Understanding and Tackling Unethical Consumption: The Case of Counterfeit Consumption

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Abstract
This research examines how consumers feel when they use counterfeits, and how these feelings affect purchase intentions toward counterfeits and genuine brands. We find that counterfeit users experience mixed emotions, stemming from concerns about the signals the counterfeit might send to others. Accordingly, mixed emotions are stronger in public versus private settings, and among consumers chronically concerned about social signaling (i.e., consumers high in social-adjuvant motives). Because mixed emotions can be unpleasant, counterfeit users subsequently gravitate away from counterfeits and toward genuine brands (which communicate largely positive social signals and thus elicit no mixed emotions). In this manner, counterfeit consumption may drive demand for genuine brands. A final experiment tests implications for reducing counterfeit consumption. As predicted, consumers exposed to anticounterfeiting advertisements designed to elicit mixed emotions are willing to pay a higher price premium for genuine over counterfeit products. Collectively, these findings identify the emotional consequences of counterfeit consumption and highlight that an effective way to understand and reduce counterfeit consumption is to focus on the social context in which many counterfeits are used.

Keywords: Counterfeit consumption, mixed emotions, social signaling

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We sincerely thank the Editor, AE and reviewers for their helpful comments and for the opportunity to revise our paper. This revision note outlines changes based on the AE’s comments, and then addresses concerns raised by the reviewers. To overview, studies 1 and 2 are new and replace former studies 2 and 3. The review team suggested dropping study 1 but we instead moved it to the Introduction. We believe it adds value given it’s the only study based on counterfeit users’ retrospective memories and shows that over time counterfeit users do in fact remember feeling mixed. But if the team prefers, we are happy to omit this study. Regarding study 5b, we thought this study was valuable to practitioners who might read our work because it shows that surveying consumers about the factors that influence them is a somewhat misguided approach. But we took the team’s advice and dropped this study.

**MAJOR CONCEPTUAL CHANGES:**

1. **Clearly identify the theoretical contribution.** We clarify and strengthen the discussion of our contribution in the following ways.

   1.1 Past research has focused primarily on antecedents to purchasing counterfeits while we examine consequences of using counterfeits. Doing so has revealed a disconnect between the role of social factors at purchase and use. Social signaling concerns are a major driver of purchase (e.g., Wilcox et al., 2009). We show that the very same contexts and individuals associated with social signaling will exacerbate mixed emotions during use, thereby reducing counterfeits’ appeal.

   1.2 We now describe our contribution to the mixed emotions literature. We examine a novel context wherein a relatively mundane consumption episode elicits mixed emotions, and these emotions arise from social rather than intrapersonal factors. We also examine a novel DV. Prior work shows effects on brands and advertisements that are the source of mixed emotions, whereas
we show effects on purchase intentions, and show these effects occur at a product category level, affecting both a source category (counterfeits), and a substitute category (genuine products).

1.3 We clarify our practical contribution. Imagined consumption can elicit mixed emotions in the same way that actual consumption does, which we then rely upon to design an advertisement that renders counterfeits less appealing. This is important because (1) as we describe in study 4, very few intervention campaigns have attempted to reduce demand via social factors, and (2) it shows that our work is broadly useful because it implies not only users might gravitate away from counterfeits but nonusers can be prompted to do so with the right kind of intervention in place.

2. Improve and streamline the conceptual model. Many of the team’s suggestions on how to position our conceptual model are actually consistent with our intended positioning. Thanks to your feedback we believe we have clarified our framework, focusing on the following concerns:

2.1 The process whereby counterfeit products elicit mixed emotions. We posit that the potential to communicate positive and negative social signals is the key driver of mixed emotions. The positive signals are associated with the brand (communicating, for example, status). The negative signals are associated with the product (communicating, for example, unethical consumption). The potential to communicate these positive and negative social signals should elicit positive and negative emotions and hence mixed emotions. How we test this process is discussed in point 2.3.

2.2 Why mixed emotions are undesirable and may deter future counterfeit consumption. Mixed emotions can lead to psychological discomfort, which leads to negative attitudes toward brands and advertisements that induced the mixed emotions (Hong and Lee 2010; Williams and Aaker 2002). Complimenting that research, we suggest that mixed emotions affect purchase intentions toward both counterfeits and genuine brand goods. We also provide more evidence for this prediction, demonstrating that mixed emotions decrease purchase intentions toward counterfeits,
increase preference to purchase genuine over counterfeit products, and increase the price premium one is willing to pay for genuine over counterfeit products.

2.3 *Moderators of the conceptual model*. We propose that mixed emotions arise due to the social signals (both positive and negative) associated with counterfeits. We test this process argument via two factors that moderate the salience of social signals: public vs. private consumption setting, and individual differences in social-adjustive motives. First, social signaling concerns become more salient in public versus private settings (Ratner and Hamilton, 2015; Ratner and Kahn, 2002). Thus, if mixed emotions are rooted in social signaling concerns, they should be greater when using a counterfeit in public (vs. private). Second, in a public setting, concerns about social signaling should be most prevalent among consumers high in social-adjustive motives, who use brands to signal status and gain social approval (Katz, 1960; Wilcox et al., 2009). Thus, they should feel more mixed. Third, we identify a boundary condition – social acceptability of counterfeit consumption. The capacity for a counterfeit to send negative signals presupposes that using a counterfeit is socially unacceptable. If social acceptability were to increase, the drop in concern about negative signals should attenuate mixed emotions.

2.4 *Removing the distinction between acquisition and usage*. We agree with the review team that while counterfeit acquisition is an important topic, it is beyond the scope of our research. We thus focus on counterfeit consumption and its consequences for downstream purchase intentions.

3. **Strengthen the link between our work and extant literature.** We now include a broader literature review to better clarify the similarities and differences of our work. We also restructured the Introduction based on the advice of the team. First, we review past research on counterfeit consumption and discuss the moral and social antecedents of counterfeit purchase. We next review past research on mixed emotions, discussing what they are and when they occur.
We then explain why counterfeit users feel mixed (point 2.1), how we test this process (point 2.3), and the consequences of mixed emotions for counterfeit consumption (point 2.2).

**MAJOR EMPIRICAL CHANGES:**

We have made substantial empirical changes. The following table outlines the current studies.

<table>
<thead>
<tr>
<th>Study</th>
<th>Summary</th>
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| Study 1 *(New Study)* | Test the moderator of public vs. private setting and downstream consequence on purchase intentions toward counterfeits.  
- Public (vs. private) setting increases mixed emotions in counterfeit, but not in genuine, consumption.  
- Mixed emotions in turn lower purchase intentions toward counterfeits. |
| Study 2 *(New Study)* | Test the moderator of social-adjustive motives and downstream consequence on purchase intentions toward counterfeit and genuine products.  
- Social-adjustive motives increase mixed emotions in counterfeit, but not genuine, consumption.  
- Social-adjustive motives decrease counterfeit (but not genuine) users’ future purchase intentions toward counterfeits, and increases their preference to purchase genuine over counterfeit products.  
- Mixed emotions mediate the purchase intention and purchase preference. |
| Study 3 *(old study 4, manipulation check study)* | Test the boundary condition of social acceptability.  
- When counterfeit consumption is socially acceptable [unacceptable], social-adjustive motives have no effect on [increase] mixed emotions in counterfeit consumption. |
| Study 4 *(old study 5A, manipulation check studies)* | Provide practical implication on intervention strategy.  
- Participants are willing to pay a higher price premium for genuine over counterfeit products when an ad prompts them to imagine using a counterfeit product in public. |

1. **Demonstrating the downstream consequences of mixed emotions.** The team called for more data to support our claim that mixed emotions reduce the appeal of counterfeits. These data are now provided in two new studies (1 and 2). We agree with the review team that willingness to pay might be influenced by financial constraints (a concern raised about current study 4), so we instead measure purchase intentions in the new studies. We find that counterfeit-induced mixed emotions decrease users’ subsequent purchase intentions toward counterfeits (studies 1 and 2), and increase their preference to purchase genuine over counterfeit products (study 2).
2. **Concern on the confounding factor of a compliment.** The review team raised a concern that our scenario studies always included a compliment in the public scenario and never in the private scenario. To address this, 1) we do not include a compliment either in the public or private, counterfeit or genuine, conditions in new study 1, and 2) we include a compliment in both the counterfeit and genuine conditions in study 2. We obtain our predicted results in both studies.

3. **The nature of the manipulation in old Study 4.** In the old study 4 (new study 3), we manipulated whether participants were explicitly told that half of them would use a counterfeit product. We concur with Reviewer A that this manipulation may change the perceived social norm. We conducted a 2 (norm: acceptable, unacceptable) X 2 (product: genuine, counterfeit) manipulation check study (which is presented as a pretest of study 3). Similar to the main study, the “acceptable” [“unacceptable”] condition was explicitly told [not told] that half of them would use a counterfeit product. Since prevalence and acceptability are two dimensions of social norms (Cialdini et al. 1991), we measured both perceived prevalence and acceptability of counterfeit consumption as dependent variables. We found no difference in perceived prevalence between the norm conditions, but greater perceived acceptability in the “acceptable” (vs. unacceptable) condition. We now position this study as to test the boundary condition of social acceptability. We very much appreciate this suggestion on how to better position this study.

4. **Ad manipulation in Study 5A.** We conducted two “manipulation check” studies (presented as pretests in new study 4) based on concerns raised by the team. The first study verifies that the “social” versus the “non-social” ad indeed prompts participants to imagine public versus private counterfeit consumption. The second study verifies that the “social” ad (vs. the “non-social” ad and the “generic” ad) indeed elicits greater mixed emotions about using a counterfeit product.
Thus, the manipulation check studies confirm that the “social” ad prompts consumers to imagine counterfeit consumption in public (vs. private) and elicits greater mixed emotions as intended.

5. Emotion measures: Following the review team’s suggestion, we use the same scale to measure mixed emotions in all studies. This measure is adapted from prior research (Larsen et al. 2001; Hong and Lee 2010) and taps into the subjective experience of mixed emotions and psychological conflict. We also use the same scale to measure positive and negative emotions in both new studies.

OTHER SPECIFIC CONCERNS RAISED BY INDIVIDUAL REVIEWERS

1. Forced nature of consumption in study 4. We respectfully argue that social signaling is possible even when participants are assigned to an experimental condition rather than choosing a behavior freely. Social impression concerns can arise in laboratory settings where participants are assigned to perform a task, such as doing something embarrassing (e.g. Leary et al., 1996) or delivering a counterattitudinal speech to others (e.g. Schlenker et al., 1980). In addition, the old study 1 (now in the Introduction) was conducted on real-world counterfeit users. When asked to recall how counterfeit usage makes them feel, they too indicated feeling mixed when social signals are salient (i.e. in public). Taken together, the results suggest that consumers feel mixed whether they are assigned to use a counterfeit in the lab or freely choose to use one in daily life.

