

# 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-adjustive 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.

Study	Summary
Study 1 ( <i>New Study</i> )	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 ( <i>New Study</i> )	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, <i>manipulation check study</i> )	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, <i>manipulation check studies</i> )	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.



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4 Counterfeits are products that use a brand name or logo without the owner's  
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6 authorization. In addition to being illegal, counterfeiting is morally dubious on several grounds.  
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8 There is infringement of intellectual property rights and financial loss to companies, estimated to  
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10 cost upwards of \$1.3 billion in 2015 alone (U.S. Customs and Border Protection Office of Trade,  
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12 2016). There is a burden on government coffers – money that could be spent benefiting society  
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14 that instead is spent removing counterfeits from supply chains. Then there are the ties to  
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16 organized crime, money laundering, drug trafficking, and child labor (International Anti-  
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18 counterfeiting Coalition, 2016). Despite efforts to educate consumers about the industry's ugly  
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20 truths, counterfeit consumption has grown to a \$1.7 trillion industry, fueled in part by consumer  
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22 demand for popular name brand and luxury brand counterfeits (Nia and Zaichkowsky, 2000).  
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24 Curbing demand for counterfeits depends critically on understanding the psychology of these  
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26 counterfeit users. To this end, research has examined several factors that drive consumers to  
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28 *purchase* counterfeits (Phau and Teah, 2009; Wiedmann, Hennigs, and Klarmann, 2012; Wilcox,  
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30 Kim, & Sen, 2009; see Eisend and Schuchert-Guler, 2006 for a review). Less is known, however,  
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32 about how consumers feel when they actually *use* counterfeits. We posit that using a counterfeit  
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34 can be an emotionally complex experience that elicits mixed emotions, that is, experiencing both  
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36 positive and negative emotions. This hypothesis is important to explore because, if counterfeit  
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38 users do feel mixed, not only might mixed emotions affect the appeal of counterfeits but they  
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40 also might be leveraged to design interventions that curb demand for counterfeits. We thus  
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42 investigate the experience of using a counterfeit and the mixed emotions this gives rise to.  
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53 Counterfeits can potentially communicate *positive signals* associated with the brand (e.g.  
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55 signals related to status and prestige). Simultaneously, counterfeits can communicate *negative*  
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57 *signals* associated with the product (e.g. signals related to deceit and unethical consumption).  
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4 Past research suggests that sending these signals to oneself temporarily affects the self-concept  
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6 (Gino, Norton, and Ariely, 2010). Here, we posit that these positive and negative signals also are  
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8 a key source of users' mixed emotions, and that counterfeit users feel mixed to the extent they  
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10 are concerned about sending these signals to others. In line with this view, in-depth interviews  
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12 suggest that counterfeit users' emotions depend in part on the counterfeit's social visibility (e.g.  
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14 Penz and Stöttinger, 2012). To provide additional evidence, we began our investigation by  
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16 testing the possibility that counterfeit users experience different emotions in public versus private,  
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18 with mixed emotions occurring more often in public settings, where social signals are more  
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20 salient.  
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26 Fifty-two self-reported counterfeit users described their experiences using counterfeits  
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28 in public (product categories included handbags, shirts, shoes) and private (product categories  
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30 included books, DVDs, software). Two key insights emerged (see Appendix A for details). First,  
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32 consistent with our prediction, counterfeit users were four times more likely to recall feeling  
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34 mixed in public (16% of 44 respondents) than in private (4% of 47 respondents,  $t(47.66) = -1.83$ ,  
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36  $p < .075$ ). Second, counterfeit users recalled experiencing different concerns in public than in  
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38 private. In public, they sought to signal status and wealth (16%) but feared judgement by others  
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40 if caught (23%). In private, however, no counterfeit users sought to signal status and wealth, nor  
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42 did they fear social judgement. In fact, many explicitly stated that social judgment was not a  
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44 concern (26%; e.g. "It doesn't matter at all since those things are not exposed to outsiders...").  
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46 These findings provide preliminary evidence that mixed emotions are caused by (and thus should  
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48 depend on) a counterfeit's potential to send both positive and negative signals to others.  
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54 We test this argument and its implications in a series of laboratory studies. We  
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56 demonstrate that mixed emotions are more common in public (vs. private) contexts, and  
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4 particularly common among individuals who generally are more concerned about social signals.  
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6 That is, both situational and individual difference factors related to social signaling moderate  
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8 counterfeit users' mixed emotions. Furthermore, building on evidence that mixed emotions can  
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10 be unpleasant (Cacioppo, Gardner, and Berntson, 1999; Hong and Lee 2010; Williams and Aaker  
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12 2002), we demonstrate how mixed emotions influence users' purchase intentions toward  
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14 counterfeit and genuine goods. Finally, we find that consumers need not physically use a  
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16 counterfeit in order to feel mixed; mixed emotions are observed even among those who simply  
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18 imagine using a counterfeit. We rely upon this finding to design and test an advertising  
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20 intervention. We find that consumers are willing to pay a higher price premium for genuine over  
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22 counterfeit products if advertising prompts them to imagine using a counterfeit in the presence of  
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24 others (consistent with our view that the social signals associated with counterfeits induce mixed  
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26 emotions). This finding is important because it suggests that by examining counterfeit users we  
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28 can glean insights that can be applied to prompt even non-users to avoid using counterfeits.  
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36 Our research contributes to extant *counterfeit* research in several ways. First, we  
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38 identify the emotional consequences of counterfeit consumption and demonstrate the  
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40 downstream consequences of these emotions. We reveal that the very factors that drive  
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42 counterfeit purchase (i.e. factors related to social signaling) can in fact give rise to mixed  
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44 emotions, which may in turn deter future counterfeit consumption. Second, we show that the  
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46 very consumers who tend to buy counterfeits are prone to feel mixed during use and, importantly,  
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48 to become less interested in buying counterfeits in the future. Consequently, counterfeit buyers  
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50 might instead demand genuine brands in the future. In this manner, counterfeit consumption may  
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52 drive demand for genuine brands. Third, we suggest a novel approach to fighting counterfeit  
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54 consumption. We design an intervention strategy (i.e. advertising) that is intended to elicit mixed  
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4 emotions and, in turn, reduce the appeal of counterfeit products. In sum, our research is not only  
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6 theoretically relevant to the extant counterfeit literature, but also offers important practical  
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8 implications for stakeholders who are interested in reducing demand for counterfeits. In addition,  
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10 our research also adds to the *mixed emotions* literature. First, most work focuses on mixed  
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12 emotions arising from important life events that evoke conflicting intrapersonal goals (e.g.,  
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14 graduating from college elicits conflict for personal growth vs. safety). In contrast, our research  
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16 identifies a consumption episode wherein mixed emotions arise from social factors (i.e., conflict  
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18 between signaling prestige and being perceived as deceitful). Even in this relatively mundane  
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20 situation, mixed emotions affect subsequent behavior. In addition, past research shows negative  
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22 effects on attitudes toward ads and brands that use mixed emotions appeals (Williams and Aaker,  
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24 2002; Hong and Lee, 2010). Here, we demonstrate negative effects on purchase intentions within  
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26 a product category (counterfeit products) and relatively positive effects on other product  
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28 categories that consumers perceive as substitutes (genuine products). Taken together, a key  
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30 implication of this work is that, although counterfeit consumption is an ethical issue in many  
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32 respects, we can understand and tackle consumer demand for counterfeits from a social and an  
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34 emotional angle.  
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## 45 THEORETICAL BACKGROUND

### 46 **Consumption of Counterfeit Products**

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48 Most past research focuses on the *antecedents* to counterfeit purchase (e.g. Eisend and  
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50 Schuchert-Guler, 2006 for a review; Phau and Teah, 2009; Wiedmann et al., 2012; Wilcox et al.,  
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52 2009). In addition to financial motivations (e.g. a counterfeit's low price, a consumer's income  
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54 constraints), both moral and social antecedents have been explored. Regarding morality, there is  
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4 a strong intuition that moral concerns reduce the appeal of counterfeits; however, evidence for  
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6 this prediction is mixed. On one hand, attitudes and purchase intentions for counterfeit and  
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8 pirated goods indeed correlate negatively with consumers' self-reported respect of laws, the  
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10 value they place on personal ethics and integrity, and their perception that counterfeiting is  
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12 unethical (Cordell, Wongtada, & Kieschnick, 1996; Ang, Cheng, Lim, & Tambyah, 2001;  
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14 Maldonado and Hume, 2005; Ha and Lennon, 2006; Shoham, Ruvio, & Davidow, 2008; Kim,  
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16 Cho, & Johnson, 2009). On the other hand, even consumers who view counterfeit consumption  
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18 as immoral can find ways to justify purchase. Specifically, consumers shift blame to the  
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20 prominence of counterfeits in the market and claim to be interested in the product but not the  
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22 brand (Bian, Wang, Smith, & Yannopoulou, 2016). They hold double standards about buying  
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24 and selling counterfeits (Cordell et al., 1996), and find counterfeit consumption particularly  
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26 justifiable when the genuine brand can be cast as socially irresponsible and not worth supporting  
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28 (Poddar, Foreman, Banerjee, & Ellen, 2012). Moreover, the type of consumers who do tend to be  
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30 swayed by moral concerns are those who tend to view brands as a way to express personal values;  
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32 however, this type of consumer tends to avoid buying counterfeits in the first place (Wilcox et al.  
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34 2009). Thus, evidence that personal morals reduce counterfeit consumption is equivocal.  
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43 Social signaling concerns, in comparison, are a key antecedent to purchasing a  
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45 counterfeit. Consumers use products and brands to signal status, affiliation, and wealth to others  
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47 (e.g. Han, Nunes, and Drèze, 2010; Nelissen and Meijers, 2011; Nunes, Dreze and Han, 2010;  
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49 Ward and Dahl, 2014), and counterfeits are regarded an inexpensive way to send these positive  
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51 social signals, which otherwise are associated only with genuine brands (Gentry, Putrevu, &  
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53 Commuri, 2001; Hoe, Hogg, & Hart, 2003; Jiang and Cova, 2012; Tang, Tian, & Zaichkowsky,  
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55 2014). Consequently, consumers who tend to signal their social status and gain social approval  
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4 with brands also tend to purchase counterfeit luxury products (Wilcox et al., 2009). These  
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6 consumers regard counterfeits as an attractive substitute because they focus on a product's  
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8 physical appearance (e.g. the logo and look) more than its quality, and a counterfeit's physical  
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10 appearance resembles that of the genuine brand. We posit that these very consumers who buy  
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12 counterfeits to send positive signals to others also are more prone to feel mixed when they use a  
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14 counterfeit. To motivate this argument, we next discuss why counterfeits elicit mixed emotions.  
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### 18 19 **Counterfeit Consumption and Mixed Emotions** 20

