

An Investigation of the (Not So) Painful Duality of Envy and Consumer Decision Making

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THESIS

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*Dedicated to Ma and Baba,
For teaching me the importance of perseverance and passion*

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SUMMARY

Previous research has suggested that envy can be either malicious or benign in nature. However, the understanding of benign and malicious envy is still in a nascent stage, particularly within the consumption context. Using previous research as foundation, which proposes that along with the experience of inferiority (envy related pain), envy can involve the experience of either positive (benign envy) or negative affect (malicious envy), this work aims to build a more comprehensive picture of experiencing envy and to investigate the associated consumption practices. Firstly, this work identifies and tests the influence of product attractiveness of the envied product. Secondly, this study investigates the moderating effect of deservingness of the envied target. This work also identifies an underlying process for the observed experiences. Finally, consumption consequences are investigated both within and outside the envy related context. This research therefore aims to develop a more holistic understanding of the phenomenon. More specifically, I investigate whether the type of envy experienced (malicious and benign) influences: (1) product choices in related domains, (2) actions directed at the envied person. By doing so, the work contributes not only theoretically to research on envy but also identifies applications within the marketing context.

1. INTRODUCTION

Comparison is ubiquitous in everyday social interactions. Particularly in the era of Facebook, Instagram, and Snapchat, consumers are constantly exposed to a stream of “carefully curated” and highly attractive stories about not only their immediate social circle but also the world at large. These images of perfection assure social scrutiny, particularly in domains relevant to the consumers’ own identities. Finding oneself lacking in these social comparisons can often lead to the experience of envy.

Traditionally envy has been assumed to be a highly negative emotion that is detrimental and deviant in nature (Parrott and Smith 1993; Schoeck 1987). It involves an upward comparison between two people in relation to the envied object and results in an experience of inferiority. For instance, a person (the actor, X) might be envious of his or her co-worker (the target, Y) because the co-worker received a performance bonus. This will result in the actor, X feeling inferior compared to the target, Y, in the workplace.

However, more recent research suggests that envy is a more complex emotion involving both positive and negative experiences (Belk 2011; van de Ven, Zeelenberg, and Pieters 2009). Along with the feeling of inferiority, envy can also include experiences of positive affect and constructive behavior resulting in emulative consumption, instead of the traditionally identified hostility (Belk 2011; Lange, Weidman, and Crusius 2018; Salerno, Laran, and Janiszewski 2018; Van de Ven, Zeelenberg, and Pieters 2011). For instance, even though “X” feels inferior, it is not always necessary that he or she would only feel hostile towards “Y”. X may also experience a more positive aspirational emotion.

Therefore, researchers have proposed two qualitatively different types of envy, malicious and benign envy, in addition to the experience of inferiority related pain (Falcon 2015; Lange et al. 2018; van de Ven et al. 2009; van de Ven, Zeelenberg, and Pieters 2012). Originally studied in the context of dispositional traits (Jens Lange and Crusius 2015; Parrott and Smith 1993), these dimensions of envy (benignness, maliciousness) have also been shown to be influenced by specific contextual experiences (Cohen-Charash 2009). Such temporary experiences of envy lead to different types of consumption behavior, including variations in brand choices (Kristofferson, Lamberton, and Dahl 2018a; Van de Ven et al. 2011) and goal striving (Salerno et al. 2018).

However, this growth in envy research hasn't been accompanied by an in-depth and comprehensive study of the construct, particularly in the consumption context (Belk 2011). A more extensive understanding of how the properties of the envied object influence the experience of envy is required. More specifically, while deservingness of the envied person and perceived control of the envier has been shown to influence the experience of different dimensions of envy (Van Damme et al. 2017; van de Ven et al. 2012), the impact of the envied object's attributes is not clearly understood. This understanding is important because, at the core, envy is the result of an interaction that revolves around a product/experience or rather the lack of it in the envier's life.

A second major gap in the existing research concerns the boundary conditions for the experience of envy, particularly in the consumption context. One moderating factor that has been identified is self-esteem. Self-esteem has been shown to moderate the expression of malicious envy through divergent brand consumption (Kristofferson,

Lamberton, and Dahl 2018a). However, a more nuanced exploration of moderating factors is required to gain a clearer understanding of the construct. This research focuses on the moderating influence of target deservingness. By doing so, the research sheds light on the interaction between two external factors which are critical to the experience of benign and malicious envy. Additionally, investigating the impact of target deservingness and product attractiveness is an opportunity to take a more nuanced look associated sense of injustice and unfairness experienced by the actor, allowing for a theoretical expansion of the underlying process.

