.04$) than those who were in the lower-performance comparison condition ($N = 59, M = 3.15, SD 1.15$). Additionally, there were no crossover effects across conditions. Thus, the ethical comparison condition did not have a significant effect on the participants' performance comparison manipulation check, $F(1, 119) = 2.75, ns$, and the performance comparison condition did not have a significant effect on the participants' ethical comparison manipulation check, $F(1, 119) = .87, ns$.

Study 2 Results

The means, standard deviations, reliabilities, and intercorrelations among Study 2 variables are included in Table 3. We tested Hypotheses 1 and 2 using analysis of variance (ANOVA). Hypothesis 1 stated that more ethical comparisons would be positively related to negative emotions toward that person. The ANOVA results revealed a positive relationship between ethical comparison and negative emotions toward the comparison classmate $F(1, 115) = 4.29, p < .05$, providing support for Hypothesis 1 (see Table 4 for results). The results indicated participants who were told they were more ethical than their classmate experienced significantly greater levels of negative emotions toward that classmate ($N = 58, M = 1.74, SE = .09$) than those who were told they were less ethical ($N = 63, M = 1.48, SE = .09$).

Hypothesis 2 stated that performance comparison moderates the relationship between more ethical comparisons and negative emotions toward the comparison other, such that the relationship is more strongly positive when it was a lower-performance comparison. In support of Hypothesis 2,

Table 3 Study 2—descriptive statistics, reliability estimates, and study variable intercorrelations

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Ethical comparison	1.48	.50	–					
2. Performance comparison	1.51	.50	– .02	–				
3. Negative emotions	1.61	.70	.15	.04	(.79)			
4. Social undermining	1.28	.67	.03	.00	.42**	(.95)		
5. Ostracism	1.46	.77	– .01	– .05	.39**	.40**	(.90)	
6. Positive emotions	3.64	1.01	– .15	– .07	.09	.18	.21*	(.73)
7. Gender (1 = female)	.62	.49	.14	– .02	– .10	– .06	– .03	– .18

N = 121. Cronbach's alphas are shown on the diagonal

***p* < .01; **p* < .05

Table 4 Study 2—ANOVA results and self-threat means by experimental condition

	<i>df</i>	Mean square	<i>F</i>	Sig	Condition		Negative emotions		
					EC	PC	<i>N</i>	Mean	SE
Corrected model	5	1.03	2.19	.11	Less ethical	Lower-performance	30	1.32	.13
Intercept	1	14.72	31.34	.00	Less ethical	Higher-performance	33	1.64	.12
Positive emotions	1	.41	.88	.26	More ethical	Lower-performance	29	1.85	.13
Gender (1 = female)	1	.71	1.50	.97	More ethical	Higher-performance	29	1.63	.13
Ethical comparison	1	2.02	4.29	.04					
Performance comparison	1	.09	.19	.64					
EC x PC	1	2.15	4.57	.04					
Error	115	.47							
Total	121								
Corrected total	120								

EC ethical comparison, PC performance comparison

the ANOVA revealed a significant interaction between the ethical comparison condition and the performance comparison condition on negative emotions toward the comparison classmate $F(1, 115) = 4.57, p < .05$ (see Table 4). We tested our fully specified model (Hypothesis 3) using Model 7 of Hayes' (2018) PROCESS macro, just as we did in Study 1 (Table 5). Providing further support of Hypothesis 2, the mediator variable model results indicated that performance comparison moderated the relationship between a more ethical comparison and negative emotions toward the comparison classmate ($B = -.53, p < .05; \Delta R^2 = .04, p < .05$), such that the relationship was more strongly positive when a lower-performance comparison took place. We also conducted a simple effects analysis by examining the mean for negative emotions toward the classmate for participants in the more ethical-lower performance condition in relation to the means for the other three conditions. As shown in Table 4 and Fig. 3, the mean in the more ethical-lower performance condition was higher than the mean in the other three conditions. In addition, our analyses revealed that the mean in the more ethical-lower performance condition was significantly different from the less ethical-lower performance condition (mean difference = .50; $p < .05$), but not

significantly different from the other two conditions (less ethical-higher performance condition: mean difference = .18; *ns*; more ethical-higher performance condition: mean difference = .23; *ns*).