21 Positive and negative emotions can co-occur because they are independent constructs  
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23 (Cacioppo et al., 1999), rather than two opposite ends of a continuum (Russell, 1979). To feel  
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25 mixed is to experience both positive and negative emotions at the same time, even when the  
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27 positive and negative emotions may differ in intensity (Larsen and McGraw, 2011; Thompson,  
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29 Zanna, and Griffin, 1995). For example, people at a wedding may feel both happy and sad, and  
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31 even if the happiness outweighs the sadness, they nevertheless feel mixed. In contrast, feeling  
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33 exclusively positive or negative emotions, or feeling neutral (i.e. low intensity of both positive  
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35 and negative emotions), is not associated with mixed emotions (Larsen and McGraw, 2011).  
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37 Mixed emotions often arise in emotionally complex situations. These include moving from home  
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39 or graduating from school (Larsen, McGraw, & Cacioppo, 2001), facing disappointing gains or  
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41 relieving losses (Larsen, McGraw, Mellers, & Cacioppo, 2004), or behaving impulsively (Rook,  
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43 1987) or indulgently (Ramanathan and Williams, 2007). Mixed emotions also can be induced by  
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45 advertisements that use an emotional appeal (Williams and Aaker 2002; Hong and Lee 2010).  
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53 We propose that using a counterfeit can be an emotionally complex situation that elicits  
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55 mixed emotions because of the conflicting signals a counterfeit can send to others. To elaborate,  
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57 because counterfeits resemble their genuine counterparts, counterfeits may send positive signals  
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4 associated with a genuine brand, such as signals of one's status and prestige. As a result,  
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6 counterfeit users experience positive emotions, such as pride and happiness. At the same time,  
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8 using counterfeits also bears social risks. Indeed, people hold negative attitudes toward those  
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10 who use counterfeits (Gistri, Romani, Pace, Gabrielli, and Grappi, 2009; Perez, Castano, and  
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12 Quintanilla, 2010). Counterfeit users thus risk sending negative social signals associated with  
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14 behaving deceitfully and unethically, and, as a result, they experience negative emotions, such as  
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16 nervousness, embarrassment, and fear. Collectively, then, the potential to send these positive and  
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18 negative signals elicits a mixture of positive and negative emotions, respectively, and thus a  
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20 subjective experience of mixed emotions among counterfeit users.  
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26 If mixed emotions arise because of these positive and negative signals, then they should  
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28 depend on the salience of these signals. To test the process by which counterfeit consumption  
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30 elicits mixed emotions, we thus examine two factors that should moderate the salience of such  
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32 signals: consumption setting (public vs. private), and social-adjustive motives (an individual  
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34 difference tendency). In addition to shedding light on the underlying process, these moderators  
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36 also reveal when and for whom counterfeits elicit mixed emotions.  
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41 *Public vs. private consumption setting.* Public consumption is easily observed by others  
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43 and thus brings to the fore social signaling concerns. For example, when dining with others,  
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45 people switch away from their favorite dishes and instead sample a variety of options because  
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47 they want to send favorable signals associated with variety seeking and, in turn, obtain social  
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49 approval (Ratner and Kahn, 2002). Similarly, people who are alone in public avoid hedonic  
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51 activities that are often enjoyed in groups (e.g. bowling, watching a movie) because they want to  
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53 avoid sending an unfavorable signal that they have few friends and, in turn, receiving social  
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55 judgment (Ratner and Hamilton, 2015). Thus, public consumption settings make salient the ways  
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4 that our consumption decisions might send favorable signals that garner social approval or  
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6 unfavorable signals that elicit social judgment. In the context of using a counterfeit, both signals  
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8 can co-occur. Thus, compared to private settings, public settings make counterfeit users feel  
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10 more mixed.  
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14 **H1a:** Counterfeit users feel more mixed in public versus private settings.  
15

16 *Social-adjustive motives.* Individuals differ in the extent to which they are concerned  
17  
18 with the signals they send to others in social settings. One determinant of this individual  
19  
20 difference is the extent to which consumers hold social-adjustive motives toward brands, which  
21  
22 refers to a tendency to use brands to maintain social relationships, facilitate self-presentation, and  
23  
24 gain social approval (Katz, 1960). Social-adjustive motives have been identified as an antecedent  
25  
26 to purchasing counterfeits (Wilcox et al. 2009), which is the reason we focus our inquiry on this  
27  
28 construct. Because social-adjustive motives attune consumers to social signals in consumption,  
29  
30 they likewise should attune consumers to the positive and negative signals conveyed by using a  
31  
32 counterfeit, which should, in turn, exacerbate mixed emotions.  
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38 **H1b:** In public settings, increases in counterfeit users' social-adjustive motives are associated  
39  
40 with increases in mixed emotions.  
41

#### 42 43 **Consequences of Counterfeit-induced Mixed Emotions** 44

45  
46 Mixed emotions represent a conflict between two opposing valences (e.g. happy and  
47  
48 sad). This conflict can produce psychological discomfort, much like the tension that arises from  
49  
50 cognitive dissonance or attitudinal conflict (Cacioppo et al., 1999; Hong and Lee 2010; Williams  
51  
52 and Aaker 2002), and can negatively impact attitudes toward the source of one's mixed emotions.  
53  
54 Thus, just as ads that evoke mixed emotions often elicit negative attitudes (Hong and Lee 2010;  
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56 Williams and Aaker 2002), so too should counterfeit products. Rather than measuring attitudes  
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4 directly, we measure purchase intentions toward counterfeit and genuine brand goods. If mixed  
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6 emotions render counterfeits less attractive, substitute products (i.e., genuine brand goods)  
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8 should become relatively more appealing. Our reasoning is twofold. First, genuine products are  
9  
10 less associated with mixed signals and thus mixed emotions than counterfeits. Second,  
11  
12 consumers who use brands for social signaling purposes tend to view counterfeits and genuine  
13  
14 brands as substitutes (Jiang and Cova, 2012; Wilcox et al., 2009). Thus, we posit that mixed  
15  
16 emotions decrease purchase intentions toward counterfeits, increase preference to purchase  
17  
18 genuine over counterfeit products, and increase the price premium one is willing to pay for  
19  
20 genuine over counterfeit products.  
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26 **H2:** To the extent counterfeit users feel mixed, purchase intentions toward counterfeits decrease.  
27

### 28 **Social Acceptability: A Boundary Condition**

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30  
31 Our theory and predictions are premised on the notion that counterfeits can send both  
32  
33 positive and negative signals to others. Importantly, the capacity for a counterfeit to send  
34  
35 negative signals presupposes that using a counterfeit is socially unacceptable. While this  
36  
37 assertion is backed by extant literature (Gistri, Romani, Pace, Gabrielli, and Grappi, 2009; Perez,  
38  
39 Castano, and Quintanilla, 2010), counterfeit consumption is a global trend that implicates a wide  
40  
41 range of consumers, so it stands to reason that variation in the social acceptability of using a  
42  
43 counterfeit will vary across contexts and over time. This variation should, according to our  
44  
45 theory, represent an important boundary condition for our hypotheses and thus augment the  
46  
47 conclusions we can draw from our research. It is therefore important to address how the social  
48  
49 acceptability of counterfeit consumption moderates our findings.  
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56 Research on social norms has established that when the social acceptability of a  
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58 behavior changes, so too do the social signals associated with the behavior (Cialdini, Kallgren,  
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4 and Reno, 1991; Olds, Thombs, and Tomasek, 2005). For example, the social acceptability of  
5  
6 smoking has been declining for years, and smoking now is stigmatized and associated with more  
7  
8 negative signals (Graham, 2012). Correspondingly, if the social acceptability of counterfeits  
9  
10 were to *increase*, counterfeit users would become *less* concerned about sending negative signals  
11  
12 to others – even users who are high in social-adjustive motives and who are using a counterfeit in  
13  
14 public. The drop in concern about sending negative social signals thus should attenuate mixed  
15  
16 emotions.  
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21 **H3:** The observed effect of counterfeit consumption on mixed emotions is mitigated if using  
22  
23 counterfeits becomes more socially acceptable.  
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25

### 26 **Strategy for Interventions**

27  
28 An additional purpose of this research is to offer practical implications for stakeholders  
29  
30 interested in reducing demand for counterfeits. To this end, we first addressed whether  
31  
32 consumers must actually *use* a counterfeit in order to experience mixed emotions, or whether  
33  
34 merely imagining using a counterfeit could have a similar effect. Imagining an experience allows  
35  
36 consumers to simulate actual experience and can elicit similar emotions (Dahl, Manchanda and  
37  
38 Argo, 2001; Rotman, Lee, and Perkins, 2016). We therefore reasoned that our predictions would  
39  
40 hold both for imagined and real counterfeit consumption. Furthermore, if imagined consumption  
41  
42 is sufficient to elicit mixed emotions, we reasoned that an advertisement that prompts consumers  
43  
44 to imagine using a counterfeit in public (vs. private) should elicit mixed emotions and in turn  
45  
46 reduce the appeal of counterfeit products vis-à-vis their genuine counterparts.  
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53 **H4:** Consumers are willing to pay a higher price premium for genuine over counterfeit products  
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55 when advertising prompts them to imagine using a counterfeit in public versus private.  
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## 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

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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*

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4        *Participants and design.* One-hundred eighty-eight undergraduate students (65%  
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6  
7 females;  $M_{\text{age}} = 19.5$ ,  $SD = 1.3$ ) participated in a 2 (product: counterfeit, genuine) by 2 (setting:  
8  
9 public, private) between-subject study for partial course credits.

10  
11        *Procedure and materials.* Participants imagined wearing either a counterfeit or a  
12  
13 genuine Abercrombie & Fitch sweater, either at a picnic party or at home (Appendix B). Then  
14  
15 they reported the extent to which they felt mixed ( $\alpha = .93$ ), positive ( $\alpha = .81$ ), and negative ( $\alpha$   
16  
17 = .89; Appendix C), their purchase intentions toward counterfeits (1 = “definitely would not  
18  
19 purchase”, 7 = “definitely would purchase”), and demographic information. We included  
20  
21 separate measures of positive and negative emotions to more precisely delineate the emotions  
22  
23 elicited in counterfeit and genuine consumption (e.g., we reasoned that genuine consumption  
24  
25 elicits less mixed emotions because it associates predominantly positive emotions).

