Evil Joy Is Hard to Share: Negative Affect Attenuates Interpersonal Capitalizing on Immoral Deeds

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Capitalization is an interpersonal process in which individuals (capitalizers) communicate their accomplishments to others (responders). When these attempts to capitalize are met with enthusiastic responses, individuals reap greater personal and social benefits from the accomplishment. This research integrated the interpersonal model of capitalization with moral foundations theory to examine whether accomplishments achieved through immoral (vs. moral) means disrupt the interpersonal processes of capitalization. We hypothesized that an accomplishment achieved through immoral (vs. moral) means would suppress the positive affective response often reaped from capitalizing on good news. We conducted two, mixed-methods experiments in which individuals interacted with a stranger (Study 1) or with their romantic partner (Study 2). We found that responders exhibited greater self-reported negative emotions, avoidance motivation, and arousal when reacting to capitalizers' immoral (vs. moral) accomplishments. In turn, greater negative affect predicted less enthusiastic verbal responses to capitalization attempts. In Study 2 we found that immoral accomplishments increased avoidance motivation, which contrary to our expectations, increased expressions of happiness. These studies reveal that the moral means by which accomplishments are achieved can disrupt the interpersonal process of capitalization.

Keywords: capitalization, Moral Foundations Theory, negative affect, dyadic interactions, InterCAP

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People tend to communicate their accomplishments to others—a phenomenon known as interpersonal capitalization (Gable et al., 2004; Langston, 1994; Peters et al., 2018). A person who communicates the accomplishment, a capitalizer, often receives a reaction from the other person, a responder. If a responder reacts enthusiastically, which is the most common reaction, the benefits reaped from the good event are enhanced further (e.g., Gable et al., 2004; Woods et al., 2015). Notably, the responder may also benefit from the enthusiastic capitalization response. Responders' good feelings may stem from their close others being successful, from being compassionate and supportive, or emotional contagion (Peters et al., 2018). Recent studies by Pagani and colleagues (2020) demonstrated that enthusiastic responses to capitalization attempts might increase couple identity, and in turn, increase the quality of a relationship. Furthermore, the benefits of enthusiastic capitalization might be reinforced by a reciprocal loop—an effect driven by people's tendency to reciprocate enthusiastic capitalization responses (Kaczmarek et al., 2021). However, responders do not always react enthusiastically to capitalization attempts. In the current work, we argue that one reason responders may be less enthusiastic to capitalizers' good news is the extent to which the accomplishment was achieved through moral means.

We conducted two experiments in which we employed two different paradigms. By integrating moral foundations theory (MFT; Graham et al., 2013)—which allows us to define accomplishments deemed as immoral—with the interpersonal model of capitalization (InterCAP; Peters et al., 2018), we aimed to attenuate responders' enthusiasm to good news achieved by immoral means. Also, through

repeated assessment of reactions to the capitalization attempt, we aimed to observe the affective mechanism responsible for a less enthusiastic response. Our research program is the first that underscores immorality as a factor that disrupts the capitalization process and tracks the relevant affective processes responsible for less enthusiastic responses. Furthermore, our work examines a potential psychological mechanism responsible for the degeneration of relationships through the incompatibility of moral values between people.

Interpersonal Capitalization

When something positive happens, people often seek others' company and attention to retell the good event and receive enthusiastic feedback that validates the positive experience (Duprez et al., 2015). The process of retelling a good event to another person has been termed interpersonal capitalization (Bryant, 1989; Gable et al., 2004; Hovasapian & Levine, 2018; Lambert et al., 2013; Langston, 1994). In turn, how responders react (or are perceived to react by capitalizers) to these capitalization attempts can shape the benefits reaped from the capitalization process.

Responders' reactions can be classified into four types based on the level of enthusiasm and engagement the responders display—or are perceived to display (Pagani et al., 2013). The most enthusiastic and engaged response is defined as an active-constructive response, which enhances positive emotions of the capitalizer above levels attributable to the event itself (Demir et al., 2013; Gable et al., 2004; Lambert et al., 2013; Monfort et al., 2014; Otto et al., 2015; Reis et al., 2010). In contrast, the following three types of responses attenuate or reverse the positive association between capitalization attempts and positive outcomes (Lambert et al., 2013): passive-constructive (providing minimal feedback); passive-destructive (ignoring the event or the partner); active-destructive (demeaning the event or the partner).

An active–constructive response to a capitalization attempt also benefits the responder through interpersonal and affective effects. Peters and colleagues (2018) introduced the Interpersonal model of Capitalization (InterCAP), wherein responders may share the positive emotions of capitalizers through emotional contagion. Furthermore, responders may feel good about the achievement of close others or the fact that they acted compassionately and supportively toward them. Responders may also anticipate that capitalizers will, in turn, be responsive to responders' own future capitalization attempts. For example, experimental research demonstrated that responders felt more positive and less negative emotions through active-constructive responding after the capitalization process (Monfort et al., 2014). While active-constructive feedback is conducive to a range of positive outcomes for responders, we know little about the factors that may inhibit this type of reaction.

MFT

We conceptualized morality in line with the MFT (Graham et al., 2013). According to MFT, human moral systems compose evolved psychological mechanisms that work together to facilitate cooperation and suppress selfishness (Haidt & Bjorklund, 2008). The MFT framework was developed following the social intuitionist model of moral judgments (Haidt, 2001). Contrary to previous attempts to scientifically describe human morality, the social intuitionist model stresses the importance of emotional reactions to violations of moral norms in guiding human cognitive and deliberative reasoning (Haidt & Bjorklund,

2008). The affective response is a rapid and automatic reaction to immoral behavior followed by (when needed) retroactive, slow, and ex post facto elaborate moral reasoning (Graham et al., 2013; Haidt, 2001, 2012). Metaphorically, MFT presents emotions as the moral "dog" and cognitions as the "rational tail" (Haidt, 2001).

MFT describes five separate categories of moral violations: *care/harm,* which is concerned with the physical and psychological suffering of other people; *fairness/cheating,* which is concerned with a fair distribution of goods; *loyalty/betrayal,* which is concerned with group loyalty; *authority/subversion,* which is concerned with deference to authorities, and *purity/degradation,* which is concerned with pathogen threat and purity. These foundations are hypothesized to employ separate cognitive and affective psychological mechanisms responsible for variation in individuals' perceptions of behaviors that are regarded as immoral (Graham et al., 2013).