To test Hypotheses 3a and 3b, we examined the conditional indirect effect of more ethical comparisons on social undermining and ostracism through negative emotions toward the classmate at two values of performance comparison (1 = lower-performance comparison, 2 = higher-performance comparison). First, note the direct effects of negative emotions toward the comparison classmate on social undermining ($B = .39, p < .001$) and ostracism ($B = .42, p < .001$) are significant. Then, in support of our mediated predictions, the direct effects between ethical comparison and social undermining ($B = -.02, ns$) and ostracism ($B = -.07, ns$) are not significant. To provide specific support for Hypothesis 3, for social undermining, when participants were in the lower-performance comparison condition the conditional indirect effect was significant ($B = .21 (.09), CI [.070, .411]$), but was not when they were in the higher performer comparison condition ($B = -.00 (.08), CI [-.146, .159]$). For ostracism, we found that when participants were in the lower-performance comparison condition, the conditional

Table 5 Study 2—moderated mediation analyses using Hayes' (2018) PROCESS Macro (Model 7)

	Mediator model		Dependent variable models			
	Negative emotions		Social undermining		Ostracism	
	<i>B</i>	SE	<i>B</i>	SE	<i>B</i>	SE
Constant	-.19	.67	.32	.31	.35	.36
Ethical comparison	1.07**	.40	-.02	.12	-.07	.13
Performance comparison	.86*	.39				
EC × PC	-.53*	.25				
Positive emotions	.06	.06	.10	.06	.13*	.07
Gender (1 = female)	-.16	.13	.02	.12	.08	.14
Negative emotions			.39***	.08	.42***	.09
<i>R</i> ²	.09		.20***		.19***	

For social undermining, the index of moderated mediation = -.21 (SE = .11). The bootstrap confidence interval, based on 5000 bootstrap samples, was entirely below zero (-.455 to -.031). This means the moderated mediation model was significant and supportive of Hypothesis 3a. For ostracism, the index of moderated mediation = -.23 (SE = .13) and the bootstrap confidence interval was entirely below zero (-.546 to -.024). Thus, the moderated mediation model was significant and supportive of Hypothesis 3b. Taken together, the conditional indirect effect of ethical comparisons on both social undermining and ostracism through negative emotions differs significantly according to the level of performance comparison

Conditional indirect effect of ethical comparison on social undermining and ostracism

When there is a lower-performance comparison, the effect of ethical comparison on social undermining through negative emotions is positive (.21; SE = .09) and significant (CI [.070, .411]). The effect on ostracism is similar as it is positive (.22; SE = .10) and significant (CI [.075, .456]). When there is a higher-performance comparison, the effect of ethical comparison on social undermining through negative emotions is negative (-.00; SE = .08) and not significant (CI [-.146, .159]). The effect on ostracism is similar in that it is negative (-.00; SE = .08) and not significant (CI [-.181, .152])

N = 121

EC ethical comparison, PC performance comparison

****p* < .001; ***p* < .01; **p* < .05

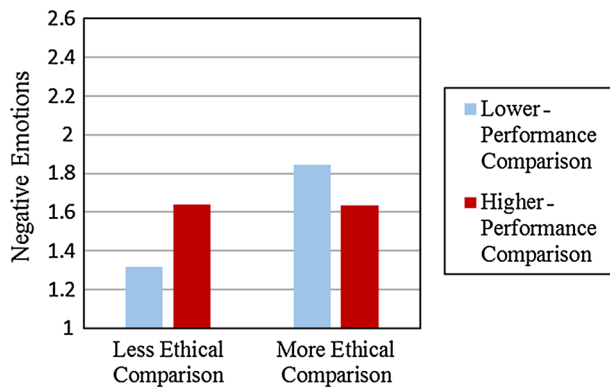


Fig. 3 Study 2—interaction of ethical comparison and performance comparison on negative emotions

indirect effect was significant (*B* = .22 (.10), CI [.075, .456]), but not for the higher-performance comparison condition (*B* = -.00 (.08), CI [-.181, .152]). As was found in Study 1, the confidence interval for the IOMM did not cross zero for (a) social undermining (*B* = -.21 (.11), CI [-.455, -.031]) and (b) ostracism (*B* = -.23 (.13), CI [-.546, -.024]) (see

Table 5). Thus, our results again provide support for Hypotheses 3a and 3b.