## 30 31 **Results**

32  
33        *Mixed emotions.* We conducted a univariate analysis with product, setting, and their  
34  
35 interaction as independent variables, and mixed emotions as a dependent variable. Results  
36  
37 yielded main effects of product ( $F(1, 184) = 3.30$ ,  $p = .07$ ) and setting ( $F(1, 184) = 16.44$ ,  $p$   
38  
39  $< .001$ ), qualified by the predicted product by setting interaction ( $F(1, 184) = 11.93$ ,  $p < .001$ ).  
40  
41 Supporting H1a, simple effect analyses showed that public ( $M = 2.74$ ,  $SD = 1.04$ ) versus private  
42  
43 ( $M = 1.77$ ,  $SD = .78$ ) setting increased mixed emotions for counterfeit users ( $t(187) = 5.31$ ,  $p$   
44  
45  $< .001$ ; Figure 1A), but not genuine brand users ( $M_{\text{public}} = 2.06$ ,  $SD = .84$ ;  $M_{\text{private}} = 1.98$ ,  $SD$   
46  
47 = .89;  $p > .6$ ).

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53 [INSERT FIGURE 1A HERE]

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55        *Positive and negative emotions.* We conducted two separate univariate analyses using  
56  
57 the same independent variables as above, and positive emotions and negative emotions as  
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4 dependent variables, respectively. Both analyses yielded significant setting by product  
5 interactions (positive emotions:  $F(1, 184) = 7.96, p = .005$ ; negative emotions:  $F(1, 184) = 36.08,$   
6  
7  $p < .001$ ). Public genuine [counterfeit] consumption elicited the greatest positive ( $M = 3.31, SD$   
8  
9  $= .82$ ) [negative ( $M = 2.96, SD = .98$ )] emotions, compared to all other conditions (all  $ps < .05$ ;  
10  
11 table 1). We also analyzed the data in a multivariate analysis, using valence (i.e. positive and  
12  
13 negative emotions) as a within-subject variable, and product and setting as between-subject  
14  
15 variables. Results yielded a significant valence by product by setting interaction ( $F(1, 184) =$   
16  
17  $30.03, p < .001$ ). Simple effect analyses revealed that participants felt similar levels of positive  
18  
19 ( $M = 2.65, SD = .73$ ) and negative emotions ( $M = 2.96, SD = .98$ ) in public counterfeit  
20  
21 consumption ( $p > .1$ ), but felt predominantly positive emotions in all other conditions (all  $ps$   
22  
23  $< .001$ ; Table 1).  
24  
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31 [INSERT TABLE 1 HERE]  
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33  
34 *Purchase Intentions.* To examine downstream consequences of mixed emotions, we first  
35  
36 regressed purchase intentions on product, setting, and their interaction. Results yielded a  
37  
38 nonsignificant interaction ( $F(1,184) < 1$ ), but the simple effects revealed that public (vs. private)  
39  
40 *counterfeit* consumption reduced purchase intentions ( $M_{\text{public}} = 3.11, SD = 1.70; M_{\text{private}} = 3.77,$   
41  
42  $SD = 1.63; p = .05$ ), whereas public and private *genuine* consumption did not differ ( $M_{\text{public}} =$   
43  
44  $3.13, SD = 1.64; M_{\text{private}} = 3.40, SD = 1.58; p > .4$ ). More importantly, a moderated mediation  
45  
46 analysis found a significant *indirect* effect of mixed emotions on purchase intentions (95% CI = -  
47  
48  $.3682, -.0426$ , bootstrap sample = 5000; PROCESS model 7, Hayes 2013), consistent with  
49  
50 “indirect only mediation” (Zhao, Lynch, and Chen, 2010). Specifically, mixed emotions  
51  
52 mediated the negative effect of public versus private setting on intentions to purchase  
53  
54 counterfeits only in the *counterfeit* condition (95% CI =  $-.2843, -.0311$ ), and not in the genuine  
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4 brand condition (95% CI = -.0146, .1338). Thus, as predicted, the mixed emotions elicited in  
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6 counterfeit consumption in turn reduced counterfeit users' subsequent intentions to purchase  
7  
8 other counterfeit products.  
9

10  
11 [INSERT FIGURE 1B HERE]  
12

### 13 14 *Discussion*

15  
16 Supporting H1a and H2, study 1 finds that consumers feel more mixed when they are  
17  
18 prompted to imagine using a counterfeit product in public versus private, which, in turn, reduces  
19  
20 the attractiveness of subsequent counterfeit consumption. These effects do not occur in genuine  
21  
22 consumption. Of greatest importance to our theorizing are the effects obtained in the public  
23  
24 counterfeit consumption cell. The finding that counterfeit users feel more mixed when social  
25  
26 signals are salient and visible (i.e., in public) supports the view that mixed emotions stem from  
27  
28 the signals being communicated to others. We also obtained clear evidence of emotional conflict:  
29  
30 separate measures revealed that positive and negative emotions were experienced at similarly  
31  
32 high levels among these consumers. In comparison to public counterfeit consumption, private  
33  
34 consumption and genuine consumption elicited less mixed emotions and, instead, elicited  
35  
36 predominately positive emotions. Building on study 1's findings, study 2 tests the role of social-  
37  
38 adjustive motives as a second moderator to mixed emotions (H1b).  
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### 48 STUDY 2

49  
50 Study 2 tests the prediction that, in public settings, increases in counterfeit users' social-  
51  
52 adjustive motives are associated with increases in mixed emotions (H1b). We again assess  
53  
54 consequences on purchase intentions, and expand our scope to include both counterfeit and  
55  
56 genuine brands (H2). We predict that, in addition to reducing consumers' *absolute* purchase  
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58 intentions,  
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4 intentions toward counterfeits, mixed emotions also should increase consumers' *relative*  
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6 purchase intentions toward genuine, over counterfeit, products. The same predictions should not  
7  
8 hold for users of genuine brand products. Lastly, to ensure the generalizability of our results  
9  
10 across brands and product categories, we used a commonly counterfeited luxury brand (i.e.,  
11  
12 Gucci) and a different (but also gender-neutral) product category (i.e., wallets).  
13  
14

### 15 16 **Method**

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18  
19 *Participants and design.* One-hundred thirty (43% female) MTurk participants  
20  
21 completed a 2 (product: counterfeit, genuine) by social-adjustive motives between-subjects study  
22  
23 in exchange for a monetary incentive. Product was manipulated and social-adjustive motives  
24  
25 were measured. In this and all other *Mturk* studies, we excluded participants whose study  
26  
27 completion time was outside three standard deviations from the mean.  
28  
29

30  
31 *Procedure and materials.* Participants imagined using a counterfeit (vs. genuine) Gucci  
32  
33 wallet in a supermarket and receiving a compliment (Appendix B). They reported mixed  
34  
35 emotions ( $\alpha = .95$ ), positive emotions ( $\alpha = .92$ ), and negative emotions ( $\alpha = .88$ ; Appendix C). To  
36  
37 avoid the possibility that measuring participants' emotional responses immediately before  
38  
39 measuring purchase intentions may make emotions salient and create demand effect, we included  
40  
41 a short verbal filler task in between. Participants then reported purchase intentions toward  
42  
43 counterfeit and genuine products (1 = "definitely would not purchase", 7 = "definitely would  
44  
45 purchase"), the Social-adjustive Function Scale as a measure of social-adjustive motives ( $\alpha = .89$ ;  
46  
47 Wilcox et al., 2009; Appendix D), and demographic information.  
48  
49  
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### 52 53 **Results**

54  
55 *Mixed emotions.* Product condition had no effect on social-adjustive motives ( $F(1,128)$   
56  
57 = 2.26,  $p > .13$ ). Thus, we regressed mixed emotions on product, social-adjustive motives  
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4 (standardized), and their interaction ( $R^2 = .11$ ). Results revealed a main effect of product  
5  
6 (counterfeit =1, genuine = -1,  $\beta = .32$ ,  $t(126) = 3.23$ ,  $p = .002$ ) qualified by the two-way  
7  
8 interaction ( $\beta = .21$ ,  $t(126) = 3.07$ ,  $p = .04$ ). As predicted, social-adjusive motives *increased*  
9  
10 mixed emotions in the counterfeit condition ( $\beta = .29$ ,  $t(126) = 2.17$ ,  $p = .03$ ), but did not  
11  
12 influence mixed emotions in the genuine condition ( $\beta = -.12$ ,  $t(126) = -.83$ ,  $p > .4$ ; Figure 2).  
13  
14 Analyzed differently, counterfeit (vs. genuine) consumption elicited greater mixed emotions  
15  
16 among high social-adjusive participants (1 S.D. above the mean;  $M_{\text{counterfeit}} = 2.96$ ,  $M_{\text{genuine}} = 1.92$ ,  
17  
18  $p < .001$ ), who are chronically more concerned about the signals they send to others. In contrast,  
19  
20 counterfeit (vs. genuine) consumption had no effect on low social-adjusive participants (1 S.D.  
21  
22 below the mean; low social-adjusive:  $M_{\text{counterfeit}} = 2.39$ ,  $M_{\text{genuine}} = 2.17$ ,  $p > .4$ ; Figure 2).  
23  
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28 [INSERT FIGURE 2 HERE]  
29  
30