2. Products in the studies. The team raised concerns that the products used in the studies are relatively inexpensive. In the new study 2, we use Gucci wallet, a luxury brand in a commonly counterfeited category. We avoid handbags so that our results are not limited to females. To ensure generalizability, we have included a variety of brands, luxury (Gucci, Ralph Lauren), popular name brands (Abercrombie & Fitch), and a fictitious brand (Gim Max), in a variety of product categories (e.g. shirts, sunglasses) that are frequently counterfeited in the real world.
Counterfeits are products that use a brand name or logo without the owner’s authorization. In addition to being illegal, counterfeiting is morally dubious on several grounds. There is infringement of intellectual property rights and financial loss to companies, estimated to cost upwards of $1.3 billion in 2015 alone (U.S. Customs and Border Protection Office of Trade, 2016). There is a burden on government coffers – money that could be spent benefiting society that instead is spent removing counterfeits from supply chains. Then there are the ties to organized crime, money laundering, drug trafficking, and child labor (International Anti-counterfeiting Coalition, 2016). Despite efforts to educate consumers about the industry’s ugly truths, counterfeit consumption has grown to a $1.7 trillion industry, fueled in part by consumer demand for popular name brand and luxury brand counterfeits (Nia and Zaichkowsky, 2000). Curbing demand for counterfeits depends critically on understanding the psychology of these counterfeit users. To this end, research has examined several factors that drive consumers to purchase counterfeits (Phau and Teah, 2009; Wiedmann, Hennigs, and Klarmann, 2012; Wilcox, Kim, & Sen, 2009; see Eisend and Schuchert-Guler, 2006 for a review). Less is known, however, about how consumers feel when they actually use counterfeits. We posit that using a counterfeit can be an emotionally complex experience that elicits mixed emotions, that is, experiencing both positive and negative emotions. This hypothesis is important to explore because, if counterfeit users do feel mixed, not only might mixed emotions affect the appeal of counterfeits but they also might be leveraged to design interventions that curb demand for counterfeits. We thus investigate the experience of using a counterfeit and the mixed emotions this gives rise to.

Counterfeits can potentially communicate positive signals associated with the brand (e.g. signals related to status and prestige). Simultaneously, counterfeits can communicate negative signals associated with the product (e.g. signals related to deceit and unethical consumption).
Past research suggests that sending these signals to oneself temporarily affects the self-concept (Gino, Norton, and Ariely, 2010). Here, we posit that these positive and negative signals also are a key source of users’ mixed emotions, and that counterfeit users feel mixed to the extent they are concerned about sending these signals to others. In line with this view, in-depth interviews suggest that counterfeit users’ emotions depend in part on the counterfeit’s social visibility (e.g. Penz and Stöttinger, 2012). To provide additional evidence, we began our investigation by testing the possibility that counterfeit users experience different emotions in public versus private, with mixed emotions occurring more often in public settings, where social signals are more salient.

Fifty-two self-reported counterfeit users described their experiences using counterfeits in public (product categories included handbags, shirts, shoes) and private (product categories included books, DVDs, software). Two key insights emerged (see Appendix A for details). First, consistent with our prediction, counterfeit users were four times more likely to recall feeling mixed in public (16% of 44 respondents) than in private (4% of 47 respondents, t(47.66) = -1.83, p < .075). Second, counterfeit users recalled experiencing different concerns in public than in private. In public, they sought to signal status and wealth (16%) but feared judgement by others if caught (23%). In private, however, no counterfeit users sought to signal status and wealth, nor did they fear social judgement. In fact, many explicitly stated that social judgment was not a concern (26%; e.g. “It doesn’t matter at all since those things are not exposed to outsiders…”).

These findings provide preliminary evidence that mixed emotions are caused by (and thus should depend on) a counterfeit’s potential to send both positive and negative signals to others.

We test this argument and its implications in a series of laboratory studies. We demonstrate that mixed emotions are more common in public (vs. private) contexts, and
particularly common among individuals who generally are more concerned about social signals. That is, both situational and individual difference factors related to social signaling moderate counterfeit users’ mixed emotions. Furthermore, building on evidence that mixed emotions can be unpleasant (Cacioppo, Gardner, and Berntson, 1999; Hong and Lee 2010; Williams and Aaker 2002), we demonstrate how mixed emotions influence users’ purchase intentions toward counterfeit and genuine goods. Finally, we find that consumers need not physically use a counterfeit in order to feel mixed; mixed emotions are observed even among those who simply imagine using a counterfeit. We rely upon this finding to design and test an advertising intervention. We find that consumers are willing to pay a higher price premium for genuine over counterfeit products if advertising prompts them to imagine using a counterfeit in the presence of others (consistent with our view that the social signals associated with counterfeits induce mixed emotions). This finding is important because it suggests that by examining counterfeit users we can glean insights that can be applied to prompt even non-users to avoid using counterfeits.

Our research contributes to extant counterfeit research in several ways. First, we identify the emotional consequences of counterfeit consumption and demonstrate the downstream consequences of these emotions. We reveal that the very factors that drive counterfeit purchase (i.e. factors related to social signaling) can in fact give rise to mixed emotions, which may in turn deter future counterfeit consumption. Second, we show that the very consumers who tend to buy counterfeits are prone to feel mixed during use and, importantly, to become less interested in buying counterfeits in the future. Consequently, counterfeit buyers might instead demand genuine brands in the future. In this manner, counterfeit consumption may drive demand for genuine brands. Third, we suggest a novel approach to fighting counterfeit consumption. We design an intervention strategy (i.e. advertising) that is intended to elicit mixed
emotions and, in turn, reduce the appeal of counterfeit products. In sum, our research is not only theoretically relevant to the extant counterfeit literature, but also offers important practical implications for stakeholders who are interested in reducing demand for counterfeits. In addition, our research also adds to the mixed emotions literature. First, most work focuses on mixed emotions arising from important life events that evoke conflicting intrapersonal goals (e.g., graduating from college elicits conflict for personal growth vs. safety). In contrast, our research identifies a consumption episode wherein mixed emotions arise from social factors (i.e., conflict between signaling prestige and being perceived as deceitful). Even in this relatively mundane situation, mixed emotions affect subsequent behavior. In addition, past research shows negative effects on attitudes toward ads and brands that use mixed emotions appeals (Williams and Aaker, 2002; Hong and Lee, 2010). Here, we demonstrate negative effects on purchase intentions within a product category (counterfeit products) and relatively positive effects on other product categories that consumers perceive as substitutes (genuine products). Taken together, a key implication of this work is that, although counterfeit consumption is an ethical issue in many respects, we can understand and tackle consumer demand for counterfeits from a social and an emotional angle.

THEORETICAL BACKGROUND

Consumption of Counterfeit Products

Most past research focuses on the antecedents to counterfeit purchase (e.g. Eisend and Schuchert-Guler, 2006 for a review; Phau and Teah, 2009; Wiedmann et al., 2012; Wilcox et al., 2009). In addition to financial motivations (e.g. a counterfeit’s low price, a consumer’s income constraints), both moral and social antecedents have been explored. Regarding morality, there is
a strong intuition that moral concerns reduce the appeal of counterfeits; however, evidence for
this prediction is mixed. On one hand, attitudes and purchase intentions for counterfeit and
pirated goods indeed correlate negatively with consumers’ self-reported respect of laws, the
value they place on personal ethics and integrity, and their perception that counterfeiting is
unethical (Cordell, Wongtada, & Kieschnick, 1996; Ang, Cheng, Lim, & Tambyah, 2001;
Maldonado and Hume, 2005; Ha and Lennon, 2006; Shoham, Ruvio, & Davidow, 2008; Kim,
Cho, & Johnson, 2009). On the other hand, even consumers who view counterfeit consumption
as immoral can find ways to justify purchase. Specifically, consumers shift blame to the
prominence of counterfeits in the market and claim to be interested in the product but not the
brand (Bian, Wang, Smith, & Yannopoulou, 2016). They hold double standards about buying
and selling counterfeits (Cordell et al., 1996), and find counterfeit consumption particularly
justifiable when the genuine brand can be cast as socially irresponsible and not worth supporting
(Poddar, Foreman, Banerjee, & Ellen, 2012). Moreover, the type of consumers who do tend to be
swayed by moral concerns are those who tend to view brands as a way to express personal values;
however, this type of consumer tends to avoid buying counterfeits in the first place (Wilcox et al.
2009). Thus, evidence that personal morals reduce counterfeit consumption is equivocal.

Social signaling concerns, in comparison, are a key antecedent to purchasing a
counterfeit. Consumers use products and brands to signal status, affiliation, and wealth to others
(e.g. Han, Nunes, and Drèze, 2010; Nelissen and Meijers, 2011; Nunes, Dreze and Han, 2010;
Ward and Dahl, 2014), and counterfeits are regarded an inexpensive way to send these positive
social signals, which otherwise are associated only with genuine brands (Gentry, Putrevu, &
Commuri, 2001; Hoe, Hogg, & Hart, 2003; Jiang and Cova, 2012; Tang, Tian, & Zaichkowsky,
2014). Consequently, consumers who tend to signal their social status and gain social approval
with brands also tend to purchase counterfeit luxury products (Wilcox et al., 2009). These consumers regard counterfeits as an attractive substitute because they focus on a product’s physical appearance (e.g. the logo and look) more than its quality, and a counterfeit’s physical appearance resembles that of the genuine brand. We posit that these very consumers who buy counterfeits to send positive signals to others also are more prone to feel mixed when they use a counterfeit. To motivate this argument, we next discuss why counterfeits elicit mixed emotions.

**Counterfeit Consumption and Mixed Emotions**

Positive and negative emotions can co-occur because they are independent constructs (Cacioppo et al., 1999), rather than two opposite ends of a continuum (Russell, 1979). To feel mixed is to experience both positive and negative emotions at the same time, even when the positive and negative emotions may differ in intensity (Larsen and McGraw, 2011; Thompson, Zanna, and Griffin, 1995). For example, people at a wedding may feel both happy and sad, and even if the happiness outweighs the sadness, they nevertheless feel mixed. In contrast, feeling exclusively positive or negative emotions, or feeling neutral (i.e. low intensity of both positive and negative emotions), is not associated with mixed emotions (Larsen and McGraw, 2011). Mixed emotions often arise in emotionally complex situations. These include moving from home or graduating from school (Larsen, McGraw, & Cacioppo, 2001), facing disappointing gains or relieving losses (Larsen, McGraw, Mellers, & Cacioppo, 2004), or behaving impulsively (Rook, 1987) or indulgently (Ramanathan and Williams, 2007). Mixed emotions also can be induced by advertisements that use an emotional appeal (Williams and Aaker 2002; Hong and Lee 2010).