Albeit recent research suggests that—except harm which elicits compassion, and degradation, which elicits disgust—moral violations probably do not elicit a specific emotional response to violations of each foundation. Instead, they elicit a wide range of moral emotions, for example, anger, contempt, or fear (Landmann & Hess, 2018). An alternative approach was demonstrated by Zhang and colleagues (2017), who did not look at particular discrete emotional states but used a dimensional approach to human affect. They studied the link between difficulties in emotion regulation and moral judgments and found that this positive/negative association was mediated by emotional valence (is the experience positive or negative?) and arousal (is the experience arousing or not?). However, no study has dimensionally operationalized the affective consequences of perceiving a moral violation which has the advantage of yielding more nuanced information relative to a discrete approach.

Importantly, MFT does not point to the morally good and morally bad behaviors in the normative sense, rather it allows for the description of highly diverse moral attitudes on a wide range of behaviors. In this sense, MFT allows for predictions regarding what type of behaviors could be interpreted by some people as moral violations. For instance, some people may think that there is nothing immoral about disobedience or promiscuity, whereas others could interpret these behaviors as moral violations.

Morality plays an important role in the interpersonal context. Yet, no extant research has explored the effect of morality on the capitalization process. People tend to rate immoral behaviors less permissively (Koleva et al., 2014; Selterman et al., 2018; Selterman & Koleva, 2015; Simpson et al., 2016), and therefore we anticipate responders to be less enthusiastic when capitalizers attempt to retell their good news achieved through immoral means. Furthermore, we expect that the association between immorality and less enthusiastic responses will be mediated through affective processes (Haidt, 2001). Specifically, we anticipate that immoral behaviors will be associated with less positive and more negative affect, which in turn will attenuate enthusiasm. Examining how immorality of deeds influences responding and how emotional processes mediate these effects will provide a better understanding of factors that shape responders' behavior—a process often neglected in capitalization research (Peters et al., 2018).

The Present Research

We conducted two studies to address two main research questions: (Research Question 1) Does immorality of achievements

suppress responders' enthusiastic (active-constructive) reaction in the capitalization process? (Research Question 2) Do affective processes mediate this relationship? Across both studies, we hypothesized the following:

> *Hypothesis 1:* Responders would react less enthusiastically to a capitalization attempt when the disclosers' achievements were accomplished via immoral (vs. moral) means.

> *Hypothesis 2:* Affective mediators—greater (a) negative valence, (b) arousal, and (c) avoidance motivation—would mediate the relationship between disclosers' attempts to capitalize on immoral (vs. moral) achievements and less-enthusiastic responses.

To test these hypotheses, we conducted two multimethod studies. In Study 1, we asked participants to respond to moral and immoral capitalization attempts recorded by nonclose others (i.e., strangers) while their subjective and behavioral responses were collected. In Study 2, we replicated this approach in real-time interactions with romantic partners. The studies aimed at extending the InterCAP model with the moral aspect of the achievement —a new factor that may distort responses to capitalization attempts.

Study 1

In Study 1, we hypothesized that responders would react less enthusiastically to capitalization attempts of immoral (vs. moral) achievements. Additionally, we hypothesized that this effect would be mediated by affective responses (negative valence, higher arousal, and lower approach motivation). To operationalize immoral achievements, we used a theoretical framework for three types of moral violations: care/harm, loyalty/betrayal, and purity/degradation. Previous research suggested that the perception of these particular categories negatively impacts interpersonal relationships (Selterman et al., 2018; Selterman & Koleva, 2015). We conducted a pilot study to develop and validate a set of capitalization disclosures, that is, brief success stories that

individuals communicate with others (see Table 1). Building upon the MFT (Graham et al., 2013), we created six short first-person stories about someone's recent success.

In order to confirm these stories were deemed immoral/moral, we conducted a pilot study. Specifically, we prepared a set of six (two per moral violation), which presented a capitalization attempt. Each story had two versions—the first version described a success achieved using immoral means, and the second version described the same outcome achieved morally. Stories were designed to elicit a psychological response to moral violations—a phenomenon that highly varies between individuals (Graham et al., 2009). It is important to note that they do not represent morally good and morally bad behaviors in the normative sense (nor do they necessarily represent the authors' morals or values), and therefore should not be treated as such.

We conducted an online study to test the validity of the stories ($N = 222$; 114 women, 108 men; age: $M = 25.9$, $SD = 3.39$). Through a social media link, participants rated the morality of a stranger's success on a 7-point scale ranging from 1 (*completely immoral*) to 7 (*completely moral*). We conducted a paired samples *t*-test to examine whether immoral stories are indeed rated as more immoral. As expected, the moral stories ($M = 6.16$, $SD = 1.20$) were evaluated higher on the immoral-moral dimension compared to the immoral stories ($M = 2.90$, $SD = 1.66$), $t(220) = -16.75$, $p < .001$, $d = 2.25$. We also tested each story independently and found that each story produced large effects (all Cohen's ds > 1.91) contributing to the immorality effects across the study (see Table S1 in the online supplemental material).

Method

Participants

This study involved 84 individuals between the ages of 18 and 27 ($M = 21.07$, $SD = 1.93$). The sample included 50% women and 50% men (self-identified) to minimize potential effects associated with the gender of the participants. Each person generated six responses to capitalization attempts. Thus, the number of cases

Table 1

Study 1: Moral and Immoral Capitalization Stories by Moral Foundation

Moral success	Immoral success
Care/harm	
I explained to my daughter why fruit and vegetables are so good for her health. I taught her to eat dinner to the end.	I spanked my daughter for not eating dinner. I taught her to eat dinner to the end.
I am a volunteer at the shelter. Today I encouraged a dog to get out of the cage to the runway so that someone could see it and adopt it. Thanks to this, it was adopted by some family.	I am a volunteer at the shelter. Today I kicked a dog to get out of the cage to the runway so that someone could see it and adopt it. Thanks to this, it was adopted by some family.
Loyalty/betrayal	
I left a job where I was cheated, and I got hired in another company in a highly paid position.	I left my job in a family business, and I got hired in a competitor company in a highly paid position.
I gave an interview in which I talked about how cool people from my home village are. The editors liked it so much that they offered me a permanent broadcast on their radio.	I gave an interview in which I talked about how much I hate people in my home village. The editors liked it so much that they offered me a permanent broadcast on their radio.
Purity/degradation	
I was at a party and had a good time with four newly met women and one newly met man.	I was at a party and kissed four newly met women and one newly met man.
I married my best friend. We had a wonderful wedding.	I married my cousin. We had a wonderful wedding.