31 *Positive and negative emotions.* In two separate analyses, we regressed positive and  
32  
33 negative emotions, respectively, on product, social-adjusive motives (standardized), and their  
34  
35 interaction. Both regressions yielded significant product by social-adjusive interactions (positive  
36  
37 emotions:  $\beta = -.30$ ,  $t(126) = -2.96$ ,  $p = .004$ ; negative emotions:  $\beta = .32$ ,  $t(126) = 3.54$ ,  $p = .001$ ;  
38  
39 table 2). Simple effect analyses showed that social-adjusive motives increased *positive* emotions  
40  
41 for *genuine* ( $\beta = .64$ ,  $t(129) = 4.17$ ,  $p < .001$ ) but not counterfeit ( $\beta = .03$ ,  $t(129) = .21$ ,  $p > .8$ )  
42  
43 consumption; whereas it increased *negative* emotions for *counterfeit* ( $\beta = .51$ ,  $t(129) = 4.18$ ,  $p$   
44  
45  $< .001$ ), but not genuine ( $\beta = -.13$ ,  $t(129) = -.99$ ,  $p > .3$ ) consumption. These results suggest that  
46  
47 social-adjusive motives may amplify the effects of positive signals in genuine consumption and  
48  
49 negative signals in counterfeit consumption.  
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55 [INSERT TABLE 2 HERE]  
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4           *Purchase intentions toward counterfeit products.* First, we regressed purchase intentions  
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6 toward *counterfeit* products (referred to as “PIC” hereafter) on product, social-adjusive motives  
7  
8 (standardized), and their interaction ( $R^2 = .31$ ). The results yielded a product by social-adjusive  
9  
10 motives interaction ( $\beta = -.47, t(126) = -2.66, p = .009$ ), and a main effect of product (counterfeit  
11  
12 =1, genuine = -1,  $\beta = .41, t(126) = 2.33, p = .02$ ) qualified by the interaction (Figure 1B). Simple  
13  
14 effect analyses showed that social-adjusive motives *decreased* PIC in the *counterfeit* condition  
15  
16 ( $\beta = -.52, t(129) = -2.18, p = .02$ ), and directionally *increased* PIC in the *genuine* condition ( $\beta$   
17  
18 = .43,  $t(129) = 1.61, p = .11$ ). Moreover, we tested the moderated mediation effect of mixed  
19  
20 emotions on PIC (PROCESS model 8, Hayes 2013) and found a significant result (95% CI = -  
21  
22 .5522, -.0424, bootstrap sample = 500). Mixed emotions mediated the effect of social-adjusive  
23  
24 motives on PIC in counterfeit consumption (95% CI = -.3551, -.0494), but not in genuine  
25  
26 consumption (95% CI = -.0870, .2920).  
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33           *Purchase intentions toward genuine products.* We next regressed purchase intentions  
34  
35 toward genuine products (referred to as “PIG” hereafter) on product, social-adjusive motives  
36  
37 (standardized), and their interaction ( $R^2 = .42$ ). We found no interaction ( $p > .8$ ), but significant  
38  
39 main effects of product (counterfeit =1, genuine = -1,  $\beta = -.51, t(126) = -3.64, p < .001$ ) and  
40  
41 social-adjusive motives ( $\beta = 1.15, t(126) = 8.16, p < .001$ ; Figure 3B).  
42  
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46           *Preference for purchasing genuine over counterfeit products.* Finally, we computed a  
47  
48 measure for the relative preference for purchasing genuine over counterfeit products (referred to  
49  
50 as “PID” hereafter) by subtracting PIG by PIC (i.e.  $PID = PIG - PIC$ ). We regressed PID on  
51  
52 product, social-adjusive motives (standardized), and their interaction ( $R^2 = .56$ ). Results yielded  
53  
54 a marginal interaction ( $\beta = .43, t(126) = 1.91, p = .058$ ), and significant main effects of product  
55  
56 (counterfeit =1, genuine = -1,  $\beta = -.92, t(126) = -4.10, p < .001$ ) and social-adjusive motives ( $\beta =$   
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4 1.20,  $t(126) = 5.28$ ,  $p < .001$ ) qualified by the interaction (Figure 3C). Simple effect analyses  
5  
6 revealed that social-adjustive motives increased PID in both counterfeit ( $\beta = 1.48$ ,  $t(129) = 4.89$ ,  
7  
8  $p < .001$ ) and genuine ( $\beta = .83$ ,  $t(129) = 2.51$ ,  $p = .014$ ) condition, but the effect was stronger in  
9  
10 the counterfeit condition. More importantly, we found a moderated mediation effect of mixed  
11  
12 emotions on PID (95% CI = .0303, .5763, bootstrap sample = 500). Mixed emotions mediated  
13  
14 the positive effect of social-adjustive motives on PID in the counterfeit condition (95% CI  
15  
16 = .0321, .3672), but did not mediate that in the genuine condition (95% CI = -.3117, .0635).  
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21 [INSERT FIGURES 3A, B, AND C HERE]  
22

### 23 *Discussion*

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26 As predicted by H1b, social-adjustive motives, which influence the extent to which  
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28 consumers are concerned about the social signals they send out, increase mixed emotions in  
29  
30 counterfeit (but not genuine) consumption. These mixed emotions in turn *decrease* purchase  
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32 intentions toward counterfeits, and *increase* preference for purchasing genuine over counterfeit  
33  
34 products, supporting H2. These findings are important in the light of prior research that shows  
35  
36 social-adjustive motives drive counterfeit purchase (Wilcox et al. 2009). Consistent with Wilcox  
37  
38 et al. (2009), we find that social-adjustive motives *increase* purchase intention toward counterfeit  
39  
40 products, but only among *genuine users*. In contrast, among *counterfeit users*, social-adjustive  
41  
42 motives *decrease* purchase intention toward counterfeit products after counterfeit users  
43  
44 experience the mixed emotions elicited in counterfeit consumption. Thus, the very motives that  
45  
46 drive consumers to purchase counterfeits in the first place in fact increase mixed emotions in  
47  
48 counterfeit consumption, and reduce subsequent purchase intention. Moreover, these mixed  
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50 emotions increase counterfeit users' relative preference for genuine over counterfeit products,  
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52 driving them away from counterfeit products and toward genuine products. In the next study, we  
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4 test the potential boundary condition – social acceptability – for the effects we have observed on  
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6 mixed emotions.  
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### 10 11 STUDY 3 12 13

14 Study 3 tests the boundary effect of social acceptability – we predict that the observed  
15 effect of counterfeit consumption on mixed emotions is mitigated if using counterfeits becomes  
16 more socially acceptable (H3). In addition, we have observed mixed emotions among consumers  
17 who imagine using a counterfeit in the previous studies. The results suggest that a consumer need  
18 not be using a counterfeit in the moment in order to feel mixed about use. In this study, we  
19 demonstrate that mixed emotions do occur during actual use. Thus, study 3 tests H3 among  
20 consumers who are in the act of using counterfeit or genuine products.  
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#### 30 31 *Method* 32

33 *Participants and design.* Two hundred thirty-seven undergraduate students participated  
34 in the main study for partial course credits. Due to logistic constraint of the university subject  
35 pool policy, nine students had participated in one of the related studies that are not reported here,  
36 and were excluded from the data analyses. Thus, we included data from 228 participants (54.4%  
37 female;  $M_{\text{age}} = 20.3$ ,  $SD = 1.29$ ) in the analyses. We employed a 2 (norm: acceptable,  
38 unacceptable) by 2 (product: genuine vs. counterfeit) by social-adjustive motives mixed factorial  
39 design. Norm and product were manipulated as between-subject variables, and social-adjustive  
40 motives (Wilcox et al., 2009) were measured as an individual difference variable.  
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52 *Procedure and materials.* Students participated in sessions of 6 to 10 people. They sat at  
53 individual computer cubicles and a bag containing a pair of sunglasses was placed on each desk  
54 (see Appendix E). We manipulated the social acceptability of counterfeit consumption by having  
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4 the experimenter explicitly “approving” counterfeit consumption in the laboratory (also see  
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6 Blanchard, Crandall, Brigham, and Vaughn, 1994; Crandall, Eshleman, and O’Brien, 2002 for  
7  
8 social norms manipulation). Specifically, in the [unacceptable] acceptable norm condition, an  
9  
10 experimenter who was blind to the hypothesis [did not] explicitly indicated that half of the  
11  
12 participants would wear counterfeit (vs. genuine) sunglasses (see Appendix E). After that, all  
13  
14 participants put on the sunglasses and turned to their computer monitors for further instruction.  
15  
16 Depending on the product condition, they read that they were wearing a pair of genuine or  
17  
18 counterfeit sunglasses for a (fictitious) eyewear brand, Gim Max. In the “acceptable” condition,  
19  
20 students on the left (vs. right) of the room were assigned to the genuine (vs. counterfeit) product  
21  
22 condition. In the “unacceptable” condition, participants were randomly assigned to either  
23  
24 condition without having others’ knowing. All participants wore the sunglasses for 1.5 minutes  
25  
26 to “experience wearing the (counterfeit) Gim Max sunglasses”, until the computer screen  
27  
28 automatically advanced. Participants then removed the sunglasses and reported the extent to  
29  
30 which they experienced mixed emotions ( $\alpha = .86$  see Appendix C). Then they completed  
31  
32 demographic information and the Social-adjustive Function Scale ( $\alpha = .87$ , Wilcox et al., 2009;  
33  
34 Appendix D).

### 35 36 37 38 39 40 41 42 43 *Pretest*

44  
45 We pretested the manipulation of social acceptability with a separate sample of 128  
46  
47 undergraduate students using a 2 (norm: acceptable, unacceptable) by 2 (product: genuine vs.  
48  
49 counterfeit) design (Appendix F). The “acceptable” [“unacceptable”] condition read [did not read]  
50  
51 that half of the participants would evaluate a pair of counterfeit (vs. genuine) sunglasses. Then  
52  
53 they saw a photo of either the counterfeit or the genuine sunglasses, and were told that the  
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55 experimenter would distribute the sunglasses for them the wear shortly. Meanwhile, they  
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4 estimated the percentage of people who would wear counterfeit sunglasses in the room (as a  
5  
6 measure of prevalence), their certainty of the estimation (1 = not at all, 7 = very much), and the  
7  
8 extent to which wearing counterfeits was acceptable in the present situation (1 = not at all, 7 =  
9  
10 very much). We measured both perceived prevalence and acceptability, because they were two  
11  
12 components of social norms (Cialdini et al., 1991) and both might influence the social signals  
13  
14 associated with counterfeit consumption. Participants did not in fact wear the sunglasses,  
15  
16 ostensibly due to time limit, but instead completed demographic information. We regressed  
17  
18 prevalence, certainty, and acceptability, respectively, on norm, product, and their interaction.  
19  
20 There was no significant norm by product interaction on any of the dependent variables (all  
21  
22  $ps > .05$ ). The two norm conditions did not differ in the estimated prevalence of counterfeit use  
23  
24 ( $M_{\text{acceptable}} = 48\%$ ,  $SD = .16$ ,  $M_{\text{unacceptable}} = 50\%$ ,  $SD = .21$ ,  $F(1,126) < 1$ ,  $p > .6$ ), though the  
25  
26 “acceptable” condition ( $M = 4.23$ ,  $SD = 1.97$ ) versus the “unacceptable” condition ( $M = 3.06$ ,  $SD$   
27  
28  $= 1.51$ ) was more certain about the estimation ( $F(1,126) = 14.29$ ,  $p < .001$ ). Importantly, the  
29  
30 “acceptable” condition ( $M = 4.34$ ,  $SD = 1.65$ ) versus the “unacceptable” condition ( $M = 3.59$ ,  $SD$   
31  
32  $= 1.716$ ) found it more acceptable to wear counterfeits in the situation ( $F(1,126) = 6.37$ ,  $p$   
33  
34  $= .013$ ). Thus, the manipulation successfully changed the perceived acceptability of wearing  
35  
36 counterfeit sunglasses in the situation.  
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## 45 **Results**

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47 Neither the norm condition ( $F(1,226) < 1$ ,  $p > .4$ ) nor the product condition ( $F(1,226) <$   
48  
49  $1$ ,  $p > .8$ ) had an effect on social-adjustive motives. Thus, we regressed mixed emotions on norm,  
50  
51 product, social-adjustive motives (standardized), and all possible interactions ( $R^2 = .069$ ). Results  
52  
53 yielded a norm by product by social-adjustive motives three-way interaction ( $\beta = -.35$ ,  $t(220) = -$   
54  
55  $2.83$ ,  $p = .005$ ), and, qualified by the three-way interaction, a product by social-adjustive motives  
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4 two-way interaction ( $\beta = .25, t(220) = 2.98, p = .003$ ) and a norm main effect ( $\beta = -.25, t(220) = -$   
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6  
7 2.07,  $p = .04$ ). Supporting H3, simple interaction analyses yielded a product by social-adjusive  
8  
9 motives two-way interaction in the “unacceptable” condition ( $\beta = .25, t(220) = 2.97, p < .004$ ),  
10  
11 replicating the results in study 2, but no interaction in the “acceptable” condition ( $\beta = -.10, t(220)$   
12  
13 = -1.07,  $p > .25$ ).