We propose that using a counterfeit can be an emotionally complex situation that elicits mixed emotions because of the conflicting signals a counterfeit can send to others. To elaborate, because counterfeits resemble their genuine counterparts, counterfeits may send positive signals
associated with a genuine brand, such as signals of one’s status and prestige. As a result, counterfeit users experience positive emotions, such as pride and happiness. At the same time, using counterfeits also bears social risks. Indeed, people hold negative attitudes toward those who use counterfeits (Gistri, Romani, Pace, Gabrielli, and Grappi, 2009; Perez, Castano, and Quintanilla, 2010). Counterfeit users thus risk sending negative social signals associated with behaving deceitfully and unethically, and, as a result, they experience negative emotions, such as nervousness, embarrassment, and fear. Collectively, then, the potential to send these positive and negative signals elicits a mixture of positive and negative emotions, respectively, and thus a subjective experience of mixed emotions among counterfeit users.

If mixed emotions arise because of these positive and negative signals, then they should depend on the salience of these signals. To test the process by which counterfeit consumption elicits mixed emotions, we thus examine two factors that should moderate the salience of such signals: consumption setting (public vs. private), and social-adjustive motives (an individual difference tendency). In addition to shedding light on the underlying process, these moderators also reveal when and for whom counterfeits elicit mixed emotions.

Public vs. private consumption setting. Public consumption is easily observed by others and thus brings to the fore social signaling concerns. For example, when dining with others, people switch away from their favorite dishes and instead sample a variety of options because they want to send favorable signals associated with variety seeking and, in turn, obtain social approval (Ratner and Kahn, 2002). Similarly, people who are alone in public avoid hedonic activities that are often enjoyed in groups (e.g. bowling, watching a movie) because they want to avoid sending an unfavorable signal that they have few friends and, in turn, receiving social judgment (Ratner and Hamilton, 2015). Thus, public consumption settings make salient the ways
that our consumption decisions might send favorable signals that garner social approval or unfavorable signals that elicit social judgment. In the context of using a counterfeit, both signals can co-occur. Thus, compared to private settings, public settings make counterfeit users feel more mixed.

**H1a**: Counterfeit users feel more mixed in public versus private settings.

*Social-adjustive motives.* Individuals differ in the extent to which they are concerned with the signals they send to others in social settings. One determinant of this individual difference is the extent to which consumers hold social-adjustive motives toward brands, which refers to a tendency to use brands to maintain social relationships, facilitate self-presentation, and gain social approval (Katz, 1960). Social-adjustive motives have been identified as an antecedent to purchasing counterfeits (Wilcox et al. 2009), which is the reason we focus our inquiry on this construct. Because social-adjustive motives attune consumers to social signals in consumption, they likewise should attune consumers to the positive and negative signals conveyed by using a counterfeit, which should, in turn, exacerbate mixed emotions.

**H1b**: In public settings, increases in counterfeit users’ social-adjustive motives are associated with increases in mixed emotions.

**Consequences of Counterfeit-induced Mixed Emotions**

Mixed emotions represent a conflict between two opposing valences (e.g. happy and sad). This conflict can produce psychological discomfort, much like the tension that arises from cognitive dissonance or attitudinal conflict (Cacioppo et al., 1999; Hong and Lee 2010; Williams and Aaker 2002), and can negatively impact attitudes toward the source of one’s mixed emotions. Thus, just as ads that evoke mixed emotions often elicit negative attitudes (Hong and Lee 2010; Williams and Aaker 2002), so too should counterfeit products. Rather than measuring attitudes
directly, we measure purchase intentions toward counterfeit and genuine brand goods. If mixed emotions render counterfeits less attractive, substitute products (i.e., genuine brand goods) should become relatively more appealing. Our reasoning is twofold. First, genuine products are less associated with mixed signals and thus mixed emotions than counterfeits. Second, consumers who use brands for social signaling purposes tend to view counterfeits and genuine brands as substitutes (Jiang and Cova, 2012; Wilcox et al., 2009). Thus, we posit that mixed emotions decrease purchase intentions toward counterfeits, increase preference to purchase genuine over counterfeit products, and increase the price premium one is willing to pay for genuine over counterfeit products.

**H2:** To the extent counterfeit users feel mixed, purchase intentions toward counterfeits decrease.

**Social Acceptability: A Boundary Condition**

Our theory and predictions are premised on the notion that counterfeits can send both positive and negative signals to others. Importantly, the capacity for a counterfeit to send negative signals presupposes that using a counterfeit is socially unacceptable. While this assertion is backed by extant literature (Gistri, Romani, Pace, Gabrielli, and Grappi, 2009; Perez, Castano, and Quintanilla, 2010), counterfeit consumption is a global trend that implicates a wide range of consumers, so it stands to reason that variation in the social acceptability of using a counterfeit will vary across contexts and over time. This variation should, according to our theory, represent an important boundary condition for our hypotheses and thus augment the conclusions we can draw from our research. It is therefore important to address how the social acceptability of counterfeit consumption moderates our findings.

Research on social norms has established that when the social acceptability of a behavior changes, so too do the social signals associated with the behavior (Cialdini, Kallgren,
and Reno, 1991; Olds, Thombs, and Tomasek, 2005). For example, the social acceptability of smoking has been declining for years, and smoking now is stigmatized and associated with more negative signals (Graham, 2012). Correspondingly, if the social acceptability of counterfeits were to increase, counterfeit users would become less concerned about sending negative signals to others – even users who are high in social-adjustive motives and who are using a counterfeit in public. The drop in concern about sending negative social signals thus should attenuate mixed emotions.

**H3:** The observed effect of counterfeit consumption on mixed emotions is mitigated if using counterfeits becomes more socially acceptable.

**Strategy for Interventions**

An additional purpose of this research is to offer practical implications for stakeholders interested in reducing demand for counterfeits. To this end, we first addressed whether consumers must actually use a counterfeit in order to experience mixed emotions, or whether merely imagining using a counterfeit could have a similar effect. Imagining an experience allows consumers to simulate actual experience and can elicit similar emotions (Dahl, Manchanda and Argo, 2001; Rotman, Lee, and Perkins, 2016). We therefore reasoned that our predictions would hold both for imagined and real counterfeit consumption. Furthermore, if imagined consumption is sufficient to elicit mixed emotions, we reasoned that an advertisement that prompts consumers to imagine using a counterfeit in public (vs. private) should elicit mixed emotions and in turn reduce the appeal of counterfeit products vis-à-vis their genuine counterparts.

**H4:** Consumers are willing to pay a higher price premium for genuine over counterfeit products when advertising prompts them to imagine using a counterfeit in public versus private.
OVERVIEW OF STUDIES

Study 1 finds that a public (vs. private) setting increases mixed emotions in counterfeit consumption (H1a). Study 2 shows that social-adjustive motives increase mixed emotions in counterfeit consumption (H1b). Both studies find that mixed emotions mediate counterfeit users’ intentions to purchase counterfeits (H2). Study 3 shows that when counterfeit consumption is socially acceptable [unacceptable], the interactive effect of counterfeit consumption and social-adjustive motives on mixed emotions is nullified [replicated], supporting a boundary effect of social acceptability (H3). In studies 1-3, in addition to examining counterfeit users we also include genuine brand users as a point of comparison, keeping with past research (e.g. Jiang and Cova, 2012; Penz and Stottinger, 2012). Consistent with our theory, none of the aforementioned effects occur for users of genuine brand products. Finally, study 4 finds that advertising that depicts counterfeit usage in a public setting can reduce the attractiveness of counterfeits (H4).

STUDY 1

Study 1 tests the hypotheses that counterfeit users feel more mixed in public versus private settings (H1a) and, to the extent counterfeit users feel mixed, their intention to purchase other counterfeit products decreases (H2). In comparison, we do not predict these effects in genuine consumption. In addition, study 1 tests whether the preliminary mixed emotions results obtained based on counterfeit users’ retrospective memory (as described in the Introduction) can be replicated for imagined consumption. Lastly, to enhance mundane realism, we used a brand that is popular among our undergraduate participants and is routinely counterfeited, namely, Abercrombie & Fitch sweaters.

Method
Participants and design. One-hundred eighty-eight undergraduate students (65% females; $M_{age} = 19.5, SD = 1.3$) participated in a 2 (product: counterfeit, genuine) by 2 (setting: public, private) between-subject study for partial course credits.

Procedure and materials. Participants imagined wearing either a counterfeit or a genuine Abercrombie & Fitch sweater, either at a picnic party or at home (Appendix B). Then they reported the extent to which they felt mixed ($\alpha = .93$), positive ($\alpha = .81$), and negative ($\alpha = .89$; Appendix C), their purchase intentions toward counterfeits ($1 = “definitely would not purchase”, 7 = “definitely would purchase”), and demographic information. We included separate measures of positive and negative emotions to more precisely delineate the emotions elicited in counterfeit and genuine consumption (e.g., we reasoned that genuine consumption elicits less mixed emotions because it associates predominantly positive emotions).

Results

Mixed emotions. We conducted a univariate analysis with product, setting, and their interaction as independent variables, and mixed emotions as a dependent variable. Results yielded main effects of product ($F(1, 184) = 3.30, p = .07$) and setting ($F(1, 184) = 16.44, p < .001$), qualified by the predicted product by setting interaction ($F(1, 184) = 11.93, p < .001$). Supporting H1a, simple effect analyses showed that public ($M = 2.74, SD = 1.04$) versus private ($M = 1.77, SD = .78$) setting increased mixed emotions for counterfeit users ($t(187) = 5.31, p < .001$; Figure 1A), but not genuine brand users ($M_{public} = 2.06, SD = .84$; $M_{private} = 1.98, SD = .89; p > .6$).

[INSERT FIGURE 1A HERE]

Positive and negative emotions. We conducted two separate univariate analyses using the same independent variables as above, and positive emotions and negative emotions as
dependent variables, respectively. Both analyses yielded significant setting by product interactions (positive emotions: $F(1, 184) = 7.96, p = .005$; negative emotions: $F(1, 184) = 36.08, p < .001$). Public genuine [counterfeit] consumption elicited the greatest positive ($M = 3.31, SD = .82$) [negative ($M = 2.96, SD = .98$)] emotions, compared to all other conditions (all $ps < .05$; Table 1). We also analyzed the data in a multivariate analysis, using valence (i.e. positive and negative emotions) as a within-subject variable, and product and setting as between-subject variables. Results yielded a significant valence by product by setting interaction ($F(1, 184) = 30.03, p < .001$). Simple effect analyses revealed that participants felt similar levels of positive ($M = 2.65, SD = .73$) and negative emotions ($M = 2.96, SD = .98$) in public counterfeit consumption ($p > .1$), but felt predominantly positive emotions in all other conditions (all $ps < .001$; Table 1).