Figure 1

An Example of a Screen Seen by a Participant During the Capitalization Attempt

Note. An item from the Warsaw Set of Emotional Facial Expression Pictures presenting a professional actor. Reprinted with permission. See the online article for the color version of this figure.

clustered within individuals was 504. The sample size was determined before any data analysis. A power analysis using G*Power 3.1 (Faul et al., 2009) indicated that detecting small effect sizes of $f^2 = .15$, with the power of .80, would require a sample size of 74 participants for a repeated measures design. We decided to include 10 more individuals to account for any potential missing data. No additional data were collected after the analyses. The study was a part of a larger project that included measures not germane to the study hypotheses. Each participant received a cinema ticket for their involvement. The Institutional Ethics Committee of the Institute of Psychology, Adam Mickiewicz University in Poznan approved the study.

Stimuli

We presented the success stories accompanied by portraits of people who shared the stories (i.e., capitalizers). We used the pictures from The Warsaw Set of Emotional Facial Expression Pictures, a validated database of basic emotional expressions performed by professional actors (Olszanowski et al., 2014; see Figure 1). Faces and stories were counterbalanced so that each face was presented along with each story across the study.

Procedure

The experiment was carried out in a sound-attenuated and air-conditioned room. Upon arrival, each participant signed written informed consent. We used a cover story to mask the study objective based on previous research (Kubota et al., 2013). Specifically, we told participants that the idea for this study was to share a recent personal success story with other students. We informed each participant that some of our previous participants were asked to write down a short story about their recent success and that they were photographed. We also notified the participant that the computer would randomly choose whether they will provide their story and a photo at the end of the experiment. To strengthen procedure credibility, we demonstrated the equipment for taking the photo: a plain white background, a black cloak to cover the clothes, and a camera. In fact, all participants reacted to stories and pictures that

were preprepared and validated beforehand. No participants were chosen to provide a story or a photo.

Participants completed six rounds where they responded to capitalization attempts (three moral and three immoral success stories). Immoral and moral success stories were presented in an order consistent with Latin-square design, which is a method used to minimize the impact of extraneous factors (Richardson, 2018). Each round included a 90-s presentation of a success story and picture. After each story, participants reported their affective responses on three scales -valence, arousal, approach–avoidance motivation. Participants were also allowed to freely respond (via a text box) to the capitalizer's attempt.

Measures

Emotions Toward Capitalizer. We measured levels of valence and arousal responders felt toward the capitalizers with the self-assessment manikin (SAM; Bradley & Lang, 1994). SAM is a validated nonverbal visual assessment developed to measure affective responses. Participants reported their state felt emotions using a graphical scale ranging from 1 (*very sad figure*) to 9 (*very happy figure*) for valence and from 1 (*calm figure*) to 9 (*agitated figure*) for arousal. We also asked participants to report their approach–avoidance motivation toward the capitalizer using a validated graphical scale modeled after the self-assessment manikin (Behnke et al., 2020). Participants reported whether they felt the urge to avoid or approach their friend, from 1 (*avoid*) to 9 (*approach*; Marchewka et al., 2014). Motivation scores were multiplied by −1 so that higher scores reflected greater avoidance (less approach) motivation.

Written Response to Capitalization Attempts. Participants were asked to provide a brief, written response to the capitalization attempt that would be as close as possible to their immediate response to a friend in a similar real-world situation. Participants were provided with a text box and asked to complete this entry by writing a brief response that would be sent to the author of the story through an e-mail. Two independent coders categorized each written response according to the active-passive and constructive-destructive dimensions of responses to capitalization attempts by answering the following two questions: (a) Is the message active or passive? (ICC = .89) and (b) is the message constructive or destructive? (ICC = .97). Based on extant capitalization research (e.g., Gable et al., 2004; Gable & Reis, 2010; Pagani et al., 2015; Peters et al., 2018), a dichotomous variable was created such that enthusiastic (active–constructive) responses were coded as 1 and passive and destructive responses were coded as 0.

We also analyzed the content of capitalization responses with Linguistic Inquiry and Word Count 2015 (LIWC; Pennebaker et al., 2015), a validated computerized text analysis software. LIWC counts words in psychologically meaningful categories. Multiple studies (involving the generation, expression, and regulation of emotions) have shown its validity (e.g., Settanni & Marengo, 2015; Sylwester & Purver, 2015). Of the available LIWC categories, we focused on whether responders emphasized their positive emotions (using words such as happy, good, great, beautiful, congratulations) and their negative emotions (using words such as cruelty, aggression, fear, mistake, violence; Gable et al., 2004). We also used the response length (word count) as a measure of communication and engagement effort (Schwarz & Baßfeld, 2019). Participants generated average responses of fifteen words (M =

15.00, SD = 11.51), such as "Your behavior is completely out of my style," "I do not support it," and "I think you should think about your behavior and not repeat it" (for immoral successes) and "Well done, keep it that way," or "It is super cool!" (for moral successes).

Analytical Strategy

To account for nonindependence of observations (each participant responded to six stimuli), we nested responses within individuals and tested a mediational model using MPlus 8.0 (Asparouhov, 2005; Muthén & Satorra, 1995). In the mediation model, we regressed the binary outcome (enthusiastic vs. nonenthusiastic feedback; Gable et al., 2004; Gable & Reis, 2010; Pagani et al., 2015) and continuous outcomes (percentage of positive and negative words in response) on the mediators (affective responses to reading the capitalization stories) and predictors (the use of moral vs. immoral means). A weighted least-square with mean and variance correction estimator (WLSMV) was used to evaluate the fit of the structural model with binary outcomes (i. e., did the person provide enthusiastic feedback or nonenthusiastic feedback?; Muthén & Muthén, 2012). We calculated root mean square error of approximation (RMSEA), the recommended fit index for the WLSMV estimator, with values <.06 indicating acceptable fit, along with the comparative fit index (CFI) with values above .90 indicating acceptable fit (Bentler, 1990).