Discussion

Theoretical Implications

Our research makes several theoretical contributions to the behavioral ethics and social comparison literature. First, although a considerable amount of research points to the benefits of ethical behavior (e.g., Kish-Gephart et al. 2010), much less is known about its potential risks. Theoretically, some scholars have noted that ethical behavior could pose risks related to one's competence because upholding ethics could undermine efficiency and effectiveness (e.g., Bird and Waters 1989; Kreps and Monin 2011). Empirically, research on whistleblowing has suggested that reporting unethical conduct could be risky to the extent that it sparks retribution (Near and Miceli 1986). Our research adds to this conversation by noting additional risks associated with upholding ethical standards. More specifically, our research contributes to the literature by suggesting that employees may consider

both internal risks (e.g., negative emotions) and potential external risks (e.g., retaliation) when thinking through and acting upon their ethical behaviors.

Second, social comparison theory within the organizational sciences has drawn rather robust conclusions: viewing oneself as inferior than a comparison other elicits negative emotional reactions, whereas viewing oneself as superior than a comparison other elicits positive emotional reactions (Greenberg et al. 2007). Although other scientific disciplines suggest that this pattern of effects does not always hold (e.g., Blanton et al. 2000; Biernat and Billings 2001), the management literature has not fully joined this discussion. To this end, we contribute to the literature by utilizing social comparison theory (Festinger 1954) and arguments related to the risks of upholding ethics (e.g., Bird and Waters 1989; Greenbaum et al. 2015; Kreps and Monin 2011) to understand why more ethical, lower-performing employees may experience negative emotions toward a less ethical, higher-performing comparison coworker, with these emotions serving as an indicator that this type of social arrangement is costly. This social arrangement is costly because less ethical, higher-performing coworkers may rely on less stringent rules to achieve desirable organizational outcomes.

Third, Greenberg et al. (2007) noted that “social comparison appears to be embedded deeply into the fabric of organizational life;” yet, there has been “no unified efforts to explain organizational behavior from the perspective of social comparison processes” (2007, p. 23). Thus, through our research, we attempt to further reveal the intricacies of social comparisons in the workplace. By investigating ethical comparisons, we demonstrate that social comparison theory can be applied to a range of phenomena. Importantly, we join others who have started to study the interplay of social comparisons and (un)ethical behavior (e.g., John et al. 2014). Interestingly, while John et al. (2014) revealed that being paid less than a comparison coworker can induce unethical behavior (e.g., cheating), our work highlights the potential drawbacks of being more ethical than a coworker. Employees who view themselves as more ethical than a comparison coworker may manage their negative emotional reactions by “fighting back” through social undermining and by “fleeing” through ostracism. In this context, even though social undermining and ostracism may serve a desirable end (e.g., to punish or to avoid a less ethical coworker), these outcomes can be quite costly to organizations (Duffy et al. 2002; Ferris et al. 2008).

Importantly, too, our results demonstrate that ethical comparisons can be derived from imagined or real circumstances while still producing the same results. In Study 1, ethical comparisons were based on participants’ perceptions of their own ethicality with respect to a comparison coworker’s ethicality. On the other hand, Study 2 utilized scores on ethical decision making to manipulate whether the participant’s

ethicality was higher or lower than a comparison other’s ethicality, thereby providing a more objective indicator of ethical comparisons. In either case, our theoretical model held such that ethical and performance comparisons interacted to predict negative emotions and fight and flight behavioral reactions. Thus, our research provides evidence that a person’s social comparison perceptions form the bases of their own reality by producing effects that are on par with those produced from actual knowledge (Jussim 1991).