**[INSERT TABLE 1 HERE]**

*Purchase Intentions.* To examine downstream consequences of mixed emotions, we first regressed purchase intentions on product, setting, and their interaction. Results yielded a nonsignificant interaction ($F(1,184) < 1$), but the simple effects revealed that public (vs. private) counterfeit consumption reduced purchase intentions ($M_{public} = 3.11, SD = 1.70; M_{private} = 3.77, SD = 1.63; p = .05$), whereas public and private genuine consumption did not differ ($M_{public} = 3.13, SD = 1.64; M_{private} = 3.40, SD = 1.58; p > .4$). More importantly, a moderated mediation analysis found a significant indirect effect of mixed emotions on purchase intentions ($95\% CI = -.3682, -.0426$, bootstrap sample = 5000; PROCESS model 7, Hayes 2013), consistent with “indirect only mediation” (Zhao, Lynch, and Chen, 2010). Specifically, mixed emotions mediated the negative effect of public versus private setting on intentions to purchase counterfeits only in the counterfeit condition ($95\% CI = -.2843, -.0311$), and not in the genuine
brand condition (95% CI = -.0146, .1338). Thus, as predicted, the mixed emotions elicited in counterfeit consumption in turn reduced counterfeit users’ subsequent intentions to purchase other counterfeit products.

[INSERT FIGURE 1B HERE]

**Discussion**

Supporting H1a and H2, study 1 finds that consumers feel more mixed when they are prompted to imagine using a counterfeit product in public versus private, which, in turn, reduces the attractiveness of subsequent counterfeit consumption. These effects do not occur in genuine consumption. Of greatest importance to our theorizing are the effects obtained in the public counterfeit consumption cell. The finding that counterfeit users feel more mixed when social signals are salient and visible (i.e., in public) supports the view that mixed emotions stem from the signals being communicated to others. We also obtained clear evidence of emotional conflict: separate measures revealed that positive and negative emotions were experienced at similarly high levels among these consumers. In comparison to public counterfeit consumption, private consumption and genuine consumption elicited less mixed emotions and, instead, elicited predominately positive emotions. Building on study 1’s findings, study 2 tests the role of social-adjustive motives as a second moderator to mixed emotions (H1b).

**STUDY 2**

Study 2 tests the prediction that, in public settings, increases in counterfeit users’ social-adjustive motives are associated with increases in mixed emotions (H1b). We again assess consequences on purchase intentions, and expand our scope to include both counterfeit and genuine brands (H2). We predict that, in addition to reducing consumers’ *absolute* purchase
intentions toward counterfeits, mixed emotions also should increase consumers’ relative purchase intentions toward genuine, over counterfeit, products. The same predictions should not hold for users of genuine brand products. Lastly, to ensure the generalizability of our results across brands and product categories, we used a commonly counterfeited luxury brand (i.e., Gucci) and a different (but also gender-neutral) product category (i.e., wallets).

**Method**

*Participants and design.* One-hundred thirty (43% female) MTurk participants completed a 2 (product: counterfeit, genuine) by social-adjustive motives between-subjects study in exchange for a monetary incentive. Product was manipulated and social-adjustive motives were measured. In this and all other Mturk studies, we excluded participants whose study completion time was outside three standard deviations from the mean.

*Procedure and materials.* Participants imagined using a counterfeit (vs. genuine) Gucci wallet in a supermarket and receiving a compliment (Appendix B). They reported mixed emotions \(\alpha = .95\), positive emotions \(\alpha = .92\), and negative emotions \(\alpha = .88\); Appendix C). To avoid the possibility that measuring participants’ emotional responses immediately before measuring purchase intentions may make emotions salient and create demand effect, we included a short verbal filler task in between. Participants then reported purchase intentions toward counterfeit and genuine products (1 = “definitely would not purchase”, 7 = “definitely would purchase”), the Social-adjustive Function Scale as a measure of social-adjustive motives \(\alpha = .89\); Wilcox et al., 2009; Appendix D), and demographic information.

**Results**

*Mixed emotions.* Product condition had no effect on social-adjustive motives \(F(1,128) = 2.26, p > .13\). Thus, we regressed mixed emotions on product, social-adjustive motives
(standardized), and their interaction ($R^2 = .11$). Results revealed a main effect of product (counterfeit = 1, genuine = -1, $\beta = .32$, $t(126) = 3.23$, $p = .002$) qualified by the two-way interaction ($\beta = .21$, $t(126) = 3.07$, $p = .04$). As predicted, social-adjustive motives increased mixed emotions in the counterfeit condition ($\beta = .29$, $t(126) = 2.17$, $p = .03$), but did not influence mixed emotions in the genuine condition ($\beta = -.12$, $t(126) = -.83$, $p > .4$; Figure 2).

Analyzed differently, counterfeit (vs. genuine) consumption elicited greater mixed emotions among high social-adjustive participants (1 S.D. above the mean; $M_{\text{counterfeit}} = 2.96$, $M_{\text{genuine}} = 1.92$, $p < .001$), who are chronically more concerned about the signals they send to others. In contrast, counterfeit (vs. genuine) consumption had no effect on low social-adjustive participants (1 S.D. below the mean; low social-adjustive: $M_{\text{counterfeit}} = 2.39$, $M_{\text{genuine}} = 2.17$, $p > .4$; Figure 2).

**Positive and negative emotions.** In two separate analyses, we regressed positive and negative emotions, respectively, on product, social-adjustive motives (standardized), and their interaction. Both regressions yielded significant product by social-adjustive interactions (positive emotions: $\beta = -.30$, $t(126) = -2.96$, $p = .004$; negative emotions: $\beta = .32$, $t(126) = 3.54$, $p = .001$; Table 2). Simple effect analyses showed that social-adjustive motives increased positive emotions for genuine ($\beta = .64$, $t(129) = 4.17$, $p < .001$) but not counterfeit ($\beta = .03$, $t(129) = .21$, $p > .8$) consumption; whereas it increased negative emotions for counterfeit ($\beta = .51$, $t(129) = 4.18$, $p < .001$), but not genuine ($\beta = -.13$, $t(129) = -.99$, $p > .3$) consumption. These results suggest that social-adjustive motives may amplify the effects of positive signals in genuine consumption and negative signals in counterfeit consumption.

[INSERT TABLE 2 HERE]
Purchase intentions toward counterfeit products. First, we regressed purchase intentions toward counterfeit products (referred to as “PIC” hereafter) on product, social-adjustive motives (standardized), and their interaction ($R^2 = .31$). The results yielded a product by social-adjustive motives interaction ($\beta = -.47$, $t(126) = -2.66$, $p = .009$), and a main effect of product (counterfeit = 1, genuine = -1, $\beta = .41$, $t(126) = 2.33$, $p = .02$) qualified by the interaction (Figure 1B). Simple effect analyses showed that social-adjustive motives decreased PIC in the counterfeit condition ($\beta = -.52$, $t(129) = -2.18$, $p = .02$), and directionally increased PIC in the genuine condition ($\beta = .43$, $t(129) = 1.61$, $p = .11$). Moreover, we tested the moderated mediation effect of mixed emotions on PIC (PROCESS model 8, Hayes 2013) and found a significant result (95% CI = -.5522, -.0424, bootstrap sample = 500). Mixed emotions mediated the effect of social-adjustive motives on PIC in counterfeit consumption (95% CI = -.3551, -.0494), but not in genuine consumption (95% CI = -.0870, .2920).

Purchase intentions toward genuine products. We next regressed purchase intentions toward genuine products (referred to as “PIG” hereafter) on product, social-adjustive motives (standardized), and their interaction ($R^2 = .42$). We found no interaction ($p > .8$), but significant main effects of product (counterfeit = 1, genuine = -1, $\beta = -.51$, $t(126) = -3.64$, $p < .001$) and social-adjustive motives ($\beta = 1.15$, $t(126) = 8.16$, $p < .001$; Figure 3B).

Preference for purchasing genuine over counterfeit products. Finally, we computed a measure for the relative preference for purchasing genuine over counterfeit products (referred to as “PID” hereafter) by subtracting PIG by PIC (i.e. PID = PIG – PIC). We regressed PID on product, social-adjustive motives (standardized), and their interaction ($R^2 = .56$). Results yielded a marginal interaction ($\beta = .43$, $t(126) = 1.91$, $p = .058$), and significant main effects of product (counterfeit = 1, genuine = -1, $\beta = -.92$, $t(126) = -4.10$, $p < .001$) and social-adjustive motives ($\beta =$
1.20, \( t(126) = 5.28, p < .001 \) qualified by the interaction (Figure 3C). Simple effect analyses revealed that social-adjustive motives increased PID in both counterfeit (\( \beta = 1.48, t(129) = 4.89, p < .001 \)) and genuine (\( \beta = .83, t(129) = 2.51, p = .014 \)) condition, but the effect was stronger in the counterfeit condition. More importantly, we found a moderated mediation effect of mixed emotions on PID (95% CI = .0303, .5763, bootstrap sample = 500). Mixed emotions mediated the positive effect of social-adjustive motives on PID in the counterfeit condition (95% CI = .0321, .3672), but did not mediate that in the genuine condition (95% CI = -.3117, .0635).

**Discussion**

As predicted by H1b, social-adjustive motives, which influence the extent to which consumers are concerned about the social signals they send out, increase mixed emotions in counterfeit (but not genuine) consumption. These mixed emotions in turn *decrease* purchase intentions toward counterfeits, and *increase* preference for purchasing genuine over counterfeit products, supporting H2. These findings are important in the light of prior research that shows social-adjustive motives drive counterfeit purchase (Wilcox et al. 2009). Consistent with Wilcox et al. (2009), we find that social-adjustive motives *increase* purchase intention toward counterfeit products, but only among genuine users. In contrast, among counterfeit users, social-adjustive motives *decrease* purchase intention toward counterfeit products after counterfeit users experience the mixed emotions elicited in counterfeit consumption. Thus, the very motives that drive consumers to purchase counterfeits in the first place in fact increase mixed emotions in counterfeit consumption, and reduce subsequent purchase intention. Moreover, these mixed emotions increase counterfeit users’ relative preference for genuine over counterfeit products, driving them away from counterfeit products and toward genuine products. In the next study, we
test the potential boundary condition – social acceptability – for the effects we have observed on mixed emotions.

STUDY 3

Study 3 tests the boundary effect of social acceptability – we predict that the observed effect of counterfeit consumption on mixed emotions is mitigated if using counterfeits becomes more socially acceptable (H3). In addition, we have observed mixed emotions among consumers who imagine using a counterfeit in the previous studies. The results suggest that a consumer need not be using a counterfeit in the moment in order to feel mixed about use. In this study, we demonstrate that mixed emotions do occur during actual use. Thus, study 3 tests H3 among consumers who are in the act of using counterfeit or genuine products.