Results

Descriptive statistics and correlations are presented in Table S2 in the online supplemental material. After eliminating participants with missing data, we analyzed 444 responses to capitalization attempts, of which 178 (40%) were enthusiastic. Figure 2 presents the hypothesized mediational path model of enthusiastic responding. This model fit the data well, $\chi^2(9)$ = 13.35, p = .15, RMSEA = .03, 90% confidence interval (CI) [.01, .07], CFI = .99. Insignificant paths had no effect on model fit, $\Delta\chi^2(7)$ = 6.12, p = .53, and were removed.

The total effects of the model supported our first hypothesis— immoral successes led to less enthusiastic responses (β = −.61, 95% CI [−.69, −.53]), and responses to immoral successes contained fewer positive words (β = −22, 95% CI [−.29, −.15]). We

found no effect of immoral success on the number of negative words in the response.

We also partially supported our second hypothesis that negative affect would mediate the association between immoral success and enthusiastic responses. Negative valence mediated the relationship between immoral success and enthusiastic responses (indirect effect: β = −.35, 95% CI [−.44, −.27]). Specifically, immoral success elicited more negative valence, and this, in turn, caused participants to respond less enthusiastically. Negative valence also mediated the inverse relationship between immoral success and the number of positive words (indirect effect: β = −.22, 95% CI [−.29, −.15]). Immoral success elicited more negative valence than moral success, and this, in turn, led participants to include fewer positive words in their responses. Finally, negative valence mediated the relationship between immoral success and the number of negative words (indirect effect: β = .18, 95% CI [.12, .24]). Immoral success elicited more negative valence, and this, in turn, led participants to include more negative words in their responses. Figure 2 presents the regression parameters for the direct effects included in the model.

Our study was not sufficiently powered to reliably test our model that simultaneously included the three subtypes of morality (care/harm, loyalty/betrayal, and purity/degradation). However, we provide a comparison between moral and immoral successes for each foundation on the arousal, approach, and valence scales in the online supplemental material (see Table S3 in the online supplemental material). Briefly, the strongest effects for valence and approach were observed for the care/harm foundation, whereas the strongest effect for arousal was for the purity/degradation foundation. These additional results informed our methodological approach to Study 2.

Discussion

Study 1 revealed that immoral (vs. moral) capitalization attempts led responders to limit their enthusiastic responses and respond with fewer positive and more negative words. These effects were partially mediated by negative affect—capitalizing on an immoral success predicted greater negative valence, which, in turn, predicted less enthusiastic responses and the use of less positive and more

Figure 2
Effects of Affective Factors on Response to Moral and Immoral Capitalization Attempts in Study 1

Study 1
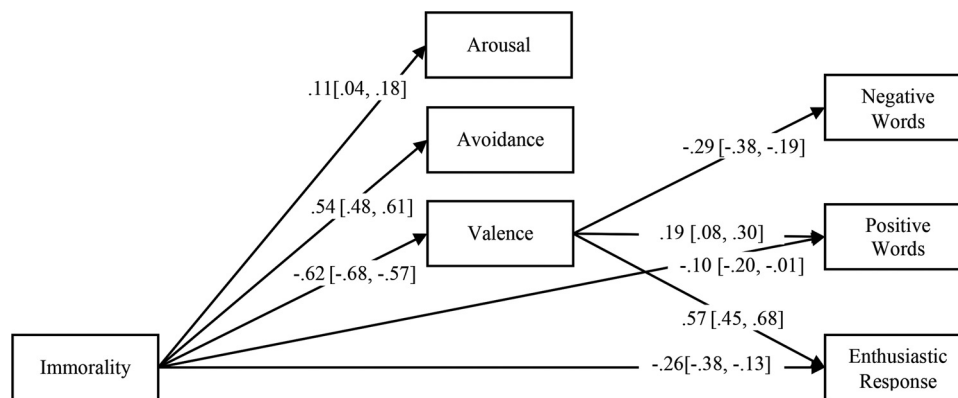
Notes.   Immorality coded 0 = no, 1 = yes, Enthusiastic response coded 0 = no, 1 = yes.

negative words. These results provide a theoretical bridge between the InterCAP (Peters et al., 2018) and MFT (Graham et al., 2013) by indicating that accounting for morality may reveal why some capitalization attempts are likely to fail. Specifically, capitalizing on an immoral success—as operationalized by MFT—led to greater negative affect (intrapersonal process), which predicted greater negative responses toward the capitalizer (interpersonal process). This is the first study to show that the cause of a capitalization failure may be due to the morality of the capitalizers' success.

Whereas prior studies focused on the emotions of the capitalizer as a result of capitalization support (e.g., Lambert et al., 2013), we examined emotional processes that precede and influence the responder. The strengths of the present study are its experimental design and multidimensional approach to emotional experiences (i.e., affect, valence, arousal, and written expression). The main limitation of this study was that individuals responded to recorded capitalization attempts. It could be that we did not find the hypothesized mediational effect of arousal and avoidance motivation because the interaction in which the participants engaged was deemed superficial. It is likely that the participants would experience stronger emotions and engage in more emotional expression in a more socially-realistic live interaction (Jakobs et al., 2001; Kalokerinos et al., 2017). We addressed this limitation in Study 2, in which we replicate our study among romantic couples engaging in a more realistic conversation.