Through this research I am also able to address the issue that benign and malicious envy is defined by their consequences, that is, benign envy is directed towards acquiring products, and malicious envy is associated with denigrating the envied person. This, however, may not always be true. For instance, Van de Ven et al. (2011) showed that people can also express malicious envy through divergent brand consumption. Thus, this implicit assumption that benign and malicious envy is defined by the person's consequent motivation (desire to emulate vs denigrate, own object vs cause harm to the envied person) is limiting and needs to be reexamined. By doing this we can build a broader and more flexible understanding of envy within the consumption context.

Finally, this research addresses issues related to consumption arising from the experience of envy and associated factors can lead to positive behavior both for malicious and benign envy. Research indicates that benign and malicious envy can lead to divergent consumption consequences, in different consumption contexts including brand choices (Van de Ven, Zeelenberg, and Pieters 2011), willingness to pay

(Kristofferson et al. 2018a) and goal pursuit (Salerno, Laran, and Janiszewski 2018).

Expanding on these works, this project explores the impact of envy on prosocial behavior outside of the immediate experience context.

By addressing these gaps, this work hopes to make four main contributions. Firstly, building on previous research (Cohen-Charash 2009a; Crusius and Lange 2014; Kristofferson et al. 2018a; Lange, Weidman, and Crusius 2018; Parrott and Smith 1993; Salerno et al. 2018), this work aims to disentangle the definitions of envy dimensions (malicious, benign) from their behavioral consequences. Secondly, this work investigates the impact of product attractiveness and deservingness of the envied person on the various dimensions of envy. By doing so, this project hopes to add to the understanding of how the envy triad (actor-product-target) influences the overall emotional experience. Thirdly, this study explores how envy influences various forms of target- and product-oriented responses within the consumption context.

For building this understanding of envy in the context of consumer behavior, I first start with a more detailed discussion of the contributions of this work. The second section provides an overview of the existing research and hypotheses development. The third section presents the initial empirical evidence supporting a subset of the hypotheses, while the fourth section proposes planned future studies. This is followed by the general discussion, limitation, and future research plans. In all of the sections, to avoid confusion, the envious person is addressed as the "actor" and the envied person is referred to as the "target".

2. LIMITATIONS OF EXISTING RESEARCH AND EXPECTED CONTRIBUTIONS

2.1 Investigating the Role of Product Attractiveness

Research on envy is silent about how product characteristics influence the experience of benign and malicious envy. Previous works implicitly assume that the envied product needs to be desirable for the actor to experience envy (Lange et al. 2018; Parrott and Smith 1993). However, this may not always be the case. For instance, the actor “X” might not find the bonus the co-worker “Y” received desirable but still feel envious because the co-worker received a reward in a domain relevant to “X”’s identity. This is further supported by popular media reports (Zamon 2015) and research on ugly products (Grewal et al. 2019) which indicate that products that don't conform to the standard aesthetic stereotypes can still be popular with consumers. Therefore, it is necessary to understand how product attractiveness interacts with target deservingness in the experience of the different types of envy. This study aims to understand this by investigating the effects of product attractiveness on envy.

2.2 Investigating the Moderating Role of Target Deservingness

Previous research indicates that benign envy results in behavior directed at the envied object while malicious envy primarily facilitates target-oriented behavior (Crusius and Lange 2014). However, the interaction between target deservingness and product attractiveness is not clear. That is, previous research does not provide a clear indication of how target deservingness will moderate the influence of product attractiveness on the

experience of envy and the differences between the experience of benign and malicious envy. It is crucial to understand the combined role played by target deservingness and product attractiveness because, of the triad of factors that influence envy, these two are external motivators that are not in control of the envier. Therefore, they can unforeseen consequences as a result of the variations in the perceived injustice and unfairness in the upward social comparison which leads to the experience.

2.3 Identifying How Perceived Unfairness Drives the Interaction.

In addition to the above discussed goals, this project is also designed to identify the underlying mechanism which may explain the consequences of target deservingness and product attractiveness interaction. Research on goal and resource complementary suggests that if multiple types of information are available, people are likely to use information that is most complementary to their goal first before other types of information. Therefore, another purpose is to understand which type of information is most relevant for the experience. Since target (un) deservingness relates to the social interaction more directly than the product attractive, this study postulates that people use the two sets of information sequentially. That is, first people, see if target deservingness provides enough information to determine whether some form of injustice/unfairness has occurred. If the information is not sufficient, they then factor in product attractiveness in determining their experience.