Method

Participants and design. Two hundred thirty-seven undergraduate students participated in the main study for partial course credits. Due to logistic constraint of the university subject pool policy, nine students had participated in one of the related studies that are not reported here, and were excluded from the data analyses. Thus, we included data from 228 participants (54.4% female; $M_{age} = 20.3, \ SD = 1.29$) in the analyses. We employed a 2 (norm: acceptable, unacceptable) by 2 (product: genuine vs. counterfeit) by social-adjustive motives mixed factorial design. Norm and product were manipulated as between-subject variables, and social-adjustive motives (Wilcoxon et al., 2009) were measured as an individual difference variable.

Procedure and materials. Students participated in sessions of 6 to 10 people. They sat at individual computer cubicles and a bag containing a pair of sunglasses was placed on each desk (see Appendix E). We manipulated the social acceptability of counterfeit consumption by having
the experimenter explicitly “approving” counterfeit consumption in the laboratory (also see Blanchard, Crandall, Brigham, and Vaughn, 1994; Crandall, Eshleman, and O’Brien, 2002 for social norms manipulation). Specifically, in the [unacceptable] acceptable norm condition, an experimenter who was blind to the hypothesis [did not] explicitly indicated that half of the participants would wear counterfeit (vs. genuine) sunglasses (see Appendix E). After that, all participants put on the sunglasses and turned to their computer monitors for further instruction. Depending on the product condition, they read that they were wearing a pair of genuine or counterfeit sunglasses for a (fictitious) eyewear brand, Gim Max. In the “acceptable” condition, students on the left (vs. right) of the room were assigned to the genuine (vs. counterfeit) product condition. In the “unacceptable” condition, participants were randomly assigned to either condition without having others’ knowing. All participants wore the sunglasses for 1.5 minutes to “experience wearing the (counterfeit) Gim Max sunglasses”, until the computer screen automatically advanced. Participants then removed the sunglasses and reported the extent to which they experienced mixed emotions (α = .86 see Appendix C). Then they completed demographic information and the Social-adjustive Function Scale (α = .87, Wilcox et al., 2009; Appendix D).

Pretest

We pretested the manipulation of social acceptability with a separate sample of 128 undergraduate students using a 2 (norm: acceptable, unacceptable) by 2 (product: genuine vs. counterfeit) design (Appendix F). The “acceptable” [“unacceptable”] condition read [did not read] that half of the participants would evaluate a pair of counterfeit (vs. genuine) sunglasses. Then they saw a photo of either the counterfeit or the genuine sunglasses, and were told that the experimenter would distribute the sunglasses for them to wear shortly. Meanwhile, they
estimated the percentage of people who would wear counterfeit sunglasses in the room (as a measure of prevalence), their certainty of the estimation (1 = not at all, 7 = very much), and the extent to which wearing counterfeits was acceptable in the present situation (1 = not at all, 7 = very much). We measured both perceived prevalence and acceptability, because they were two components of social norms (Cialdini et al., 1991) and both might influence the social signals associated with counterfeit consumption. Participants did not in fact wear the sunglasses, ostensibly due to time limit, but instead completed demographic information. We regressed prevalence, certainty, and acceptability, respectively, on norm, product, and their interaction. There was no significant norm by product interaction on any of the dependent variables (all ps > .05). The two norm conditions did not differ in the estimated prevalence of counterfeit use ($M_{\text{acceptable}} = 48\%, \ SD = .16, \ M_{\text{unacceptable}} = 50\%, \ SD = .21, \ F(1,126) < 1, \ p > .6$), though the “acceptable” condition ($M = 4.23, \ SD = 1.97$) versus the “unacceptable” condition ($M = 3.06, \ SD = 1.51$) was more certain about the estimation ($F(1,126) = 14.29, \ p < .001$). Importantly, the “acceptable” condition ($M = 4.34, \ SD = 1.65$) versus the “unacceptable” condition ($M = 3.59, \ SD = 1.716$) found it more acceptable to wear counterfeits in the situation ($F(1,126) = 6.37, \ p = .013$). Thus, the manipulation successfully changed the perceived acceptability of wearing counterfeit sunglasses in the situation.

**Results**

Neither the norm condition ($F(1,226) < 1, \ p > .4$) nor the product condition ($F(1,226) < 1, \ p > .8$) had an effect on social-adjustive motives. Thus, we regressed mixed emotions on norm, product, social-adjustive motives (standardized), and all possible interactions ($R^2 = .069$). Results yielded a norm by product by social-adjustive motives three-way interaction ($\beta = -.35, \ t(220) = -2.83, \ p = .005$), and, qualified by the three-way interaction, a product by social-adjustive motives
two-way interaction ($\beta = .25$, $t(220) = 2.98$, $p = .003$) and a norm main effect ($\beta = -.25$, $t(220) = -2.07$, $p = .04$). Supporting H3, simple interaction analyses yielded a product by social-adjustive motives two-way interaction in the “unacceptable” condition ($\beta = .25$, $t(220) = 2.97$, $p < .004$), replicating the results in study 2, but no interaction in the “acceptable” condition ($\beta = -.10$, $t(220) = -1.07$, $p > .25$).

Within the unacceptable condition, social-adjustive motives increased mixed emotions among counterfeit users ($\beta = .29$, $t(220) = 2.42$, $p < .02$), paralleled study 2. Social-adjustive motives directionally decreased mixed emotions in the genuine condition ($\beta = -.22$, $t(220) = -1.80$, $p = .07$; Figure 4A). We did not predict or observe this effect in the previous study, but we conjectured that since social-adjustive motives increased positive emotions in genuine consumption (as observed in Study 2), an increase in purely positive emotions can reduce mixed emotions. Analyzing the data differently, counterfeit (vs. genuine) consumption elicited mixed feelings among high (1 S.D. above the mean, $M_{\text{counterfeit}} = 2.90$, $M_{\text{genuine}} = 2.23$, $p < .01$) but not low (1 S.D. below the mean, $M_{\text{counterfeit}} = 2.33$, $M_{\text{genuine}} = 2.67$, $p > .1$) social-adjustive participants, again replicating study 2.

Within the acceptable condition, we found no effect of social-adjustive motives in either the counterfeit ($\beta = -.13$, $t(220) = -.94$, $p > .3$) or the genuine condition ($\beta = .06$, $t(220) = .55$, $p > .5$). Moreover, counterfeit (vs. genuine) consumption did not elicit greater mixed emotions among either high (1 S.D. above the mean, $M_{\text{counterfeit}} = 2.26$, $M_{\text{genuine}} = 2.24$, $p > .9$) or low (1 S.D. below the mean, $M_{\text{counterfeit}} = 2.51$, $M_{\text{genuine}} = 2.11$, $p > .1$) social-adjustive participants (Figure 4B).

[INSERT FIGURE 4A and 4B HERE]

Discussion
Consistent with H3, social acceptability provides a boundary condition for the effect of counterfeit consumption on mixed emotions. When counterfeit consumption is unacceptable, social-adjustive motives increase mixed emotions in counterfeit consumption, as predicted in H1b and found in study 2. These results also show that to the extent counterfeit consumption is socially unacceptable, the effect of counterfeit consumption on mixed emotions pertains to not only imagined consumption, but also actual consumption. However, when counterfeit consumption is acceptable, counterfeit users no longer feel mixed regardless of the extent of their social-adjustive motives. Social acceptability of counterfeit consumption should take away the taboo attached to using a counterfeit product. It might regard counterfeit products as commodities and nullify both the positive and negative signals a counterfeit can send out, in which case counterfeit users should feel neutral. Or it might regard counterfeit products as similar to genuine products and associate with only positive signals, in which case counterfeit users should feel predominately positive. In either case, the social acceptability reduces the mixed emotions in counterfeit consumption. The findings of this study have real-world implications: in societies where counterfeit consumption is highly acceptable, counterfeit consumption should elicit less mixed emotions.

STUDY 4

The purpose of study 4 is twofold. First, it tests H4, which posits that consumers are willing to pay a higher price premium for genuine over counterfeit products when advertising prompts them to imagine using a counterfeit in public versus private. This prediction is based on previous studies showing that counterfeit users feel more mixed in public versus private (study 1), and mixed emotions reduce counterfeit users purchase intention toward counterfeit products.
(studies 1 and 2) and increase their relative preference for purchasing genuine over counterfeit products (study 2). We designed an advertisement depicting public counterfeit consumption, one depicting private counterfeit consumption, and a one intended only to raise awareness of counterfeiting (to use in a control condition). The control ad is intended to establish that any difference in price premiums between the public and private ad conditions is based on an increase for the public ad rather than a decrease for the private ad. The second purpose of study 4 is more practical than theoretical. H4 predicts that public ads are more effective relative to private and generic ads. This hypothesis does not address whether each of these three ads has an absolute effect in its own right. To address this, we manipulated whether participants reported their willingness to pay for counterfeit and genuine products either before or after viewing one of the three anti-counterfeiting ads. This manipulation allows us to assess the effect of each intervention on consumers’ price premiums.

Before developing our ads, we researched existing campaigns online. A research assistant, blind to the nature of our investigation, conducted a Google image search using the keyword “anti-counterfeit campaigns.” Of the first 200 images that appeared, 133 were unique images that were coded into one of six categories. The majority of the images focused on increasing awareness of counterfeiting (38%) and teaching consumers how to identify counterfeits (32%) – strategies that presuppose consumers purchase counterfeits unintentionally. These strategies may not reduce demand for counterfeits of popular name brands or luxury brands because many consumers are not being duped into purchasing these counterfeits; rather, they do so intentionally. Among the remaining campaigns, which did tend to target consumers who intentionally purchase counterfeits, 14% emphasized safety, 2% emphasized legality (applicable where purchasing counterfeits is illegal), and 9% emphasized morality. Only 4%
depicted a message or image intended to evoke social signaling concerns. This analysis reveals a paucity of current campaigns that incorporate social signals in their intervention messages. Findings in the previous studies suggest that bringing salient the social signals associated with a counterfeit can reduce the appeal of counterfeits.

**Method**

*Participants and design.* Two hundred seventy-three Mturk participants participated for a monetary reward. Because we conducted multiple studies for this project in the same week, we asked participants “Have you participated in similar studies about counterfeit products before?”, and excluded 46 participants who reported “yes” from the analyses. The study has a 2 (order: ad-first vs. WTP-first) by 3 (ad: social, non-social, generic) by 2 (purchase type: counterfeit, genuine) mixed-design. Both “order” and “ad” are between-subject, and “purchase type” is within-subject.