Study 2

In Study 2, we sought to replicate findings from Study 1. We hypothesized that responders would react less enthusiastically to capitalization attempts of an immoral (vs. moral) achievement and that affective responses would mediate this effect. However, this time we tested these hypotheses within romantic couples' interactions. Compared to Study 1, where participants reacted to a recorded capitalization attempt, we increased the external validity by allowing the participants to interact with each other through a computer interface while being physically present in the same room. We focused on violence against children because physical mistreatment of children by adults lies at the core of the care/harm foundation (Graham et al., 2013). The care/harm foundation is believed to have primarily evolved to address the adaptive challenge to protect and care for children (Haidt, 2012). It is triggered by children's suffering or distress and results in compassion for the victim and anger at the perpetrator. Physical violence as a disciplinary technique is widely criticized by professionals (Miller-Perrin & Rush, 2018) and disapproved by considerable numbers of parents and nonparents. In Poland, where the data were collected, there is a seven-percentage point difference in individuals who accept physical violence as a disciplinary technique against children between parents (49% acceptance) and individuals without children (56%; Włodarczyk, 2017).

To increase the internal validity, we expanded our operationalization of responses to capitalization attempts by allowing responders to communicate their response nonverbally through sending a selfie (i.e., a photograph of themselves). Recent work has demonstrated that facial expressions, such as a happy face, are sensitive measures of enthusiastic responding to capitalization attempts (Monfort et al., 2015).

Method

Participants

Study 2 involved 182 individuals from 91 heterosexual dating couples between the ages of 17 and 36 ($M = 21.8$, $SD = 2.62$). We obtained a balanced sample (50% women, 50% men). The participation criterion included being in a serious, committed romantic relationship for at last 2 months (Gable et al., 2012). Relationship length ranged from 2 months to 10 years ($M = 2.80$ years, $SD = 2.12$). Approximately 45.7% of the sample was in a relationship without living together, 44.6% lived together, 7.6% were engaged, and 2.2% were married. Almost all (97.8%) of the participants had no children. Each person in the couple had the same role in the experiment, and each person generated four responses to capitalization attempts. Thus, the number of cases for the analysis was 728. The sample size was determined before any data analysis. At the time of the research design and data collection, there were no established practices for calculating power for dyadic repeated measures designs. Instead, we conducted a power analysis using G*Power 3.1 (Faul et al., 2009). Power analyses indicated that detecting small effect sizes of $f^2 = .10$, with the power of .80, would require a sample size of 142 participants for a repeated measures design. To account for any potential missing data, we decided to include the pairs of participants that applied to take part in the study. A post hoc power analysis indicated that at least 91 dyads were needed to achieve sufficient power of .80 to detect small-to-medium effect sizes ($\beta = .20$; Ackerman et al., 2016). No additional data were collected after the analyses.

Immoral Success Stimuli—Pilot Data

We prepared a problem-solving game with eight tasks to create a situation in which participants' partners (disclosers) might succeed and then share the success information with them (responders). We developed a set of eight parenting problems in which an adult had to intervene to ensure a child's safety. Each of the problems had four potential solutions: two immoral and two moral. We prepared an online questionnaire in which we presented each problem with corresponding solutions. We asked 41 volunteers to rate each solution via a 7-pt. Likert scale (1 - Strongly ineffective, 7 - Strongly effective) on the dimension of the intervention's effectiveness. We compared the effectiveness of each intervention in each problem, and we chose four parenting problems in which we found at least one moral and one immoral solution that was not significantly different from each other on effectiveness ratings (see Table 2). These four parenting problems were used in Study 2.

Procedure

The experiment was carried out in a sound-attenuated room with two separate air-conditioned cubicles. Upon arrival, each participant signed written informed consent. We used a cover story to mask the study objective. We briefed participants that the idea for this research was to observe how partners communicate after completing a problem-solving task. We notified the participants that one of them would be randomly chosen to solve the task that required high moral judgment and choosing the most efficient way to solve the problem. The role of the other dyad member was to respond to the problem-solvers' performance on the task. Unbeknownst to the participants, however, all of them were assigned to the responder role. Partners were unaware that they both acted as responders because once the experiment started,

Table 2
Parenting Problems and Solutions Used in a Task to Evoke a Capitalization Response in Study 2

Parenting problem	Moral solution	Immoral solution
Imagine that your child has made friends with a group of teenagers known for their vandalism and drug use. If your child does not change their social environment, they can start imitating their new friends' behavior.	I am signing up my child for extra activities to not have time to interact with their group of new friends.	I contact teenagers and tell them that my child is telling the teachers that they are taking drugs. I hope that the group will punish my child and that they will stop the relationship.
Imagine that your child does not want to drink a teaspoon of distasteful medicine. If your child does not take medicine, they may become ill.	I tell my child that if they take medicine, they will give me great satisfaction. I try to give my child the medicine again.	I am threatening the child that if they do not take medicine, they will be punished. I try to give my child the medicine again.
Imagine finding out that your teenage child smokes cigarettes at school during breaks between classes. If your child does not stop, they may become addicted.	I talk to my child and explain that if they smoke cigarettes, they will smell terrible.	I threaten the child that if I smell cigarettes, they will be hit with a belt.
Imagine you are the parent of two children who are just fighting each other. If you do not stop the fighting, they can cause themselves serious harm.	I am trying to stop the fight by asking them to stop fighting.	I hit each of the children and warn them I will do it again if they don't stop fighting.

they had no physical contact, and their communication was strictly controlled by the computer-based selection and exchange of predefined messages. Each participant responded to two immoral and two moral solutions to a parenting problem (four rounds). Participants were instructed that they would be updated about their partners' outcomes but would not be allowed to watch their partners perform the task.

Participants were told that their partner was considering the most efficacious solution from several proposed solutions. They were also informed that a panel of experts had previously determined which solution was the most effective. This information aimed to ensure the participants knew that the task has correct and incorrect answers. After, participants received a message regarding their capitalizing partners' success in picking the most efficacious solution, and in turn, winning $1.50. This message was, in fact, predefined and sent by the participant via a computer and lasted 60s (Monfort et al., 2015). Disclosers took part in a game and were presented with a set of four parenting problems. To succeed, they had to pick an intervention that most successfully resolved the problem. However, some methods inflicted physical or emotional harm on the child and violated the care/harm foundation. Through picking these solutions, the participants affiliated emotional and physical harm toward a child. If harm-affiliating answers were scored as more successful, participants won money and shared the information about their success (capitalization attempt). Despite being morally wrong, spanking is often considered efficacious in controlling behavior by laypeople (Orhon et al., 2006; Włodarczyk, 2017).