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16 Within the *unacceptable* condition, social-adjusive motives *increased* mixed emotions  
17  
18 among counterfeit users ( $\beta = .29, t(220) = 2.42, p < .02$ ), paralleled study 2. Social-adjusive  
19  
20 motives directionally *decreased* mixed emotions in the genuine condition ( $\beta = -.22, t(220) = -$   
21  
22 1.80,  $p = .07$ ; Figure 4A). We did not predict or observe this effect in the previous study, but we  
23  
24 conjectured that since social-adjusive motives increased positive emotions in genuine  
25  
26 consumption (as observed in Study 2), an increase in purely positive emotions can reduce mixed  
27  
28 emotions. Analyzing the data differently, counterfeit (vs. genuine) consumption elicited mixed  
29  
30 feelings among high (1 S.D. above the mean,  $M_{\text{counterfeit}} = 2.90, M_{\text{genuine}} = 2.23, p < .01$ ) but not  
31  
32 low (1 S.D. below the mean,  $M_{\text{counterfeit}} = 2.33, M_{\text{genuine}} = 2.67, p > .1$ ) social-adjusive  
33  
34 participants, again replicating study 2.

35  
36  
37 Within the *acceptable* condition, we found no effect of social-adjusive motives in  
38  
39 either the counterfeit ( $\beta = -.13, t(220) = -.94, p > .3$ ) or the genuine condition ( $\beta = .06, t(220)$   
40  
41 = .55,  $p > .5$ ). Moreover, counterfeit (vs. genuine) consumption did *not* elicit greater mixed  
42  
43 emotions among either high (1 S.D. above the mean,  $M_{\text{counterfeit}} = 2.26, M_{\text{genuine}} = 2.24, p > .9$ ) or  
44  
45 low (1 S.D. below the mean,  $M_{\text{counterfeit}} = 2.51, M_{\text{genuine}} = 2.11, p > .1$ ) social-adjusive  
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47 participants (Figure 4B).

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56 [INSERT FIGURE 4A and 4B HERE]

## 57 58 **Discussion**

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4 Consistent with H3, social acceptability provides a boundary condition for the effect of  
5  
6 counterfeit consumption on mixed emotions. When counterfeit consumption is *unacceptable*,  
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8 social-adjustive motives increase mixed emotions in counterfeit consumption, as predicted in  
9  
10 H1b and found in study 2. These results also show that to the extent counterfeit consumption is  
11  
12 socially unacceptable, the effect of counterfeit consumption on mixed emotions pertains to not  
13  
14 only imagined consumption, but also actual consumption. However, when counterfeit  
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16 consumption is *acceptable*, counterfeit users no longer feel mixed regardless of the extent of  
17  
18 their social-adjustive motives. Social acceptability of counterfeit consumption should take away  
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20 the taboo attached to using a counterfeit product. It might regard counterfeit products as  
21  
22 commodities and nullify both the positive and negative signals a counterfeit can send out, in  
23  
24 which case counterfeit users should feel neutral. Or it might regard counterfeit products as  
25  
26 similar to genuine products and associate with only positive signals, in which case counterfeit  
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28 users should feel predominately positive. In either case, the social acceptability reduces the  
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30 mixed emotions in counterfeit consumption. The findings of this study have real-world  
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32 implications: in societies where counterfeit consumption is highly acceptable, counterfeit  
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34 consumption should elicit less mixed emotions.  
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#### 45 STUDY 4

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47 The purpose of study 4 is twofold. First, it tests H4, which posits that consumers are  
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49 willing to pay a higher price premium for genuine over counterfeit products when advertising  
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51 prompts them to imagine using a counterfeit in public versus private. This prediction is based on  
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53 previous studies showing that counterfeit users feel more mixed in public versus private (study 1),  
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55 and mixed emotions reduce counterfeit users purchase intention toward counterfeit products  
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4 (studies 1 and 2) and increase their relative preference for purchasing genuine over counterfeit  
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6 products (study 2). We designed an advertisement depicting public counterfeit consumption, one  
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8 depicting private counterfeit consumption, and a one intended only to raise awareness of  
9  
10 counterfeiting (to use in a control condition). The control ad is intended to establish that any  
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12 difference in price premiums between the public and private ad conditions is based on an  
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14 increase for the public ad rather than a decrease for the private ad. The second purpose of study 4  
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16 is more practical than theoretical. H4 predicts that public ads are more effective *relative* to  
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18 private and generic ads. This hypothesis does not address whether each of these three ads has an  
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20 *absolute* effect in its own right. To address this, we manipulated whether participants reported  
21  
22 their willingness to pay for counterfeit and genuine products either before or after viewing one of  
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24 the three anti-counterfeiting ads. This manipulation allows us to assess the effect of each  
25  
26 intervention on consumers' price premiums.  
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34 Before developing our ads, we researched existing campaigns online. A research  
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36 assistant, blind to the nature of our investigation, conducted a Google image search using the  
37  
38 keyword "anti-counterfeit campaigns." Of the first 200 images that appeared, 133 were unique  
39  
40 images that were coded into one of six categories. The majority of the images focused on  
41  
42 increasing awareness of counterfeiting (38%) and teaching consumers how to identify  
43  
44 counterfeits (32%) – strategies that presuppose consumers purchase counterfeits unintentionally.  
45  
46 These strategies may not reduce demand for counterfeits of popular name brands or luxury  
47  
48 brands because many consumers are not being duped into purchasing these counterfeits; rather,  
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50 they do so intentionally. Among the remaining campaigns, which did tend to target consumers  
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52 who intentionally purchase counterfeits, 14% emphasized safety, 2% emphasized legality  
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54 (applicable where purchasing counterfeits is illegal), and 9% emphasized morality. Only 4%  
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4 depicted a message or image intended to evoke social signaling concerns. This analysis reveals a  
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6 paucity of current campaigns that incorporate social signals in their intervention messages.  
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8 Findings in the previous studies suggest that bringing salient the social signals associated with a  
9  
10 counterfeit can reduce the appeal of counterfeits.  
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### 13 ***Method***

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16 *Participants and design.* Two hundred seventy-three Mturk participants participated for  
17  
18 a monetary reward. Because we conducted multiple studies for this project in the same week, we  
19  
20 asked participants “Have you participated in similar studies about counterfeit products before?”,  
21  
22 and excluded 46 participants who reported “yes” from the analyses. The study has a 2 (order: ad-  
23  
24 first vs. WTP-first) by 3 (ad: social, non-social, generic) by 2 (purchase type: counterfeit,  
25  
26 genuine) mixed-design. Both “order” and “ad” are between-subject, and “purchase type” is  
27  
28 within-subject.  
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34 Participants in the “ad-first” (vs. “WTP-first”) condition see an intervention ad before  
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36 (vs. after) reporting their WTP for a counterfeit and a genuine product. In other words, the  
37  
38 “WTP-first” condition is a control condition, showing consumers’ general WTP for counterfeit  
39  
40 and genuine products without any intervention. We calculated price premium for genuine over  
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42 counterfeit goods by subtracting participants’ WTP for a genuine good by their WTP for a  
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44 counterfeit good. Participants were also randomly assigned to one of the three ad conditions:  
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46 social ad, non-social ad, and generic ad. The social ad prompts consumers to imagine how they  
47  
48 feel when using a counterfeit in public. This ad taps into the strategy of our key interest – making  
49  
50 salient that using a counterfeit can send social signals to others. The non-social ad prompts  
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52 consumers to imagine how they feel when using a counterfeit in private. This ad was included to  
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54 test our key prediction that prompting consumers to imagine public (vs. private) counterfeit  
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4 consumption may reduce the appeals of counterfeits. Finally, a generic ad was adopted from a  
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6 real-world anti-counterfeit campaign (International Trademark Association, 2012), and it depicts  
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8 a logo, which has the word “UNREAL”. This ad was included because it represents the most  
9  
10 common type of anti-counterfeit campaigns, namely, awareness promotion, based on our Google  
11  
12 image research. All three ads were pre-tested by a separate sample ( $N = 94$ ) and showed no  
13  
14 difference in liking ( $F(2, 91) = .16, p > .8$ ) or professional appearance ( $F(2, 91) = 1.05, p > .3$ ;  
15  
16 see Appendix G for the ads).  
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20

21 *Procedure and materials.* Participants in the “ad-first” condition were randomly  
22  
23 assigned to see one of the social, non-social, or generic ads. The ad appeared on the screen for  
24  
25 five seconds. Then participants imagined having a chance to purchase a counterfeit Ralph Lauren  
26  
27 polo shirt and reported their WTPs for both a counterfeit and a genuine Ralph Lauren polo shirt,  
28  
29 respectively. Participants in the “WTP-first” condition first reported their WTPs and then saw  
30  
31 one of the ads. We collected demographic information at the end of the study. We explicitly told  
32  
33 participants that counterfeit products cost significantly less than genuine products, and thus  
34  
35 excluded participants who reported a greater WTP for a counterfeit than a genuine shirt from  
36  
37 analyses, because it was unclear whether they understood our definition of a counterfeit. We  
38  
39 included data from 215 participants (41% females;  $M_{\text{age}} = 33.53, SD = 9.65$ ) in the analyses.  
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#### 45 *Pretests*

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48 We conducted a pretest to validate that the “social” (vs. “non-social”) ad indeed  
49  
50 prompted participants to imagine public versus private counterfeit consumption (Appendix H).  
51  
52 One-hundred and sixty-two participants (51% females;  $M_{\text{age}} = 36, SD = 11.9$ ) read either the  
53  
54 “social” or the “non-social” ad, then indicated the setting in which they imagined themselves  
55  
56 using a counterfeit (1 = private, 100 = public). The social ad condition ( $M = 68.27, SD = 26.12$ )  
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4 reported imagining using a counterfeit in a more public setting than the non-social ad condition  
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6 ( $M = 53.40, SD = 37.59; F(1, 160) = 8.07, p = .005$ ). In addition, we conducted a second pretest  
7  
8 to validate that the “social ad” (vs. the other ads) indeed elicited greater mixed emotions  
9  
10 (Appendix H). Seventy-eight participants (64% females;  $M_{age} = 19.6, SD = 1.4$ ) read all three ads  
11  
12 and indicated which ad made them feel mixed about using a counterfeit. Results showed that 63%  
13  
14 participants chose the social ad, significantly higher than those who chose the non-social (13%)  
15  
16 or the generic ad (24%,  $Chi^2(2) = 32.08, p < .001$ ). Results of the two pretests supported our  
17  
18 expectation that the social ad prompted consumers to imagine public (vs. private) counterfeit  
19  
20 consumption, and it elicited greater mixed emotions, compared to the other ads.  
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## 26 **Results**