2.4 Differentiating between Experiencing Envy and Consequent Consumption Behavior

Research shows that people regulate expression of envy (Parrott and Smith 1993), however, it is not clearly understood how the regulation differs between malicious and benign envy, that is, do individuals who experience malicious envy always engage in target-oriented denigrating behavior. This is critical because there are different social norms associated with these two types (van de Ven, Zeelenberg, and Pieters 2009), and the resulting behavior can change based on various intrinsic and extrinsic factors. Therefore, this study explores conditions under which people might regulate expression of envy by studying various moderating factors.

2.5 Identifying the Consequences of Experiencing Envy

Research suggests that people engage in emulation when experiencing benign envy and denigration when experiencing malicious envy. Originally, research indicated that emulation was usually product-oriented and denigration was target oriented. However recent work has suggested that behavioral expression of malicious and benign envy can be both product and person-related. Along with studying these within-category and immediate consequences of experiencing envy, this work also investigates downstream and unrelated consumption consequences.

3. THEORETICAL BACKGROUND

Envy involves "displeasure and ill will at the superiority of [another person] in happiness, success, reputation, or the possession of anything desirable" (Schoeck 1987). More specifically it is the complex emotion emerging from the interaction between a person, the envier who experiences envy, (referred to as the actor), the object that provokes envy (e.g. products, experiences, etc.) and the person, the envied, (referred to as the target) (Belk 2014; Lange et al. 2018). It is characterized by the actor experiencing a sense of inferiority as a result of upward social comparison with the target in a context central to the actor's self-concept (Belk 1985, 2011; Hill, DelPriore, and Vaughan 2011; Lange et al. 2018; Miceli and Castelfranchi 2007; Parrott and Smith 1993; Van de Ven et al. 2011; van de Ven et al. 2009).

This experience of envy can be either dispositional (Jens Lange and Crusius 2015; Smith et al. 1999) or contextual (Cohen-Charash 2009a) in nature. Both dispositional and episodic envy can be either malicious or benign (Falcon 2015; Jens Lange and Crusius 2015; Lange et al. 2018; van de Ven et al. 2009; van de Ven, Zeelenberg, and Pieters 2012). In distinguishing between the two types of envy, a large section of the research has depended on the "Pain theory of Envy" and suggested that benign and malicious envy are constructive and destructive motivations respectively, which result from differences in the appraisal of actor and target characteristics, like the actor's control over the situation and the target's deservingness (Cohen 2009, Cohen 2017a, Cohen 2017b, Tai et al 2012, Ven 2012).

The Pain theory identifies three aspects of experienced envy: 1) Pain, 2) Maliciousness & 3) Benignness (Lange et al. 2018). Pain is a "preoccupation with the

envy eliciting situation, inferiority" (Lange et al. 2018, pg.1). The actor experiences this inferiority related pain when he or she doesn't have the envied object owned by the target. This preoccupation is central to the experience of envy and is always present, irrespective of whether the envy is malicious or benign. For instance, if the co-worker "Y" (target) receives a performance bonus, to be envious, the actor "X" has to be preoccupied with his/her sense of inferiority. This preoccupation is defined as envy related pain and is present irrespective of whether the actor experiences additional positive or negative affect.

In addition to the experience of inferiority-related pain, actors can either experience the malicious dimension or the benign dimension. Malicious envy is described as the experience of negative affect like hostility, aggression, and negative motivation (Lange et al. 2018). For instance, along with experiencing inferiority related pain, the actor "X" can also feel angry with the target (coworker Y).

Alternatively, the actor can also experience a benign form of envy in addition to the inferiority-related pain. That is, instead of experiencing resentment and hostility, the actor "X" might experience aspiration, happiness, and constructive motivation. Whether the actor will experience malicious or benign envy is often determined by whether the target is considered deserving of the quality/possession and the actor's lack of control over the context (van de Ven et al. 2012). When the target is underserving and the actor lacks control, the actor is more likely to experience malicious envy. On the other hand, benign envy is experienced because the target is considered to be deserving of the quality/possession and the actor has a perceived ability to change the situation (van de Ven et al. 2012). While inferiority related pain is central to the experience both malicious

and benign envy, for this project, I primarily focus on malicious and benign envy because it is often difficult to separate the pain from the experience of the two types of envy (Lange et al. 2018; van de Ven et al. 2012).