Practical Implications

An important practical implication of our research is that organizations could encourage employees to respond constructively to unfavorable social comparisons. In the midst of more ethical comparisons, managers can encourage employees to communicate perceived disparities in ethical behavior and the assumed repercussions (e.g., perceptions of being at a disadvantage to more ethical coworkers). Managers can then work with employees to resolve discrepancies and create stronger commitments to ethics among all employees. Employees should also be encouraged to manage or vent their negative emotions in appropriate ways. Rather than engaging in punitive or avoidant behaviors toward the comparison coworker, the employee could focus on emotional regulation and serving as an ethical role model for the coworker. The employee could work with the less ethical comparison coworker on improving his/her commitment to behaving ethically. Overall, by fostering an environment that encourages open communication and constructive problem solving, organizations may be able to effectively diffuse the ill effects of ethical comparisons.

Importantly, organizations should recognize some of the challenges employees may face in their commitment to ethics, including the fact that not all organizational constituents will be equally committed to upholding ethics. Although organizations should focus on promoting ethics, organizations should also realize that upholding ethics may not always come easily to employees (Bird and Waters 1989; Greenbaum et al. 2015), especially if they see themselves as a “lone wolf” in the pursuit of ethics. Therefore, organizations may be able to more effectively encourage commitment to ethics by providing a substantial amount of ongoing support. Doing so may help alleviate the potential burdens of behaving ethically when others are not. In that same vein, it is important for organizations to make it clear that high performance alone will not be rewarded. More specifically, if high performance is the result of questionable or unethical behavior, that combination will not be celebrated. Instead, organizations should be cautious when rewarding and promoting performance within organizations, ensuring that they also consider the way the job is done from an ethical standpoint (Treviño and Nelson 2011). Thus, it is important for

organizations and managers to reward *both* performance and ethical conduct.

Limitations and Future Directions

This research is not without limitations. Our two studies, individually, have limitations. Study 1, a cross-sectional field study, limits our ability to draw causal inferences. Study 2, an experimental study, lacks external validity. Our two studies, together, however, offer a multi-method approach that provides confidence in our research conclusions (Shadish et al. 2002). Study 1 provides evidence of external validity and reduces concerns regarding the same source bias by collecting data from multiple sources: employee–coworker dyads (Podsakoff et al. 2003). The experimental nature of Study 2 helps to alleviate causality concerns.

Our Study 2 results replicated our findings from Study 1 and demonstrated support for our moderation hypothesis. Specifically, the mean for negative emotions was the highest in the more ethical-lower performance comparison condition in relation to the other three conditions (as shown in Table 4 and Fig. 3). Yet, our results are limited in that we only found a statistically significant difference between the more ethical-lower performance condition and the less ethical-lower performance condition and not between all four conditions. The lack of statistically significant differences between all of the conditions could be due to power issues (Cohen 1992); therefore, future research should consider replicating our laboratory study using a larger sample size.

Another potential limitation of our work is our focus on similar social comparisons as opposed to dissimilar social comparisons. Even though scholars have argued that dissimilar others may be used in certain social comparison contexts (Goethals and Nelson 1973; Kruglanski and Mayseless 1987, 1990; Mettee and Smith 1977), we relied on social comparisons of similar others to align with the majority of organizational behavior, social comparison research (Greenberg et al. 2007). Additionally, from a theoretical standpoint, we felt that social comparisons related to ethics would be more vexing when the referent was similar rather than different, especially because comparisons with similar others often create more disturbances in a person's self-evaluations (Tesser 1986). However, the organizational sciences would benefit from examining other social comparison models whereby a dissimilar other is used as the referent. For example, it would be interesting to have referents specifically select comparison others who they believe are dissimilar to themselves in terms of ethics and then analyze the effect of their comparisons on related or different outcomes, including whether these dissimilar comparisons are more likely to lead to positive, rather than negative, emotions.