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28 The price premium was log transformed due to its high skewness ( $Skewness = 4.25, S.E.$   
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30  $= .17$ ). A univariate analysis using order, ad, and their interaction as independent variables, and  
31  
32 logged price premium score as dependent variable yielded a significant two-way interaction ( $F(2,$   
33  
34  $209) = 3.21, p = .042$ ). Price premium did not differ by ad condition within the “WTP-first”  
35  
36 order condition (all  $ps > .14$ ), and thus we combined data in the “WTP-first” condition to create a  
37  
38 control condition. Planned comparisons revealed that participants were willing to pay a higher  
39  
40 price premium after seeing the social ad ( $M_{logged} = 3.30, SD = .86$ ) compared to the control  
41  
42 condition ( $M_{logged} = 2.87, SD = 1.08, t(209) = 2.24, p = .026$ ). But the price premium did not  
43  
44 differ between the control condition and either the non-social ad ( $M_{logged} = 2.82, SD = .96, t(209)$   
45  
46  $= -.08, p > .9$ ) or the generic ad ( $M_{logged} = 2.75, SD = 1.05, t(209) = -.45, p > .6$ ). In other words,  
47  
48 compared to *no* intervention, only the social ad increased interests in a genuine over a counterfeit  
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50 product. In fact, the social ad was significantly more effective when compared to either of those  
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52 ads. Contrast analyses showed that the price premium in the social ad condition was also higher  
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4 than the non-social ad ( $t(209) = 1.92, p < .06$ ) and the generic ad ( $t(209) = 2.21, p < .03$ )  
5  
6 conditions, whereas the latter two conditions did not differ ( $t(209) = .30, p > .7$ ; Figure 5). No  
7  
8 significant order by ad interaction was found for the absolute WTPs for genuine or counterfeit  
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10 product ( $ps > .1$ ). However, the social ad (vs. all the other conditions) directionally increases  
11  
12 consumers' absolute WTP for the genuine good and decreases their absolute WTP for the  
13  
14 counterfeit good (Table 3).  
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18 [INSERT TABLE 3 HERE]

19 [INSERT FIGURE 5 HERE]

## 20 21 22 23 *Discussion*

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26 Consistent with H4, an ad that prompts consumers to imagine publically using a  
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28 counterfeit (vs. other ads and vs. no ad) increases the premium consumers are willing to pay for a  
29  
30 genuine over a counterfeit product. In contrast, ads that either prompt consumers to imagine  
31  
32 privately using a counterfeit or promote awareness of counterfeiting do not affect price  
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34 premiums (vs. no ad). These results suggest that making salient concerns related to social  
35  
36 signaling is an effective strategy for moving consumers away from counterfeit products.  
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## 43 GENERAL DISCUSSION

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46 Our research builds on the literature on counterfeit consumption in several important  
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48 ways. First, we explore counterfeit consumption using a mixed emotions framework. We find  
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50 that consumers feel mixed when using counterfeits. Second, we argue that this effect occurs  
51  
52 because using a counterfeit can potentially send out positive and negative signals to others. We  
53  
54 test this process using two moderators: public vs. private settings, and social-adjustive motives.  
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56 We find that consumers experience greater mixed emotions when they use a counterfeit product in  
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4 public (vs. private), where the social signals are visible and salient. Moreover, in a social context,  
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6 consumers' social-adjustive motives – an individual factor that influences the extent to which  
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8 consumers are concerned about social signaling – increases the mixed emotions they experience  
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10 in counterfeit consumption. These findings support the notion that using a counterfeit product  
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12 elicits mixed emotions because of the positive and negative social signals it can potentially send  
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14 out. Third, we identify an important boundary condition for the effect of counterfeit consumption  
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16 on mixed emotions, namely, social acceptability. When social acceptability of counterfeit  
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18 consumption is high, it takes away the social taboo attached to using a counterfeit. Thus, using a  
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20 counterfeit product should send out less negative signals, and might send out either purely  
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22 positive social signals or little social signals at all. In either case, counterfeit consumption elicits  
23  
24 less mixed emotions. This boundary condition provides an important implication that in societies  
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26 where counterfeit products are highly acceptable, the effect of counterfeit consumption on mixed  
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28 emotions and the downstream consequences should be weakened. Fourth, we demonstrate the  
29  
30 downstream consequence of mixed emotions on consumers' subsequent demand for counterfeit  
31  
32 and genuine good products. Mixed emotions create an aversive psychological conflict that  
33  
34 people seek to avoid (Cacioppo et al., 1999; Hong and Lee 2010; Williams and Aaker 2002).  
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36 Thus, driven by the mixed emotions elicited in counterfeit consumption, counterfeit users  
37  
38 subsequently have lower purchase intentions toward counterfeit products, and greater relative  
39  
40 purchase intentions toward genuine than counterfeit products. Finally, we leverage the above  
41  
42 insights to design advertisements that intended to elicit mixed emotions, and in turn, reduce the  
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44 appeal of counterfeit relative to genuine brand products. We find that, after seeing an  
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46 advertisement that prompts imagination of public counterfeit consumption, consumers are  
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48 willing to pay a higher price premium for a genuine over a counterfeit product. Across our  
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4 studies, we observe mixed emotions in both imagined and actual counterfeit consumption.  
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6 Moreover, counterfeit users also reported feeling mixed based on their retrospective memories of  
7  
8 using counterfeits (as discussed in the Introduction). Thus, over time, consumers do in fact  
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10 remember the mixed emotions in their counterfeit consumption experiences.  
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14 Taken together, the findings of the current research suggest although counterfeit  
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16 consumption is an ethical problem, to tackle counterfeit consumption entails strategies that bring  
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18 salient the mixed social signals associated with a counterfeit product. Given the unethical nature  
19  
20 of counterfeit consumption, we conducted two additional studies to explore how consumers'  
21  
22 moral beliefs toward counterfeit consumption may influence their emotions in counterfeit (vs.  
23  
24 genuine) consumption (details in Appendix I). In both studies, we also included a control  
25  
26 condition, where participants in one study imagined a daily social interaction, and in the other  
27  
28 study imagined a non-brand consumption. We measured participants' individual difference in  
29  
30 moral beliefs about counterfeit consumption (adopted from Wilcox et al. 2009,  $\alpha > .85$ ). In both  
31  
32 studies, we found that counterfeit consumption elicited greater mixed emotions than genuine  
33  
34 consumption and the control scenario. However, this effect was not moderated by moral beliefs  
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36 about counterfeit consumption (detailed results see Appendix I). Thus, the effect of moral beliefs  
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38 on the mixed emotions elicited in counterfeit consumption is at the least inconclusive.  
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#### 45 *Limitations and Future Directions*

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48 In the current research, we focus on understanding consumers' experience of using a  
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50 counterfeit product. Yet, consumer's experience of purchasing a counterfeit product is also of  
51  
52 importance. Consumers' experience of using versus purchasing a counterfeit product may differ.  
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54 This difference may be due to several factors. Namely, at the time of purchase, consumers tend  
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56 to focus on product desirability and not the context in which they will use the product (Hamilton  
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4 and Thompson, 2007; Trope and Liberman, 2010). Consumers also might focus more on product  
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6 features during purchase but shift focus to their own subjective experience during use, which  
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8 could heighten public and private self-consciousness, sensitivity to social evaluation, and self-  
9  
10 presentation concerns (Fenigstein, Scheier, & Buss, 1975). Moreover, consumers tend to buy  
11  
12 counterfeit products in situations outside of everyday life (e.g. holidays, international travels;  
13  
14 Penz and Stottinger, 2012). They may also report their purchase intention toward counterfeit  
15  
16 products in private settings such as in research interviews or anonymous surveys. Thus, when  
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18 purchasing or reporting purchase intention, consumers may not transport themselves to the social  
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20 and interpersonal situations in which they are likely to use the counterfeit products. Future  
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22 research should examine the potential discrepancy between consumers' experience of using  
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24 versus buying counterfeit products.  
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31 Many consumers purchase counterfeit products with a motive to facilitate social  
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33 affiliation and gain social approval (Wilcox et al. 2009). However, our research shows that this  
34  
35 very social signaling motive can increase the mixed emotions elicited in counterfeit use, and  
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37 influence subsequent purchase intentions (study 2). An implication of this finding is that  
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39 consumers who hold such a signaling motive (i.e. social-adjustive consumers) might be less  
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41 likely to repeat counterfeit purchase in the future. Future research should track counterfeit users'  
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43 longitudinal purchase patterns, and explore the effect of past consumption on repeated purchase  
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45 behaviors. It is possible that social-adjustive consumers, who are more prone to purchase  
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47 counterfeits in the first place, also have a more rapid decrease in repeated purchases over time,  
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49 because they are more likely to feel mixed every time they use a counterfeit. This may further  
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51 lead to a faster switch behavior from purchasing counterfeit to genuine products among the  
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4 social-adjustive consumers, a notion that is consistent with prior research that suggests that  
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6 counterfeit products can have a positive influence on the sales of genuine brands (Qian, 2014).  
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9 Finally, price and product quality are other important factors associated with counterfeit  
10 products. In the present research, we do not examine the role of price and product quality in  
11 feelings in counterfeit consumption. Instead, we define counterfeit products as fake replicas that  
12 cost significantly less than the genuine ones without specifying the prices, and we control the  
13 effect of product quality by using the exact same products (unknown to participants) across  
14 counterfeit and genuine conditions in our real product study (Study 3). Low price is arguably the  
15 most crucial benefit offered by counterfeit products. Poor quality of counterfeits may cause  
16 frustration or regret in counterfeit consumption (Penz and Stottinger, 2012). But the quality of  
17 counterfeit products has been significantly improved (Stottinger and Penz, 2015). Thus, future  
18 research should examine the roles of price and quality in counterfeit consumption.  
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33 In conclusion, the current research enhances understanding of how consumers feel in  
34 counterfeit consumption. Consumers feel mixed in counterfeit consumption due to the  
35 combination of positive and negative social signals associated with the counterfeit product.  
36 These mixed emotions in turn reduce counterfeit users' purchase intentions toward counterfeit  
37 products. Leveraging consumers' experience in counterfeit consumption, we suggest and show  
38 evidence that intervention strategies can effectively curb counterfeit demand by prompting  
39 consumers to imagine public counterfeit consumption, where social signals are salient. Findings  
40 from our research thus contribute to the global fight against counterfeiting and can potentially  
41 increase consumer welfare by understanding their counterfeit consumption experience.  
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Table 1

Results of positive and negative emotions in study 1.