Finally, participants reported their affective response to the solution (valence, arousal, and approach–avoidance motivation). After that, participants were asked to respond to the capitalization attempt by selecting and sending a short, predefined message to their partner, along with a selfie. As in Study 1, we provided the same instructions for the participants regarding preparation for the study and compensated participants with a cinema ticket. The Institutional Ethics of the Institute of Psychology, Adam Mickiewicz University in Poznan approved the study.

Measures

Emotions Toward Capitalizer. Assessments of affective responses toward the capitalizer remained the same as in Study 1.

Responses to Capitalization Attempts. We collected verbal and nonverbal responses to capitalization attempts (Conoley et al., 2015; Kashdan et al., 2013). After each capitalization attempt, we asked responders to send a selfie with a text message. Selfies were taken with a camera located over the computer monitor. We instructed participants to look at the camera and press the spacebar to have a digital picture taken. Sending a selfie, for example, via social media or multimedia messaging services in mobile phones, is a modern method of communicating emotions (Manovich et al., 2017). We measured the intensity of happiness expressed in the photo using a validated facial expression analysis software Quantum Sense (Quantum CX, Gdynia, Poland; Kaczmarek et al., 2019).

Participants sent a selfie and a short predefined message adapted from prior capitalization research (Lambert et al., 2013; Monfort et al., 2014; Reis et al., 2010). We provided a range of five choices that included messages that were enthusiastic (active–constructive; e.g., "Wonderful!", "You did a great job!") or passive and/or destructive (e.g., "Ok. Good," "I bet the task wasn't very hard," "Not much happening here"). For the fifth option, responders could choose to refrain from communicating and not send a message. Like Study 1, the responses to capitalization attempts were dichotomized into enthusiastic versus nonenthusiastic responses.

Analytic Strategy

We used a similar analytical strategy as in Study 1 and tested hypotheses with path analysis using MPlus 8.0 (Asparouhov, 2005; Muthén & Satorra, 1995). We conducted a three-level path analytical model to account for dependency within-person (Level 2) and within romantic couples (Level 3). In the mediation model, the binary outcome (enthusiastic vs. nonenthusiastic verbal responses) and continuous outcome (percentage of a smile on selfie) were regressed on the mediators (affective response to partners' success) and experimental condition (the use of moral vs. immoral means).[1] As in Study 1, a binary outcome was used to reflect whether responders'

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[1] Following a reviewers' suggestion, we explored potential effects of including relationship duration in our model. The online supplemental material presents the results of the analyses.

feedback was enthusiastic or nonenthusiastic. Bayesian correction estimator was used to evaluate the path analytical three-level model fit with binary outcomes (Muthén & Muthén, 2012). We used the Bayesian posterior predictive (PP) to evaluate model fit. A well-fitting model should have a PP*p* value around .50, combined with a symmetric 95% credibility interval centered on zero (Muthén, 2010; Van de Schoot et al., 2014).

Results

Descriptive statistics and correlations are presented in Table S4 in the online supplemental material. After eliminating participants with missing data, we analyzed 736 responses to capitalization attempts, of which 256 (35%) were enthusiastic. The mediation path model of enthusiastic responding is presented in Figure 3. This model fit the data well (PP*p* = .50, 95% CI [−16.31, 24.64]).

We replicated the results from Study 1, supported both of our hypotheses, and found an unexpected effect of avoidance motivation on the expression of happiness. Although we found no direct effect of the immoral success capitalization attempt on the response, results revealed significant indirect effects of this association with negative valence and avoidance motivation. Negative valence mediated the relationship between immoral success and enthusiastic responses (indirect effect β = −.40, 95% CI [−.51, −.31]). Immoral success elicited more negative valence, and this, in turn, led participants to respond less enthusiastically. Furthermore, negative valence mediated the relationship between immoral success and the happiness intensity on the selfie (indirect effect β = −.07, 95% CI [−.12, −.02]). Immoral success elicited more negative valence, and, in turn, participants sent less happy selfies. Finally, avoidance motivation mediated the relationship between immoral success and the happiness intensity on the response selfie (indirect effect β = −.05, 95% CI [−.10, −.02]). Immoral success elicited greater levels of avoidance motivation, and this, in turn—contrary to our expectations—led participants to send happier selfies. The regression parameters for the model are presented in Figure 3.

Discussion

We replicated and extended the main findings of Study 1. We found that participants who faced their partners' capitalization

attempts based on immoral parenting techniques were less likely to respond with enthusiastic feedback. Affective reactions to the immoral success fully mediated this effect. Specifically, immoral (vs. moral) successes were associated with less positive and more negative valence, which, in turn, attenuated enthusiastic responding. Study 2 also extended our work to nonverbal self-reported motivation orientations and nonverbal displays, but in unexpected directions. Greater avoidance motivation was associated with greater nonverbal displays of happiness. The latter finding was unexpected because we anticipated negative affect would lead responders to express fewer positive emotions and that greater avoidance motivation would attenuate the expression of happiness. Interestingly, one of the previous studies on capitalization found that people may smile when sending a negative message in response to a capitalization attempt, and this finding also was described as contradictory (Monfort et al., 2014). The authors argued that smiling while experiencing greater avoidance motivation could be a self-regulatory strategy that down-regulates negative affect (Fredrickson & Levenson, 1998). We believe that the same mechanism might have operated in our study. Future studies could reexamine this finding by directly addressing the hypothesis that happiness expression indeed down-regulates the unpleasant perception of affective processes. We think it would also be interesting to examine whether the expressed smile is spontaneous or work primarily as a cover for genuine emotional experience (i.e., deliberate Duchenne smile; Gunnery et al., 2013).

We used parenting to present the violation of care/harm foundation directed toward a third person (a child) and not the romantic partner with which the partner was interacting—this could confound the influence of immorality of the act with being the target of the immoral act. Few participants were parents (2.2%); thus, most participants considered these scenarios hypothetical or referred to their personal experience in being parented as a child. This might provide a real-life basis for understanding how violence (or lack thereof) affects children and builds empathic concern for mistreated children. This follows methods used in moral psychology based on considering moral scenarios that no one has personally experienced (e.g., Clifford et al., 2015; Greene et al., 2001; Koenigs et al., 2007).