Studies on malicious and benign envy are silent on the role of product attractiveness, that is, the attractiveness of the envied object which is critical to the envy triad (actor-object-target) (Belk 2011). However, changes in product attractiveness have been shown to influence emotional experiences and associated consumer decisions (Kristofferson et al. 2018a; Salerno et al. 2018; Van de Ven et al. 2011). For this reason, one of the main purposes of this study is to investigate the influence of product attractiveness on the experience of the two types of envy and its interaction with target deservingness.

Building on previous work, this research investigates firstly the effect of product attractiveness on the experience of malicious and benign envy. As a next step, the moderating effect of target deservingness is explored. I also study the importance of process and outcome fairness as an underlying explanation for the observed phenomenon. Finally, the project investigates how malicious and benign envy influence downstream decision-making practices particularly relating to prosocial behavior.

In the following section, I provide an overview of the existing research and develop predictions for the proposed theoretical model. These include a discussion of a comparison with other emotions, the hypothesized antecedents, consequences, and moderating factors.

3.1 Distinguishing Envy from Other Emotions

Envy is a negative self-conscious emotion which is a result of upward social comparison and longing for a product (Salerno et al. 2018). It involves self-evaluation on the basis of comparison with another person. While embarrassment, shame and guilt are a result of violating social norms and being therefore judged (Leary 2007), envy is a result of a comparison with a person over an object (Lange et al. 2018; Parrott and Smith 1993; Salerno et al. 2018).

A closely related emotion is jealousy (Clanton 2006; Parrott and Smith 1993). In popular media, envy and jealousy are used interchangeably. This is particularly true for malicious envy which has often been shown to co-occur with jealousy (Parrott and Smith 1993). However, these are distinct emotions. While envy involves a “sense of inferiority and longing” (Parrott and Smith 1993, 917), jealousy was characterized by a “fear of loss or reject” (Parrott and Smith 1993, 917). Usually, envy involves the appraisal of a lack of an object the envied target has and the actor lacks. On the other hand, jealousy is more focused on the appraisal of fear of losing a relationship to a rival (Clanton 2006; DeSteno and Salovey 1996; Parrott and Smith 1993).

While the malicious envy is more closely aligned with jealousy, benign envy has often been compared to admiration in terms of the end goals of emulation (van de Ven 2017; van de Ven, Zeelenberg, and Pieters 2011; van de Ven et al. 2012). However, research shows that benign envy outperforms admiration in terms of motivation for improving oneself (van de Ven et al. 2011, 2012), because while admiration leads to a happy approval of the target’s achievement, benign envy leads to frustration and self-assertion (van de Ven 2017; van de Ven et al. 2011, 2012). Therefore, when the actor

has control over the situation and there is an opportunity for self-improvement, people experience benign envy. In the absence of these factors, admiration is experienced (van de Ven et al. 2011).

Therefore, it can be concluded that envy is a unique emotion which can be clearly distinguished from other negative emotions both in terms of being self-conscious and being a result of sense of longing as a result of upward comparison with the target of the envy. Taking this position, in the following sections I provide an overview of the postulated variables, and their relationship with the malicious and benign envy.

3.2 Effect of Product Attractiveness

For this work, product attractiveness is described as the attractiveness of the envied object. Product attractiveness plays a crucial role in consumer decision making. Research suggests that perceived product attractiveness is influenced by a multitude of factors including context (Schnurr, Brunner-Sperdin, and Stokburger-Sauer 2017), scarcity (Gierl and Huettl 2010; Verhallen and Robben 1994), product design (Batra 2009), and price (Janiszewski and Cunha 2004; Khan and Dhar 2010).

Product attractiveness, as a crucial driver of consumption, also influences both positive and negative emotional reactions (Bagozzi, Gopinath, and Nyer 1999; Chitturi, Raghunathan, and Mahajan 2007; Lee, Ha, and Widdows 2011; Sherman, Mathur, and Smith 1997; Watson and Spence 2007). However, previous work is silent on the importance of product attractiveness for experiencing benign and malicious envy (Cohen-Charash 2009b; Smith et al. 1999; van de Ven et al. 2012). This is because it is implicitly assumed that the experience of envy depends on the inherent attractiveness

of the product which leads to an increased longing for this object the actor doesn't have but desires. Within the consumption context, this is usually about a product or an experience that is perceived to be relevant to a domain which is important to the actor. (Rodriguez Mosquera, Parrott, and Hurtado de Mendoza 2010).