	Negative Emotions	Positive Emotions
<b>genuine private</b>	1.62 <sup>b</sup> (0.76)	2.72 <sup>d</sup> (0.93)
<b>genuine public</b>	1.93 <sup>b</sup> (0.75)	3.31 <sup>e</sup> (0.82)
<b>counterfeit private</b>	1.46 <sup>c</sup> (0.66)	2.79 <sup>d</sup> (1.04)
<b>counterfeit public</b>	2.96 <sup>a</sup> (0.98)	2.65 <sup>ad</sup> (0.73)

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.

		Negative Emotions	Positive Emotions
<b>Genuine</b>	<b>Low social-adjustive</b>	1.86	3.11
	<b>High social-adjustive</b>	1.59	4.37
	Slope of social-adjustive	$\beta = -.13, n.s.$	$\beta = .64, p < .001$
<b>Counterfeit</b>	<b>Low social-adjustive</b>	1.94	2.50
	<b>High social-adjustive</b>	2.95	2.56
	Slope of social-adjustive	$\beta = .51, p < .001$	$\beta = .03, n.s.$

Table 3

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

(in US\$)	“Ad-first”			“WTP-first”
	Social <i>M</i> (SD)	Non-social <i>M</i> (SD)	Generic <i>M</i> (SD)	Baseline Control <i>M</i> (SD)
“\$ Price Premium”	34.67 (28.42)	21.96 (14.30)	20.43 (12.13)	26.33 (28.83)
\$WTP for a Genuine Polo Shirt	45.12 (29.21)	34.76 (18.77)	31.35 (17.19)	37.3 (31.33)
\$WTP for a Counterfeit Polo Shirt	10.45 (8.81)	12.8 (9.61)	10.92 (16.41)	10.99 (9.45)