Figure 3

Effects of Affective Factors on Response to Moral and Immoral Capitalization Attempts in Study 2
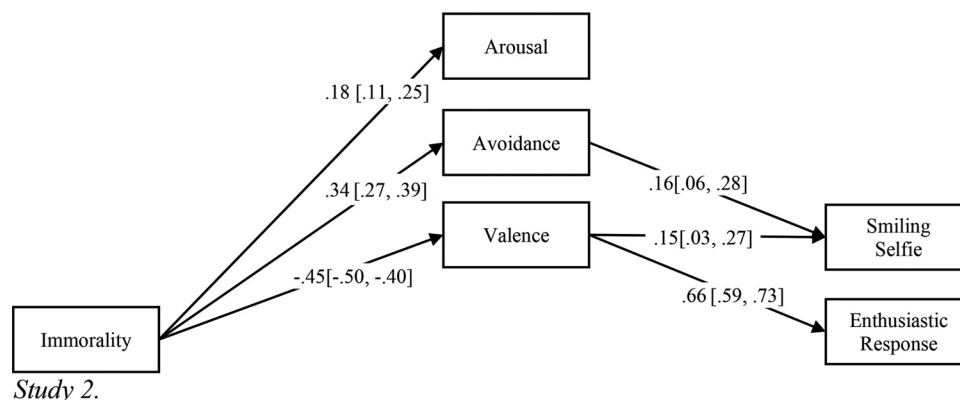
Study 2.

Notes. Immorality coded 0 = no, 1 = yes. Enthusiastic response coded 0 = no, 1 = yes,

The main improvement of this experiment, compared with Study 1, concerns the following major changes in methodology: (a) including participants in close relationships increased the study's realism and boosted its ecological validity; (b) focusing on the care/harm foundation of the MFT increased the power of experimental manipulation; and (c) including a nonverbal marker of capitalization response highlighted a different channel for communicating a response. Consequently, we replicated findings from Study 1, but found an indirect effect of avoidance motivation.

General Discussion

In this project, we found and replicated links between the InterCAP (Peters et al., 2018) and MFT (Graham et al., 2013). Namely, individuals were less likely to capitalize on immoral accomplishments, and this effect was mediated by negative affective responses to immoral deeds. This phenomenon introduces new elements to the InterCAP model and the MFT. Thus, our work extends understanding of how ethics work in relationships. Namely, we present novel evidence of how individuals who perform immoral acts fail to enhance social bonds. As emotions were the main interest in our work, we also present a suggestive illustration of how emotions help individuals fuel their corrective response to others' moral transgressions. Such a response may be challenging to deliver as it goes against capitalizers' expectations to receive attention and approval rather than advice or a rebuke (Duprez et al., 2015).

For InterCAP, we demonstrate that it is worthwhile to consider that responders are sensitive to the moral value of communicated events and tend to invalidate the positive experience of the capitalizer if it is founded on immoral deeds. This shows that responders tend to regulate the immoral behavior of their capitalization partner because capitalizers are motivated by the urge to validate their experience by receiving attention and empathy (Duprez et al., 2015). Our study also examined a unique situation in the literature when active-destructive responses (demeaning the success) seem preferable, whereas enthusiastic responses might be considered inappropriate. This greatly adds to the complexity of capitalization research. Previous studies were dominated by the capitalizer's perspective where active-constructive or enthusiastic responses are the only category that is considered desirable by the capitalizer (Pagani et al., 2015). We revealed a context where the moral perspective of the capitalizer might be different from the responder's perspective. The capitalizer might have different values or overlook the moral aspect of their deed. Thus, theories, as well as research, did not account for the fact that at least some responses to capitalization attempts perceived as passive or destructive by the capitalizer might be perceived as correct from a moral perspective and serve as a tool of facilitating more prosocial behavior in the capitalizer by the responder. Despite the cost of invalidation of capitalizers' experience by the responder and possible harm for relationship quality (Gable et al., 2004; Woods et al., 2015), responders are obliged to dampen enthusiasm and point to negative aspects of the capitalizer's behavior in case of moral violations.

We also observed that negative emotions in the responder fueled the social behavior that undermined the achievements perceived as immoral. This supports the functional perspective on emotions and indicates that functions of emotions (e.g., anger) might also be an essential aspect of the InterCAP model. Noteworthy, we observed that emotions were a full mediator (Study 2) and partial mediator

(Study 1) between the immorality of the deed and the responder's feedback. This might suggest that models that present emotions as a source of strategic information on how to behave in a particular social context might be relevant to the study of capitalization. Introducing negative emotions into the capitalization process is an important extension because, according to the review conducted by Peters and colleagues (2018), capitalization supports relationships when it leads both capitalizers and responders to experience positive feelings. We show, however, that there are instances where this straightforward affective link might break. Finally, a recent experimental study that manipulated responders' emotions indicated that elicited negative emotions inhibited enthusiastic responding (Kaczmarek et al., 2021). This partially supports our model replicability and lends further support for our hypothesis (as well as the MFT theory) that emotions are a critical (rather than spurious) mediator between immorality deeds and suppressed enthusiasm in responses to capitalization attempts. Diminished valence (or displeasure vs. pleasure) of subjective experience was the strongest predictor of less enthusiastic responding. Greater negative valence was related to more negative words, less positive words, and, in general, interpersonal communication perceived as less enthusiastic by external observers (Study 1), and less enthusiastic communication and less smiling on selfies sent to the partner (Study 2). This is suggestive evidence of how a broad range of communication channels are affected by valence and that messages sent through this channel are distinctive enough to be reliably evaluated as more negative by observers. We consistently showed that other aspects of affective experience (arousal and approach–avoidance intensity) are of potentially less importance. Thus, valence might be considered an adequate proxy to the experience of responders used in future studies and theory building.