Participants in the “ad-first” (vs. “WTP-first”) condition see an intervention ad before (vs. after) reporting their WTP for a counterfeit and a genuine product. In other words, the “WTP-first” condition is a control condition, showing consumers’ general WTP for counterfeit and genuine products without any intervention. We calculated price premium for genuine over counterfeit goods by subtracting participants’ WTP for a genuine good by their WTP for a counterfeit good. Participants were also randomly assigned to one of the three ad conditions: social ad, non-social ad, and generic ad. The social ad prompts consumers to imagine how they feel when using a counterfeit in public. This ad taps into the strategy of our key interest – making salient that using a counterfeit can send social signals to others. The non-social ad prompts consumers to imagine how they feel when using a counterfeit in private. This ad was included to test our key prediction that prompting consumers to imagine public (vs. private) counterfeit
consumption may reduce the appeals of counterfeits. Finally, a generic ad was adopted from a real-world anti-counterfeit campaign (International Trademark Association, 2012), and it depicts a logo, which has the word “UNREAL”. This ad was included because it represents the most common type of anti-counterfeit campaigns, namely, awareness promotion, based on our Google image research. All three ads were pre-tested by a separate sample ($N = 94$) and showed no difference in liking ($F(2, 91) = .16, p > .8$) or professional appearance ($F(2, 91) = 1.05, p > .3$; see Appendix G for the ads).

Procedure and materials. Participants in the “ad-first” condition were randomly assigned to see one of the social, non-social, or generic ads. The ad appeared on the screen for five seconds. Then participants imagined having a chance to purchase a counterfeit Ralph Lauren polo shirt and reported their WTPs for both a counterfeit and a genuine Ralph Lauren polo shirt, respectively. Participants in the “WTP-first” condition first reported their WTPs and then saw one of the ads. We collected demographic information at the end of the study. We explicitly told participants that counterfeit products cost significantly less than genuine products, and thus excluded participants who reported a greater WTP for a counterfeit than a genuine shirt from analyses, because it was unclear whether they understood our definition of a counterfeit. We included data from 215 participants (41% females; $M_{age} = 33.53, SD = 9.65$) in the analyses.

Pretests

We conducted a pretest to validate that the “social” (vs. “non-social”) ad indeed prompted participants to imagine public versus private counterfeit consumption (Appendix H). One-hundred and sixty-two participants (51% females; $M_{age} = 36, SD = 11.9$) read either the “social” or the “non-social” ad, then indicated the setting in which they imagined themselves using a counterfeit (1 = private, 100 = public). The social ad condition ($M = 68.27, SD = 26.12$)
reported imagining using a counterfeit in a more public setting than the non-social ad condition 
\( (M = 53.40, SD = 37.59; F(1, 160) = 8.07, p = .005) \). In addition, we conducted a second pretest to validate that the “social ad” (vs. the other ads) indeed elicited greater mixed emotions (Appendix H). Seventy-eight participants (64% females; \( M_{\text{age}} = 19.6, SD = 1.4 \)) read all three ads and indicated which ad made them feel mixed about using a counterfeit. Results showed that 63% participants chose the social ad, significantly higher than those who chose the non-social (13%) or the generic ad (24%, \( Chi^2 (2) = 32.08, p < .001 \)). Results of the two pretests supported our expectation that the social ad prompted consumers to imagine public (vs. private) counterfeit consumption, and it elicited greater mixed emotions, compared to the other ads.

**Results**

The price premium was log transformed due to its high skewness (\( Skewness = 4.25, S.E. = .17 \)). A univariate analysis using order, ad, and their interaction as independent variables, and logged price premium score as dependent variable yielded a significant two-way interaction (\( F(2, 209) = 3.21, p = .042 \)). Price premium did not differ by ad condition within the “WTP-first” order condition (all \( ps > .14 \)), and thus we combined data in the “WTP-first” condition to create a control condition. Planned comparisons revealed that participants were willing to pay a higher price premium after seeing the social ad (\( M_{\text{logged}} = 3.30, SD = .86 \)) compared to the control condition (\( M_{\text{logged}} = 2.87, SD = 1.08, t(209) = 2.24, p = .026 \)). But the price premium did not differ between the control condition and either the non-social ad (\( M_{\text{logged}} = 2.82, SD = .96, t(209) = -.08, p > .9 \)) or the generic ad (\( M_{\text{logged}} = 2.75, SD = 1.05, t(209) = -.45, p > .6 \)). In other words, compared to no intervention, only the social ad increased interests in a genuine over a counterfeit product. In fact, the social ad was significantly more effective when compared to either of those ads. Contrast analyses showed that the price premium in the social ad condition was also higher
than the non-social ad ($t(209) = 1.92, p < .06$) and the generic ad ($t(209) = 2.21, p < .03$) conditions, whereas the latter two conditions did not differ ($t(209) = .30, p > .7$; Figure 5). No significant order by ad interaction was found for the absolute WTPs for genuine or counterfeit product ($p_s > .1$). However, the social ad (vs. all the other conditions) directionally increases consumers’ absolute WTP for the genuine good and decreases their absolute WTP for the counterfeit good (Table 3).

[INSERT TABLE 3 HERE]

[INSERT FIGURE 5 HERE]

Discussion

Consistent with H4, an ad that prompts consumers to imagine publically using a counterfeit (vs. other ads and vs. no ad) increases the premium consumers are willing to pay for a genuine over a counterfeit product. In contrast, ads that either prompt consumers to imagine privately using a counterfeit or promote awareness of counterfeiting do not affect price premiums (vs. no ad). These results suggest that making salient concerns related to social signaling is an effective strategy for moving consumers away from counterfeit products.

GENERAL DISCUSSION

Our research builds on the literature on counterfeit consumption in several important ways. First, we explore counterfeit consumption using a mixed emotions framework. We find that consumers feel mixed when using counterfeits. Second, we argue that this effect occurs because using a counterfeit can potentially send out positive and negative signals to others. We test this process using two moderators: public vs. private settings, and social-adjustive motives. We find that consumers experience greater mixed emotions when they use a counterfeit product in
public (vs. private), where the social signals are visible and salient. Moreover, in a social context, consumers’ social-adjustive motives – an individual factor that influences the extent to which consumers are concerned about social signaling – increases the mixed emotions they experience in counterfeit consumption. These findings support the notion that using a counterfeit product elicits mixed emotions because of the positive and negative social signals it can potentially send out. Third, we identify an important boundary condition for the effect of counterfeit consumption on mixed emotions, namely, social acceptability. When social acceptability of counterfeit consumption is high, it takes away the social taboo attached to using a counterfeit. Thus, using a counterfeit product should send out less negative signals, and might send out either purely positive social signals or little social signals at all. In either case, counterfeit consumption elicits less mixed emotions. This boundary condition provides an important implication that in societies where counterfeit products are highly acceptable, the effect of counterfeit consumption on mixed emotions and the downstream consequences should be weakened. Fourth, we demonstrate the downstream consequence of mixed emotions on consumers’ subsequent demand for counterfeit and genuine good products. Mixed emotions create an aversive psychological conflict that people seek to avoid (Cacioppo et al., 1999; Hong and Lee 2010; Williams and Aaker 2002). Thus, driven by the mixed emotions elicited in counterfeit consumption, counterfeit users subsequently have lower purchase intentions toward counterfeit products, and greater relative purchase intentions toward genuine than counterfeit products. Finally, we leverage the above insights to design advertisements that intended to elicit mixed emotions, and in turn, reduce the appeal of counterfeit relative to genuine brand products. We find that, after seeing an advertisement that prompts imagination of public counterfeit consumption, consumers are willing to pay a higher price premium for a genuine over a counterfeit product. Across our
studies, we observe mixed emotions in both imagined and actual counterfeit consumption. Moreover, counterfeit users also reported feeling mixed based on their retrospective memories of using counterfeits (as discussed in the Introduction). Thus, over time, consumers do in fact remember the mixed emotions in their counterfeit consumption experiences.

Taken together, the findings of the current research suggest although counterfeit consumption is an ethical problem, to tackle counterfeit consumption entails strategies that bring salient the mixed social signals associated with a counterfeit product. Given the unethical nature of counterfeit consumption, we conducted two additional studies to explore how consumers’ moral beliefs toward counterfeit consumption may influence their emotions in counterfeit (vs. genuine) consumption (details in Appendix I). In both studies, we also included a control condition, where participants in one study imagined a daily social interaction, and in the other study imagined a non-brand consumption. We measured participants’ individual difference in moral beliefs about counterfeit consumption (adopted from Wilcox et al. 2009, $\alpha > .85$). In both studies, we found that counterfeit consumption elicited greater mixed emotions than genuine consumption and the control scenario. However, this effect was not moderated by moral beliefs about counterfeit consumption (detailed results see Appendix I). Thus, the effect of moral beliefs on the mixed emotions elicited in counterfeit consumption is at the least inconclusive.

**Limitations and Future Directions**

In the current research, we focus on understanding consumers’ experience of using a counterfeit product. Yet, consumer’s experience of purchasing a counterfeit product is also of importance. Consumers’ experience of using versus purchasing a counterfeit product may differ. This difference may be due to several factors. Namely, at the time of purchase, consumers tend to focus on product desirability and not the context in which they will use the product (Hamilton
and Thompson, 2007; Trope and Liberman, 2010). Consumers also might focus more on product features during purchase but shift focus to their own subjective experience during use, which could heighten public and private self-consciousness, sensitivity to social evaluation, and self-presentation concerns (Fenigstein, Scheier, & Buss, 1975). Moreover, consumers tend to buy counterfeit products in situations outside of everyday life (e.g. holidays, international travels; Penz and Stottinger, 2012). They may also report their purchase intention toward counterfeit products in private settings such as in research interviews or anonymous surveys. Thus, when purchasing or reporting purchase intention, consumers may not transport themselves to the social and interpersonal situations in which they are likely to use the counterfeit products. Future research should examine the potential discrepancy between consumers’ experience of using versus buying counterfeit products.

Many consumers purchase counterfeit products with a motive to facilitate social affiliation and gain social approval (Wilcox et al. 2009). However, our research shows that this very social signaling motive can increase the mixed emotions elicited in counterfeit use, and influence subsequent purchase intentions (study 2). An implication of this finding is that consumers who hold such a signaling motive (i.e. social-adjustive consumers) might be less likely to repeat counterfeit purchase in the future. Future research should track counterfeit users’ longitudinal purchase patterns, and explore the effect of past consumption on repeated purchase behaviors. It is possible that social-adjustive consumers, who are more prone to purchase counterfeits in the first place, also have a more rapid decrease in repeated purchases over time, because they are more likely to feel mixed every time they use a counterfeit. This may further lead to a faster switch behavior from purchasing counterfeit to genuine products among the
social-adjustive consumers, a notion that is consistent with prior research that suggests that counterfeit products can have a positive influence on the sales of genuine brands (Qian, 2014).