Conclusion

The behavioral ethics literature largely assumes that upholding ethics within organizations is good for business. Although we generally agree with this contention, our research reveals that viewing oneself as more ethical than a coworker can instigate negative emotions toward the coworker and these feelings are even stronger when the more ethical employee also perceives the coworker to be a superior performer. Additionally, our research reveals that these negative emotions can spur subsequent negative behavioral reactions, as a means of fighting back and fleeing from the source of negative emotions, in the forms of social undermining and ostracism. Through this work, we hope to encourage future research to continue to investigate both the benefits and potential challenges related to embracing ethics within organizations.

Compliance with Ethical Standards

Conflict of interest All of the study's authors declare they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

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Informed Consent Informed consent was obtained from all individual participants included in the studies.

Appendix A: Scale Items

Ethical Comparison ($\alpha = .93$) (1 = much less likely compared with coworker, 7 = much more likely compared with coworker) (adapted from Brown et al. 2005)

1. Listen to what others have to say
2. Believe others should be disciplined for violating ethical standards
3. Conduct your personal life in an ethical manner
4. Have the best interests of others in mind
5. Make fair and balanced decisions
6. Be trusted by others
7. Discuss business ethics or values with others
8. Set an example of how to do things the right way in terms of ethics
9. Define success not just by results but also the way that they are obtained

10. Ask “what is the right thing to do?” when making decisions

Performance Comparison ($\alpha = .91$) (1 = much less likely compared with coworker, 7 = much more likely compared with coworker) (adapted from Williams and Anderson 1991)

1. Adequately complete assigned duties
2. Fulfill responsibilities specified in job description
3. Perform tasks that are expected of you
4. Meet formal performance requirements of the job
5. Engage in activities that will directly affect your performance evaluation
6. Neglect aspects of the job you are obligated to perform (reverse scored)
7. Fail to perform essential duties (reverse scored)

Negative emotions (Study 1: $\alpha = .91$; Study 2: $\alpha = .79$) (1 = strongly disagree, 7 = strongly agree) (shortened version of Dunn et al. 2012)

1. I feel contempt toward him/her
2. He/she makes me feel tense
3. I feel disgusted by him/her
4. I feel stress thinking about him/her
5. I feel repulsed by him/her
6. I feel apprehensive toward him/her

Social Undermining

Study 1: ($\alpha = .95$) (1 = never, 7 = always) (Duffy et al. 2002)

1. Insult you
2. Give you the silent treatment
3. Spread rumors about you
4. Delay work to make you look bad or slow you down
5. Belittle your ideas
6. Hurt your feelings
7. Talk bad about you behind your back
8. Criticize the way you handled things on the job in a way that is not helpful
9. Not give you as much help as he/she promised
10. Give you incorrect or misleading information about the job
11. Compete with you for status and recognition
12. Let you know that he/she does not like you or something about you
13. Not defend you when people speak poorly of you

Study 2: ($\alpha = .95$) (1 = strongly disagree, 7 = strongly agree)

1. Hinder his/her ability to maintain positive interpersonal relationships with others
2. Hinder his/her ability to experience school-related success
3. Hinder his/her favorable reputation

Ostracism

Study 1: ($\alpha = .95$) (1 = never, 7 = always) (Ferris et al. 2008)

1. Ignore you at work
2. Leave the area when you enter
3. Not answer your greetings
4. Not sit with you in a lunchroom at work
5. Avoid you at work
6. Not look at you at work
7. Shut you out of the conversation
8. Refuse to talk to you at work
9. Treat you as if you weren't there
10. Not invite you or ask you if you want anything when he/she goes out for a coffee break

Study 2: ($\alpha = .90$) (1 = strongly disagree, 7 = strongly agree)

1. You would ignore him/her
2. You would exclude him/her
3. You would avoid him/her

Positive emotions (Study 1: $\alpha = .76$; Study 2: $\alpha = .73$) (1 = strongly disagree, 7 = strongly agree) (compiled based on Emmons 1987; Raskin and Hall 1979; Tracy and Robins 2007)

1. He/she can learn a great deal from me
2. I feel accomplished compared to him/her
3. I am more knowledgeable than him/her

Appendix B: Ethical Dilemmas from Study 2

Dilemmas created by Flynn and Wiltermuth (2010). Response options created for the purpose of Study 2.