Our findings add to the studies within the MFT (Graham et al., 2013). Whereas most previous MFT studies were focused on how individuals cope with negative events (e.g., Milesi et al., 2020; Selterman et al., 2018; Wagemans et al., 2018), we present how morality matters for individuals who try to capitalize on positive events, that is, events that are perceived by the capitalizer as their achievement or accomplishment. As noted, our findings indicate that the regulatory function of moral feelings might extend to the domain of positive interactions where individuals negotiate whether an event should be considered positive or deserves invalidation. Finally, from the perspective of MFT, we also present a novel argument that affect is a strong mediator that explains how individuals respond to immoral deeds. This is indicated by the mediation of valence between immorality and dampened enthusiasm. In this instance, the mediation model indicates that immoral deeds led to negative social responses if responders felt greater negative emotions. This, however, does not exclude the possibility that other cognitive factors might also be involved in the process.

Our findings have several strengths. First, we believe that we present robust evidence for the immorality—valence—dampened capitalization feedback pathway because we replicated this effect in two studies that differed in methodology. For instance, these effects were functional in a study in which participants simulated an interaction with a friend as well as a situation in which individuals believed they interacted with their romantic partner. Second, we used diverse methods (reported affect, lexical analysis or text response, raters, facial expression analysis) and each of these methods yielded results in the predicted direction; with the only

exception for the link between avoidance-approach motivation (but not valence) and smiling intensity on selfies. Third, we had relatively large sample sizes, which allowed us to test less pronounced effects (e.g., the influence of immorality on arousal). Finally, our studies focused on behavior, which is vital because studies that account for behavior have become less frequent in social psychology despite their apparent merits (Doliński, 2018).

Limitations

Our research program does warrant additional interpretative caveats. First, there is limited generalizability of the studies as the participants were mostly young adults. Second, despite providing replications, the effects observed were moderately sized, at best. Third, we observed a weak but significant direct effect of immorality on capitalization feedback (Study 1). This indicates that other unaccounted factors (e.g., social norms) might have additional influence on outcomes. Although we based our study on the MFTs, which emphasized that moral responses are primarily affective, other potential mediators might include cognitive and attitudinal factors. Fourth, the studies do not allow us to compare both models quantitively. Although we argue that there are differences in responses to capitalization attempts between the contexts of interaction with a recorded response and with real-time interaction with a close other, interpretations should be limited to qualitative differences. Fifth, the research does not allow us to conclude whether the effects we identified are limited to highly functioning romantic couples or whether they generalize to other kinds of close interpersonal relationships. Couples who self-select into this type of study (Study 2) are typically highly satisfied in their relationships (Monfort et al., 2014). Contempt, criticism, and stonewalling that are apparent in some low-functioning couples (Gottman, 1993) might cause a less enthusiastic capitalization, and prolonged adversity could further deteriorate the possibility of reaping benefits from capitalization (Hershenberg, 2013; Horn et al., 2017). Our study points to methods that might be tested with distressed couples in the future. Sixth, despite theoretical, empirical, and methodological reasons to use scenarios with physical violence toward children in Study 2, other forms of immoral behavior are relationship-relevant, including intimate partner violence, sexual infidelity, or breaking promises. The study results might be different if we considered a broader range of care/harm scenarios. Finally, we focused on moral foundations that were the most likely to affect interpersonal relationships (Selterman et al., 2018; Selterman & Koleva, 2015). Thus, the findings generalize only to foundations that were explicitly addressed in each study.

Future Directions

Future research on capitalization could test instances when a less enthusiastic response to capitalization attempts is preferable from a social perspective. In our study, we observed how reactions to capitalization attempts changed if the positive event resulted from immoral behavior toward a third party. However, further studies on capitalization might examine scenarios when the event has benefits for capitalizers and costs to their partners. For example, individuals might share the news with their romantic partners about receiving a more satisfying job in another city—in this situation, a potential relocation might disturb the life of responders and

the relationship (Peters et al., 2018). It could be that a similar pattern might be observed when people attempt to capitalize on a success that directly hurts a responder. Thus, the capitalization theory might be further investigated from the games theory perspective and zero-sum games in particular (Różycka-Tran et al., 2015). Another instance of beneficial nonenthusiastic response might occur when responders identify a positive event as harmful to capitalizers. For example, when a capitalizer shares news that they gambled a lot of their money but got lucky and won. In this instance, the responders' beliefs about gambling may conflict with the good news of winning a lot of money and consequently disrupt the capitalization process. These venues might contribute to understanding more socially complex situations that involve positive and negative emotions rather than more straightforward situations (yet less likely to occur in everyday life) where the capitalizer benefits, experiences positive emotions, and seeks to upregulate them via socializing with no implications for the welfare of the responder or the broader social context.

Another way of extending this line of work would be to focus on moderators, for example, to verify whether individual differences might enhance or attenuate the relationships in our model. For example, from the perspective of affective science, attitudes toward emotions (Harmon-Jones et al., 2011), norms of emotional expression (Hareli et al., 2015), or preferred emotion regulation strategies (Zaki & Williams, 2013) might serve as moderators in the capitalization process. These and other differences might also be considered from a cross-cultural perspective. For instance, expression of sadness (rather than anger) in response to norms violations is more frequent in some cultures than others (Hareli et al., 2015). Moreover, past research demonstrated that moral judgments and moral behaviors vary substantially between different populations—these differences are associated with cultural norms; environmental, demographic, and economic conditions (Graham et al., 2016). It could be that people from countries that judge violations of a particular moral foundation more harshly would respond with stronger negative affect to achievements violating a given moral foundation. For instance, Chinese versus Europeans or North Americans judge violations of the purity/degradation foundation more harshly (Zhang & Li, 2015). This also points to the fact that further studies might focus on more nuanced analyses of how moral transgressions during capitalization map onto each moral foundation rather than focusing on some foundations, as was the case in our project.

Conclusion

Overall, our studies demonstrated the importance of morality in the process of capitalization. Results revealed that responders reacted less enthusiastically to capitalizers' good news if the success was achieved through immoral means, and this association was consistently mediated by greater negative valence. This finding points to the importance of the content of capitalization attempt—a novel perspective within the capitalization literature. Broadly, this work extends the study of how capitalizers may aim, but fail, to capitalize on good news achieved through immoral means with responders. Thus, this project emphasizes the role of ethics in building social relationships and illustrates how emotions assist individuals in enhancing their moral response to transgressions disguised as achievements.

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