Finally, price and product quality are other important factors associated with counterfeit products. In the present research, we do not examine the role of price and product quality in feelings in counterfeit consumption. Instead, we define counterfeit products as fake replicas that cost significantly less than the genuine ones without specifying the prices, and we control the effect of product quality by using the exact same products (unknown to participants) across counterfeit and genuine conditions in our real product study (Study 3). Low price is arguably the most crucial benefit offered by counterfeit products. Poor quality of counterfeits may cause frustration or regret in counterfeit consumption (Penz and Stottinger, 2012). But the quality of counterfeit products has been significantly improved (Stottinger and Penz, 2015). Thus, future research should examine the roles of price and quality in counterfeit consumption.

In conclusion, the current research enhances understanding of how consumers feel in counterfeit consumption. Consumers feel mixed in counterfeit consumption due to the combination of positive and negative social signals associated with the counterfeit product. These mixed emotions in turn reduce counterfeit users’ purchase intentions toward counterfeit products. Leveraging consumers’ experience in counterfeit consumption, we suggest and show evidence that intervention strategies can effectively curb counterfeit demand by prompting consumers to imagine public counterfeit consumption, where social signals are salient. Findings from our research thus contribute to the global fight against counterfeiting and can potentially increase consumer welfare by understanding their counterfeit consumption experience.
References


Table 1
Results of positive and negative emotions in study 1.

<table>
<thead>
<tr>
<th></th>
<th>Negative Emotions</th>
<th>Positive Emotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>genuine private</td>
<td>1.62$^b$ (0.76)</td>
<td>2.72$^d$ (0.93)</td>
</tr>
<tr>
<td>genuine public</td>
<td>1.93$^b$ (0.75)</td>
<td>3.31$^c$ (0.82)</td>
</tr>
<tr>
<td>counterfeit private</td>
<td>1.46$^c$ (0.66)</td>
<td>2.79$^d$ (1.04)</td>
</tr>
<tr>
<td>counterfeit public</td>
<td>2.96$^a$ (0.98)</td>
<td>2.65$^{ad}$ (0.73)</td>
</tr>
</tbody>
</table>

Note: the cells that do not share a letter superscript are significantly different from each other at $p = 0.05$ level.

Table 2
Results of positive and negative emotions in study 2.

<table>
<thead>
<tr>
<th></th>
<th>Negative Emotions</th>
<th>Positive Emotions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low social-adjustive</td>
<td>1.86</td>
</tr>
<tr>
<td></td>
<td>High social-adjustive</td>
<td>1.59</td>
</tr>
<tr>
<td>Slope of social-adjustive</td>
<td>$\beta = -.13, n.s.$</td>
<td>$\beta = .64, p &lt; .001$</td>
</tr>
<tr>
<td></td>
<td>Low social-adjustive</td>
<td>1.94</td>
</tr>
<tr>
<td></td>
<td>High social-adjustive</td>
<td>2.95</td>
</tr>
<tr>
<td>Slope of social-adjustive</td>
<td>$\beta = .51, p &lt; .001$</td>
<td>$\beta = .03, n.s.$</td>
</tr>
</tbody>
</table>

Table 3
“Price premium” and WTPs of counterfeit and genuine polo shirt (raw means).

<table>
<thead>
<tr>
<th></th>
<th>“Ad-first”</th>
<th>“WTP-first”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social $M$ (SD)</td>
<td>Non-social $M$ (SD)</td>
</tr>
<tr>
<td>$WTP$ for a Genuine Polo Shirt</td>
<td>45.12 (29.21)</td>
<td>34.76 (18.77)</td>
</tr>
<tr>
<td>$WTP$ for a Counterfeit Polo Shirt</td>
<td>10.45 (8.81)</td>
<td>12.8 (9.61)</td>
</tr>
</tbody>
</table>

Note: raw means are reported in the table, but analyses were conducted based on log-transformed data.
Figure 1A: Results on mixed emotions in study 1.

Figure 1B: Results on purchase intentions toward counterfeits in study 1.

Figure 2: Results on mixed emotions in study 2.

Figure 3A, 3B, and 3C: Results on purchase intentions toward counterfeits (PIC), purchase intentions toward genuine products (PIG), and their difference (PID) in study 2.

Figure 4A and 4B: Results on mixed emotions in the “unacceptable” and the “acceptable” conditions in study 3.

Figure 5: Results on price premium in study 4.
Figure 1A

<table>
<thead>
<tr>
<th>Mixed emotions</th>
<th>genuine</th>
<th>counterfeit</th>
</tr>
</thead>
<tbody>
<tr>
<td>private</td>
<td>1.98</td>
<td>2.74</td>
</tr>
<tr>
<td>public</td>
<td>2.06</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Figure 1B

<table>
<thead>
<tr>
<th>Purchase intentions toward counterfeits</th>
<th>genuine</th>
<th>counterfeit</th>
</tr>
</thead>
<tbody>
<tr>
<td>private</td>
<td>3.40</td>
<td>n.s.</td>
</tr>
<tr>
<td>public</td>
<td>3.11</td>
<td>3.77</td>
</tr>
</tbody>
</table>

\[ p < .001 \]

\[ p = .05 \]

p = .05
Figure 2

Interaction
$p = .04$

Mixed emotions

$p = .03$

n.s.

Low Social-adjustive  High Social-adjustive

- genuine  - counterfeit
Purchase intentions toward counterfeits (PIC)  
Interaction \( p = .009 \)  
High Social-adjustive | Low Social-adjustive  
genuine | counterfeit
\[ p = .02 \]  
\[ p = .11 \]

Purchase intentions toward genuine products (PIG)  
Interaction \( p > .8 \)  
High Social-adjustive | Low Social-adjustive  
genuine | counterfeit
\[ p < .001 \]  
\[ p < .001 \]

Difference: PIG - PIC  
Interaction \( p = .058 \)  
High Social-adjustive | Low Social-adjustive  
genuine | counterfeit
\[ p = .014 \]  
\[ p < .001 \]
Figure 4A

Interaction
$p = .003$

Norm: Unacceptable

Low Social-adjustive
High Social-adjustive

- genuine
- counterfeit

$p = .02$

$p = .07$

Figure 4B

Interaction
$p > .25$

Norm: Acceptable

Low Social-adjustive
High Social-adjustive

- genuine
- counterfeit

$p > .3$

$p > .5$
Figure 5

Note: raw means are reported here for ease of interpretation, but analyses were conducted using log-transformed data.
APPENDIX A: Survey on Counterfeit Users (Discussed in the Introduction)

Public Counterfeit Consumption:

Some types of counterfeit products are commonly used in public situations (i.e., not in the privacy of your home but in a place where other people, besides your immediate family, can see you).

Below we have listed some examples of counterfeits people commonly use in public. Please select all of the counterfeits that you personally have used.

If you have used a counterfeit product in public and we haven't listed it below, please type it in the box "others".

<table>
<thead>
<tr>
<th>Bags</th>
<th>Clothes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoes</td>
<td>Suitcases</td>
</tr>
<tr>
<td>Wallets</td>
<td>Glasses</td>
</tr>
<tr>
<td>Watches</td>
<td>Others (please list as many as applicable)</td>
</tr>
<tr>
<td>Jewelries</td>
<td>None</td>
</tr>
<tr>
<td>Cell phone/laptop cases</td>
<td></td>
</tr>
</tbody>
</table>

Take a moment to think about times when you have used [insert products chosen above]. What feelings do you experience? Please describe your feelings while using these counterfeit products. Please write in as much detail as you can.

Private Counterfeit Consumption:

Other types of counterfeit products are commonly used in private situations (i.e., in the privacy of your home, where only your immediate family can see you).

Below we have listed some examples of counterfeits people commonly use in private. Please select all of the counterfeits that you personally have used.

If you have used a counterfeit product in private and we haven't listed it below, please type it in the box "others".

<table>
<thead>
<tr>
<th>Stationary (pens, folders, etc)</th>
<th>Computer software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slippers</td>
<td>Towels</td>
</tr>
<tr>
<td>Bedsheets</td>
<td>CDs</td>
</tr>
<tr>
<td>Coffee mugs</td>
<td>Others (please list as many as applicable)</td>
</tr>
<tr>
<td>Books</td>
<td>None</td>
</tr>
<tr>
<td>Movies</td>
<td></td>
</tr>
</tbody>
</table>

Take a moment to think about times when you have used [insert products chosen above]. What feelings do you experience? Please describe your feelings while using these counterfeit products. Please write in as much detail as you can.
Results of Survey

Emotions mentioned in open-ended responses

<table>
<thead>
<tr>
<th></th>
<th>Public (n = 44)</th>
<th>Private (n = 47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed</td>
<td>16%</td>
<td>4%</td>
</tr>
<tr>
<td>Positive</td>
<td>23%</td>
<td>32%</td>
</tr>
<tr>
<td>Negative</td>
<td>30%</td>
<td>11%</td>
</tr>
<tr>
<td>Specific Emotions</td>
<td>“afraid/scared” (14%), “embarrassed” (11%), “happy/glad” (11%), and “guilt” 7%</td>
<td>“happy/glad” (13%), “guilty” (9%), and “good/great” (9%)</td>
</tr>
</tbody>
</table>

Sources of emotions in public and private consumption

<table>
<thead>
<tr>
<th></th>
<th>Public</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social approval</td>
<td>16%, e.g. &quot;I take pride when someone complements [compliments] the product based on the brand name.&quot;</td>
<td>0%</td>
</tr>
<tr>
<td>Social judgment</td>
<td>23%, e.g. &quot;I was quite worried that others would discover that the product I was using wasn't authentic...&quot;</td>
<td>0%</td>
</tr>
<tr>
<td>Moral concerns</td>
<td>9%, e.g. “I feel a little bit guilty when I use those products because they are counterfeit clothes and I think I should respect to the designers of the original brand.”</td>
<td>13%, e.g. “I feel not so good. It just like I get other people's hard work free of charge and they cannot get the amount of money they deserve.”</td>
</tr>
<tr>
<td>Low price</td>
<td>27%, e.g. &quot;Achieve the same effect with a low cost.&quot;</td>
<td>32%, e.g. &quot;I feel good as it cost nothing.&quot;</td>
</tr>
</tbody>
</table>
APPENDIX B: Scenario Stimuli for Studies 1 and 2

Study 1:

Private condition: genuine (vs. counterfeit)
Several days ago, you bought an (a counterfeit) Abercrombie & Fitch sweater that you really like from an Abercrombie & Fitch store in a mall (at a low price, from a flea market). Today you wear your (counterfeit) Abercrombie & Fitch sweater at home. As you go to the living room, wearing your new (counterfeit) sweater, you notice that you are the only one at home. So you turn on the TV, sit down on the couch, and start watching TV by yourself.