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

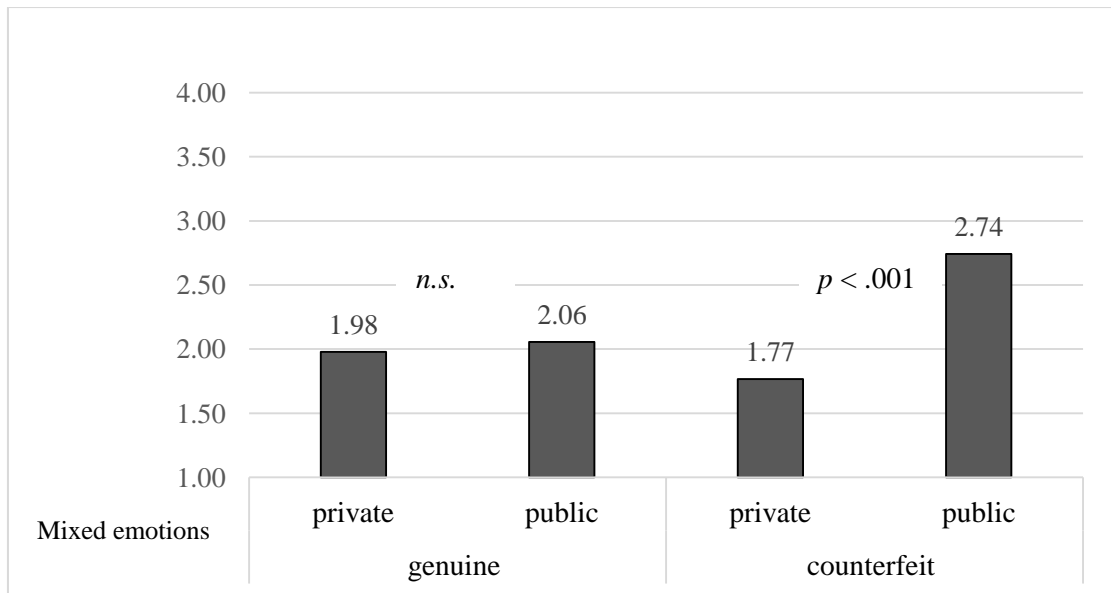


Figure 1B

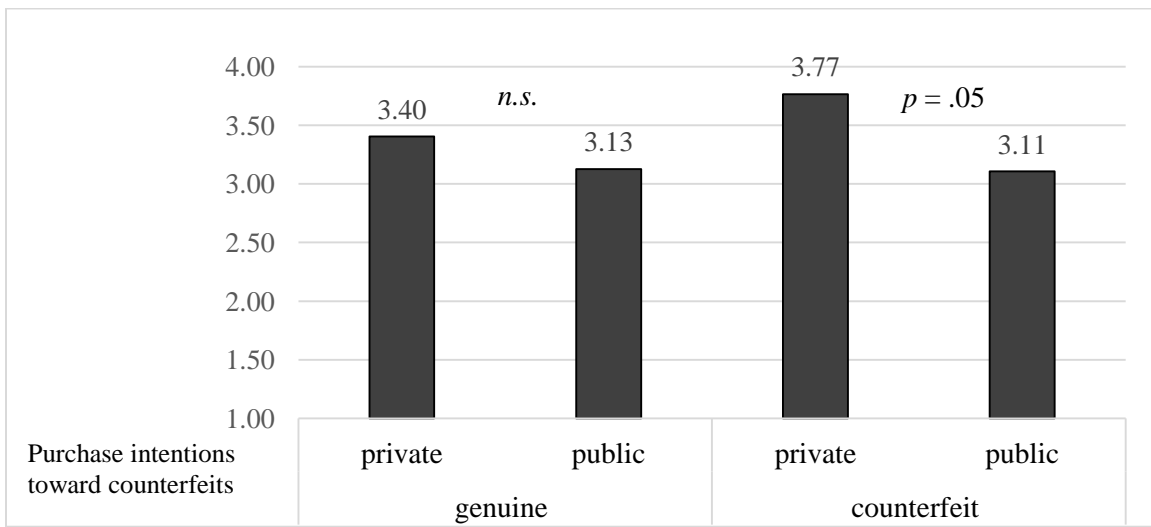


Figure 2

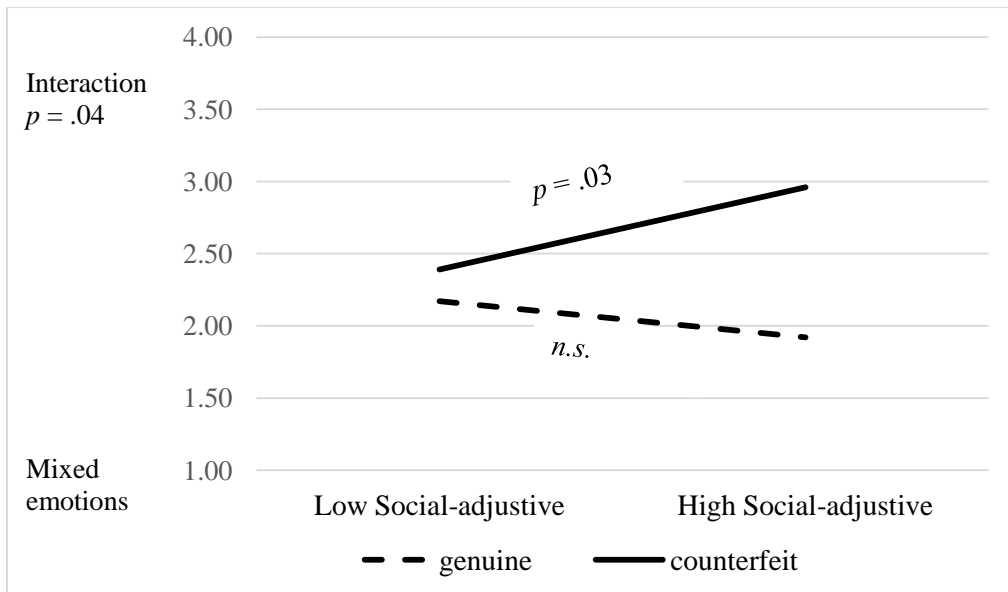




Figure 3A

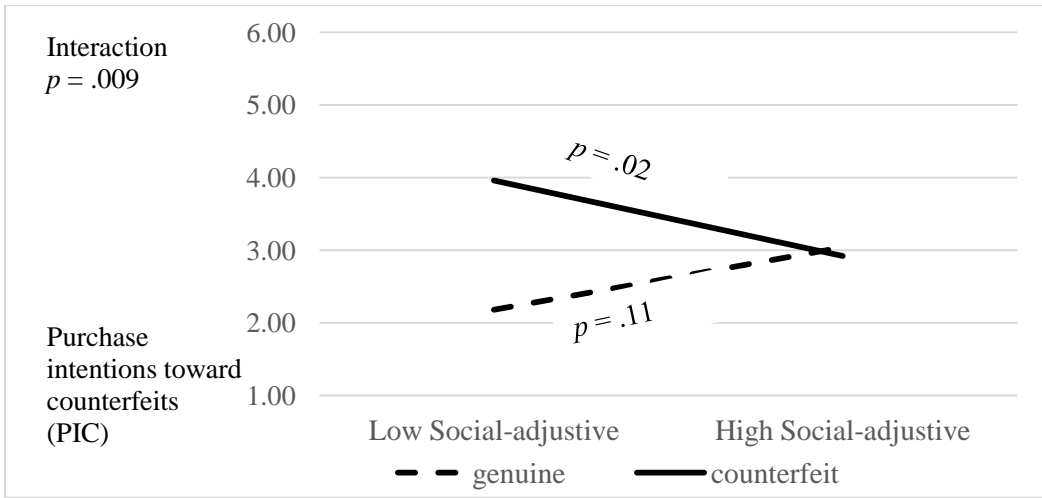


Figure 3B

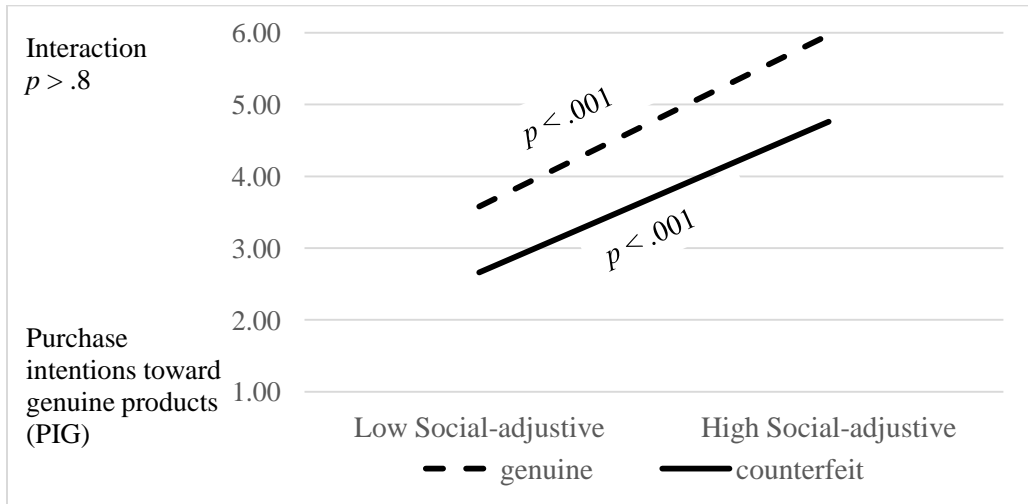


Figure 3C

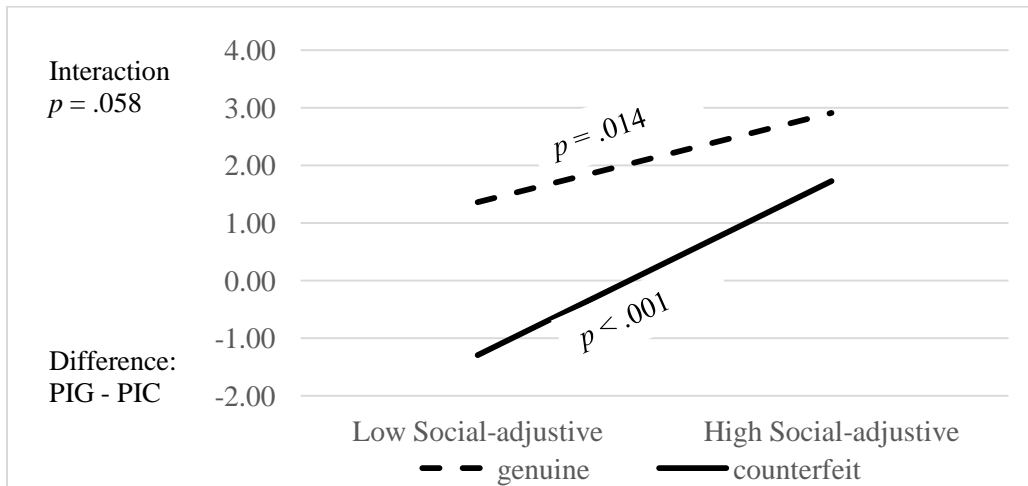


Figure 4A

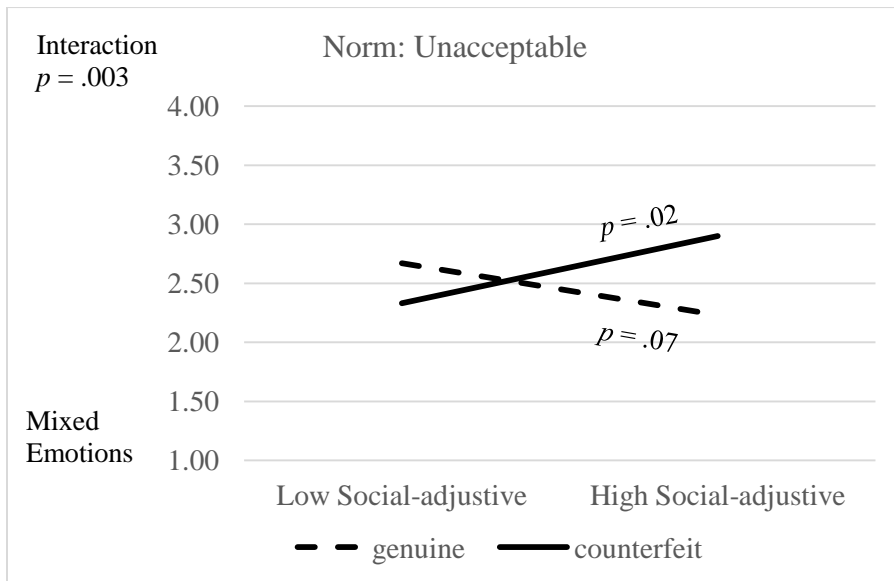


Figure 4B

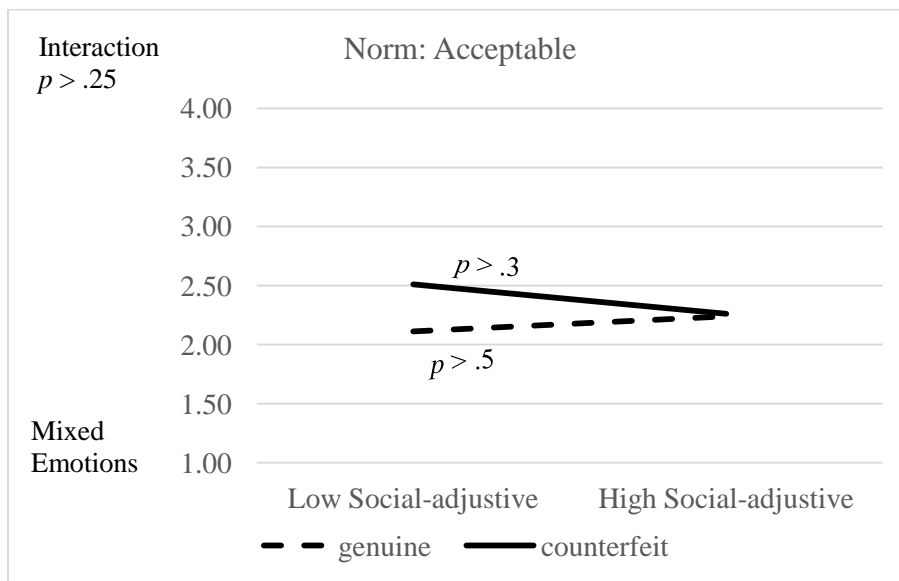
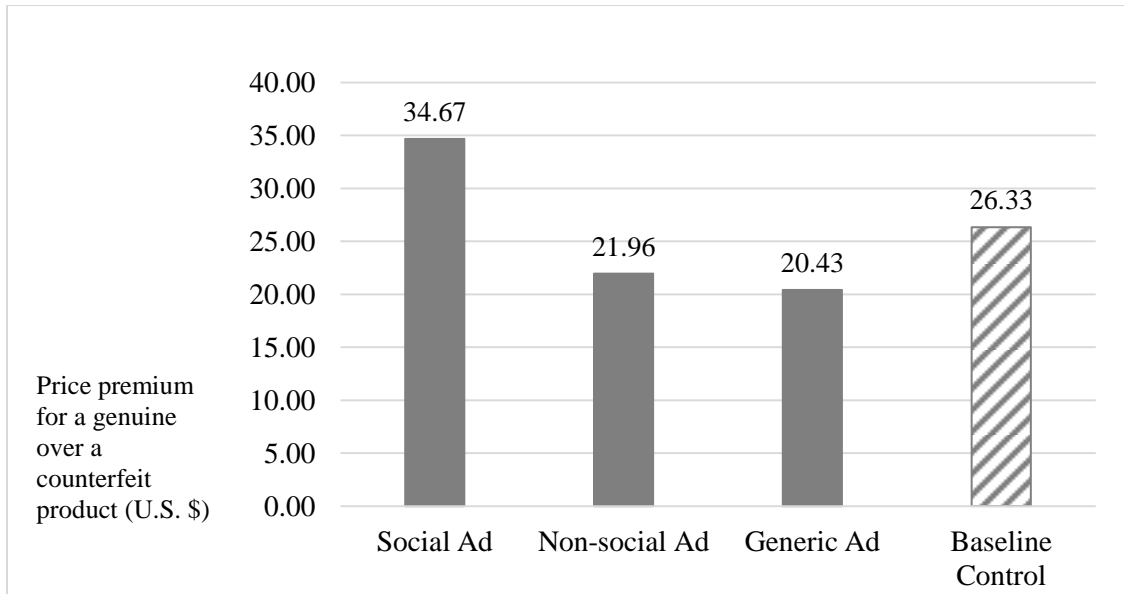


Figure 5



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".

Bags	Clothes
Shoes	Suitcases
Wallets	Glasses
Watches	Others (please list as many as applicable)
Jewelries	None
Cell phone/laptop cases	

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".

Stationary (pens, folders, etc)	Computer software
Slippers	Towels
Bedsheets	CDs
Coffee mugs	Others (please list as many as applicable)
Books	None
Movies	

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

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

### Sources of emotions in public and private consumption

	<b>Public</b>	<b>Private</b>
<b>Social approval</b>	<b>16%</b> , e.g. "I take pride when someone complements [compliments] the product based on the brand name."	<b>0%</b>
<b>Social judgment</b>	<b>23%</b> , e.g. "I was quite worried that others would discover that the product I was using wasn't authentic..."	<b>0%</b>
<b>Moral concerns</b>	<b>9%</b> , 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."	<b>13%</b> , 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."
<b>Low price</b>	<b>27%</b> , e.g. "Achieve the same effect with a low cost."	<b>32%</b> , e.g. "I feel good as it cost nothing."

## 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...”*

	1 = Not at all				5 = Very much
<b>Mixed Emotions Scale:</b>					
Ambivalent					
Good and bad (at the same time)					
Bothered					
Conflicted					
Discomfort					
Mixed Feelings					

### Positive and negative scales (studies 1-2)

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

	1 = Not at all				5 = Very much
<b>Positive Emotions Scale:</b>					
Happy					
Proud					
Good					
<b>Negative Emotions Scale:</b>					
Embarrassed					
Nervous					
Afraid					
Guilty					

#### **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



Non-social Ad



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?

Private  
0 ----- 100 Public

### 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)

Study	Sample	Sample size	Condition
A	Mturk	129 (44.2% female; $M_{age} = 35.3$ , $SD = 11.08$ )	Counterfeit
			Genuine
			Control: social interaction
B	University students	183 (61.7% female)	Counterfeit
			Genuine
			Control: non-branded product

#### ***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

Study	Mixed emotions items	Reliability ( $\alpha$ )	Means (SD)	Main effect results
A	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).	0.9	$M_{\text{counterfeit}} = 2.63$ (1.20)	ANOVA $F(2,126) = 8.22, p < .001$ . Counterfeit vs. genuine, $p = .06$ , counterfeit vs. control, $p < .001$ , genuine vs. control, $p = .03$ .
			$M_{\text{genuine}} = 2.19$ (1.11)	
			$M_{\text{control}} = 1.71$ (0.81)	
B	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).	0.85	$M_{\text{counterfeit}} = 4.02$ (1.48)	ANOVA $F(2,180) = 2.79, p = .064$ . Counterfeit vs. genuine, $p = .063$ , counterfeit vs. control, $p = .03$ , genuine vs. control, $p = .76$ .
			$M_{\text{genuine}} = 3.56$ (1.30)	
			$M_{\text{control}} = 3.48$ (1.31)	

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