1. You are in charge of testing a new software package that your company has recently developed. It will be launched in a week, which means you will need to set up round-the-clock testing before then. You have to assign people to two teams—one day shift and one graveyard shift. What would you do?
 - a. Flip a coin to randomly assign employees to each of the two teams

- b. Assign all of the married employees that have kids to the daytime shift
 - c. Ask employees to volunteer for one of the two shifts
 - d. Pay the people who are willing to work the graveyard shift more money to do so

2. You notice one of your best employees taking printer paper, highlighters, and post-it notes home in her laptop bag. This employee has worked at the firm for many years, but there is a rule against this and clear procedures for providing employees with supplies if they choose to work at home. According to company policy, you are required to fire this employee on the spot. What would you do?
 - a. I would not fire her
 - b. I would fire her immediately
 - c. I would meet with her to confront her about the situation
 - d. I would talk to her coworkers to find out how long this has been going on

3. Your colleague, who you consider to be a friend, is looking to hire a new manager in her department. She has identified an external candidate she would like to hire, but company rules require her to consider internal candidates first. She has asked you not to disclose to people within the company that she has already picked out an external candidate for the position. However, you know two employees in your area who would like to have this job, and each has asked you directly if your colleague has already picked someone for this position. What would you do?
 - a. Tell them she has not picked anyone yet
 - b. Tell them she has already picked someone from outside the company
 - c. Talk to the colleague to try and persuade her to consider the two internal employees
 - d. Talk to someone in HR to let them know your colleague plans to ignore the company rule

4. You work in a small division of a large company. Two of your colleagues, whom you are friends with outside of work, have been working on a new business venture together. Although it is against company policy, you notice that they have been spending a significant amount of time at work making plans for this new business. Despite their involvement in this side business, these colleagues have always made time to help you with the issues you encounter at work. Your boss, who is concerned by the declining performance of your group, asks you if these colleagues are using company time to pursue interests not related to the company. What would you do?
 - a. Tell your boss that the colleagues are pursuing their own interests on company time
 - b. Play dumb and pretend that you aren't really sure why performance is declining
 - c. Cover for your colleagues and tell your boss they aren't using company time to pursue their own interests
 - d. Take the blame and tell your boss you have been really distracted by things happening at home and that you'll get things turned around

5. You manage a small company that is trying to secure an additional round of venture-capital financing. The firm employs five people, each of whom has an irreplaceable set of skills. If any of the five were to leave, the company would struggle to secure additional financing. One of the principal employees, whom you consider a friend, has recently informed you that he has received an extremely appealing offer from another company that is much more likely to succeed. The employee must make a decision in the next two days. Out of respect for you, this employee has told you that he will go to the other company only if you offer your blessing. What would you do?
 - a. Talk to the other employees to see if they think the group can pick up the slack if this person leaves
 - b. Encourage this person to take the offer with your blessing
 - c. Fire the person on the spot because they clearly don't want to be a part of your company anymore
 - d. Discourage the employee from leaving out of concern for the group

6. You manage a medium-sized company that is located in a small town. Unfortunately, you are forced to lay off a third of your workforce in six-month time. You know that as soon as you announce the layoffs property prices in the small town will fall off considerably, as will the effort of the company's employees. One of your favorite employees, whom you admire very much, has been going through some hard times financially. You would like to give this employee some advance notice so that he could sell his house for a reasonable price. However, you know that if you tell him to sell the house, there is a chance the rest of the company would read the sale as a sign that layoffs are imminent long before the planned announcement date. If this were to happen, not only would property prices drop, so too would firm productivity. What would you do?

- a. Bring the employee in and drop hints that he should sell his house
- b. Clearly tell him to sell his house
- c. Don't have a conversation with the employee prior to announcing the layoffs
- d. Warn the entire company that layoffs may be on the horizon and that they should be aware of this and consider every option

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