Public condition: genuine (vs. counterfeit)
Several days ago, you bought an (a counterfeit) Abercrombie & Fitch sweater that you really like from an Abercrombie & Fitch store in a mall (at a low price, from a flea market). Today you wear your (counterfeit) Abercrombie & Fitch sweater to a picnic party. As you arrive the picnic party, wearing your new (counterfeit) sweater, you notice that some of your friends and schoolmates are already there. So you get in the crowd, and start saying hello to your friends.

Study 2:

Genuine (vs. counterfeit) conditions
Several days ago, you bought a (counterfeit) Gucci wallet. Today, you bring your (counterfeit) Gucci wallet with you to a supermarket. After you finish shopping, you take your wallet out and stand at the check-out queue. You notice that the person behind you is glancing at your (counterfeit) Gucci wallet. That person, realizing that you look back, smiles at you and says: “Hey, your wallet caught my attention. You have really great taste! It's so nice! I saw that exact style recently in a Gucci store. Gucci wallets are such nice quality, don't you think?” You smile, thinking how to respond.
APPENDIX C: Emotions Scales

Mixed emotions scale (studies 1-3)

In studies 1-2: “This scenario makes me feel…”
In study 3: “How did wearing the luxury (vs. counterfeit) Gim Max sunglasses make you feel? It makes me feel…”

<table>
<thead>
<tr>
<th>1 = Not at all</th>
<th>5 = Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mixed Emotions Scale:</strong></td>
<td></td>
</tr>
<tr>
<td>Ambivalent</td>
<td></td>
</tr>
<tr>
<td>Good and bad (at the same time)</td>
<td></td>
</tr>
<tr>
<td>Bothered</td>
<td></td>
</tr>
<tr>
<td>Conflicted</td>
<td></td>
</tr>
<tr>
<td>Discomfort</td>
<td></td>
</tr>
<tr>
<td>Mixed Feelings</td>
<td></td>
</tr>
</tbody>
</table>

Positive and negative scales (studies 1-2)

“Specifically, what emotion(s) does the scenario make you feel?”

<table>
<thead>
<tr>
<th>1 = Not at all</th>
<th>5 = Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive Emotions Scale:</strong></td>
<td></td>
</tr>
<tr>
<td>Happy</td>
<td></td>
</tr>
<tr>
<td>Proud</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td></td>
</tr>
<tr>
<td><strong>Negative Emotions Scale:</strong></td>
<td></td>
</tr>
<tr>
<td>Embarrassed</td>
<td></td>
</tr>
<tr>
<td>Nervous</td>
<td></td>
</tr>
<tr>
<td>Afraid</td>
<td></td>
</tr>
<tr>
<td>Guilty</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D: Social-Adjustive Function Scale (Wilcox et al. 2009)

“Please indicate the extent to which you agree with the following statements about luxury brands”.

- Luxury brands are a symbol of social status.
- Luxury brands help me fit into important social situations.
- I like to be seen wearing luxury brands.
- I enjoy it when people know I am wearing a luxury brand.

1 = “completely disagree” and 7 = “completely agree”
APPENDIX E: Stimuli Materials in Study 3

Photos of the sunglasses used in the experiment:

Verbal instruction that manipulated social norms:
(The underscored part was delivered only in the “acceptable” norm condition).

“In the first study, you will evaluate some sunglasses for a brand. As you see, there is a pair of sunglasses sitting in the bag on your desk. Actually, for everyone on the left side of the room (Experimenter: point to seat #D1 to D5), the sunglasses on your desks are real products of the brand. And for everyone on the right side of the room (Experimenter: point to seat #D6 to D10), the sunglasses on your desks counterfeit products of the brand. You guys understand? Counterfeit products mean the fake replicas that are usually sold at a lower price. Now, I would like you to take the sunglasses out of the bag and put them on. (After participants put on the sunglasses) Ok, please make sure you read all the instructions carefully. Now, you can press the button on the screen and start your evaluation.”
APPENDIX F: Pretest for Social Norms Manipulation in Study 3

Underlined part only shown in the “explicit instruction” (acceptable norm) condition:

This study is conducted in collaboration with an external eye-wear company for a consulting project. We are interested in consumers’ opinions on different sunglasses. In this task, we would like to ask you to evaluate some sunglasses. In particular, both the genuine and counterfeit versions of the sunglasses are available in the market. Thus, in this session, we would like half of you to evaluate the genuine version of the sunglasses, whereas the other half of you to evaluate the counterfeit version of the sunglasses.

**Counterfeit condition:**
These sunglasses are counterfeit products of a Chinese luxury fashion brand, Gim Max. Counterfeit products are fake replicas that cost significantly less than genuine products. The Gim Max sunglasses are pretty popular among college students and are sold at a premium price in China. The counterfeit products you see below, however, are fake replicas that are sold at a much cheaper price. These counterfeit sunglasses are in fact available in the flea markets.

**Genuine condition:**
These sunglasses are genuine products of a Chinese luxury fashion brand, Gim Max. The Gim Max sunglasses are pretty popular among college students and are sold at a premium price in China. These sunglasses are in fact only available in Gim Max stores.

**To all:**
The experiment will distribute the sunglasses for your evaluation. Meanwhile, please take a look at the photos of these sunglasses. The experiment will distribute the counterfeit sunglasses for your evaluation. Meanwhile, please take a look at the photos of these sunglasses.

- Counterfeit products are fake replica that are usually sold at a lower price than the genuine products. How many percent of the participants in this session are assigned to evaluate counterfeit sunglasses? Please make an estimation on the scale below.

  0% ______________________________________________100%

- How certain do you feel about your estimation? 1 = not at all, 7 = very much

- How acceptable is it right now to wear counterfeit branded sunglasses?
  1 = not at all, 7 = very much
APPENDIX G: Stimuli Materials in Study 4

Social Ad

Imagine, how would you feel wearing a counterfeit?

Be genuine, buy genuine.
www.anticounterfeit.org

Non-social Ad

Imagine, how would you feel wearing a counterfeit?

Be genuine, buy genuine.
www.anticounterfeit.org
Generic Ad

(“www.anticounterfeit.org” is a fictitious organization made to ascertain participants understand the anti-counterfeiting purpose of the ads)
APPENDIX H: Pretests for Study 4

Pretest 1:
*Participants read either of the following ads:*

OR

In what setting did you imagine yourself using a counterfeit?

<table>
<thead>
<tr>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>100</td>
</tr>
</tbody>
</table>

Pretest 2:
*Participants read all three ads:*

Which ad makes you feel mixed about using a counterfeit?
APPENDIX I: Studies Mentioned in the General Discussion

Participants and Design (3 conditions between-subject)

<table>
<thead>
<tr>
<th>Study</th>
<th>Sample</th>
<th>Sample size</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Mturk</td>
<td>129 (44.2% female; (M_{age} = 35.3, SD = 11.08))</td>
<td>Counterfeit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Genuine</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Control: social interaction</td>
</tr>
<tr>
<td>B</td>
<td>University students</td>
<td>183 (61.7% female)</td>
<td>Counterfeit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Genuine</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Control: non-branded product</td>
</tr>
</tbody>
</table>

**Genuine (vs. counterfeit) conditions**
Several days ago, you bought a Gucci (counterfeit Gucci) wallet. Today, you bring your Gucci (counterfeit) wallet with you to a supermarket. After you finish shopping, you take your wallet out and stand in the check-out queue. You notice that the person behind you is glancing at your Gucci (counterfeit) wallet. That person, realizing that you look back, smiles at you and says: “Your wallet caught my attention. I looked at that exact style recently in a Gucci store. Gucci wallets are such nice quality, don't you think?” You smile, thinking how to respond.

**Control condition (social interaction)**
Today, you go to a coffee shop to get some coffee. After you order and receive your coffee, you find an empty table and sit down. As you start drinking your coffee, you notice that the person who sits at the table beside you is glancing at you. That person, realizing that you look back, asks: “Excuse me, do you mind passing me some napkins from your table? There is no napkin on my table.” You reply: “Sure”, and pass the napkins on your table to the person. That person smiles and thanks you.

**Control condition (non-branded product)**
Several days ago, you bought a new wallet. Today, you bring your new wallet with you to a supermarket. After you finish shopping, you take your wallet out and stand at the check-out queue. You notice that the person behind you is glancing at your wallet. That person, realizing that you look back, smiles at you and says: “Your wallet caught my attention. I looked at that exact style recently in a store. It's such nice quality, don't you think?” You smile, thinking how to respond.
Results

<table>
<thead>
<tr>
<th>Study</th>
<th>Mixed emotions items</th>
<th>Reliability (α)</th>
<th>Means (SD)</th>
<th>Main effect results</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Mixed emotions means feeling good and bad emotions at the same time. Does the scenario above make you feel mixed emotions? This scenario makes me feel… ambivalent/ good and bad at the same time/ bothered/ conflicted/ discomfort (1 = not at all, 5 = very much).</td>
<td>0.9</td>
<td>(M_{\text{counterfeit}} = 2.63) (1.20)</td>
<td>ANOVA (F(2,126) = 8.22, p &lt; .001). Counterfeit vs. genuine, (p = .06), counterfeit vs. control, (p &lt; .001), genuine vs. control, (p = .03).</td>
</tr>
<tr>
<td>B</td>
<td>Mixed emotions means feeling good and bad emotions at the same time. Does the scenario above make you feel mixed emotions? (1 = very slightly or not at all mixed, 5 = extremely mixed; transformed to 7-point). The scenario above makes me feel bothered/ conflicted/ discomfort (1 = strongly disagree, 7 = strongly agree).</td>
<td>0.85</td>
<td>(M_{\text{counterfeit}} = 4.02) (1.48)</td>
<td>ANOVA (F(2,180) = 2.79, p = .064). Counterfeit vs. genuine, (p = .063), counterfeit vs. control, (p = .03), genuine vs. control, (p = .76).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study</th>
<th>Moral belief items</th>
<th>Reliability (α)</th>
<th>Interaction results (control condition as the benchmark category)</th>
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</table>
| A     | To what extent do you think the following adjectives apply to people who purchase counterfeit products?  
1 = moral/ethical/sincere, 7 = immoral/unethical/insincere | .92             | Counterfeit x Moral_belief: \(\beta = -.11, t(123) = -.67, p = .5\)  
Genuine x Moral_belief: \(\beta = -.15, t(123) = -.85, p = .4\) |
| B     |                                                                                   | .89             | Counterfeit x Moral_belief: \(\beta = -.071, t(177) = -.36, p = .72\)  
Genuine x Moral_belief: \(\beta = .057, t(177) = .27, p = .78\) |