Research on product and experience design (Landwehr, Wentzel, and Herrmann 2013; Langlois et al. 2000; Townsend and Shu 2010; Townsend and Sood 2012) suggests that people respond more positively to products which are more beautiful (Townsend and Sood 2012) and typical of their category (Landwehr et al. 2013; Veryzer and Hutchinson 1998). Aesthetically pleasing products are more likely to be purchased (Langlois et al. 2000; Veryzer and Hutchinson 1998), are more desirable (Townsend and Shu 2010; Townsend and Sood 2012) and lead to stronger emotional reactions (Desmet and Hassenzahl 2012; Howard and Gengler 2001; Sundie et al. 2009). Therefore, it is postulated that product attractiveness would have a direct and positive effect on malicious and benign envy, that is, people would experience more malicious and benign envy when then the product is attractive compared when it is unattractive. To summarize:

H1a: Product attractiveness will positively affect the experience of benign & malicious envy.

3.3 Effect of Target Deservingness

Social comparison is integral to experiencing envy. One consequence of such social comparisons is a judgment of deservingness, that is, an evaluation of whether the

targets' action and the outcome are in sync (Feather, McKee, and Bekker 2011). For instance, an employee who works hard deserves the performance bonus he/she receives but an employee who is rewarded even though he/she is lazy is perceived to be undeserving. Deservingness influences behavior such as consumer indulgence (Cavanaugh 2014), reactions to crime-related penalties (Feather 1999; Feather et al. 2011), judgment of punishment appropriateness (Callan, Ellard, and Nicol 2006) and social welfare (Oorschot 2006).

Target deservingness also strengthens various emotional reactions like anger & resentment when the action is not followed by appropriate outcomes (Feather et al. 2011), that is, the actor "X" will more likely be angry if the co-worker does not deserve the performance bonus.

Deservingness also plays an important role in determining the experience of envy (Ben-Ze'ev 1992; Lin and Utz 2015; van de Ven et al. 2012). Particularly, target deservingness determines whether the actor experiences malicious or benign envy (van de Ven et al. 2012). For instance, in a set of studies, Van de Ven et al. (2012) found that when a co-worker (the target) didn't deserve the raise they received, participants (the actors) were more likely to experience malicious envy.

Even though deservingness determines the experience of malicious and benign envy, the extant literature treats the experience of the two types of envy as being binary, that is, when the target is underserving, actors experience malicious envy and deservingness is associated with benign envy experiences. Building on the foundation of previous work, it is predicted that target deservingness would positively affect the

experience of benign envy. On the other hand, malicious envy will be negatively affected by target deservingness.

H1b: Target Deservingness will positively (negatively) affect the experience of malicious (benign envy).

3.4 Product Attractiveness and Target Deservingness

An increase in product attractiveness usually strengthens the experience of envy. This is driven by an increase in product-related longing. However, a growing body of research shows that people often can be motivated to purchase atypical products which would not be considered aesthetically pleasing on the usual normative dimensions (Grewal et al. 2019).

Companies have developed marketing strategies to sell products that otherwise would be wasted because they aren't attractive looking (Zamon 2015). In a set of studies Grewal et al (2019), found that self-esteem boosting messaging helps motivate consumers to buy unattractive products because it enhances positive self-perception of consumers.

Similarly, there are situations in which the actor might experience malicious and benign envy even though the object of envy is itself not attractive. For instance, when the co-worker "Y" earns a bonus which isn't otherwise attractive for the actor "X", it might still lead to him/her experiencing malicious or benign envy. Based on previous research, it is argued, that target deservingness will determine how the effect of product attractiveness impacts the experience of envy.

When target deservingness is low, the upward social comparison always leads to an experience of envy. Research shows that experience of emotions depends on the associated goal and the resources which are most complementary to achieving that goal ((Leventhal, Karuza, and Fry 1980; Shaddy and Shah 2018), Leventhal, 1980). The central factor for envy related upward comparison is a sense of inferiority which is experienced by the actor. Knowing whether the target's work is deserving of the reward is essential for making this determination. Therefore, in situations when both information about target deservingness and product attractiveness is available, people's experience of envy is less likely to be impacted by product attractiveness when the target is underserving. However, when the target is deserving the information isn't enough to determine the experience, and therefore the relevance of product attractiveness increases. To summarize it is hypothesized:

H2a: When target deservingness is high (low), product attractiveness will positively affect (not affect) the experience of benign envy.

H2b: When target deservingness is high (low), product attractiveness will negatively affect (not affect) the experience of malicious envy

3.5 Perceived Unfairness as an Underlying Mechanisms

The experience of envy is related to the actor's sense of injustice and being unfairly treated which is determined by the target deservingness and the product attributes. While, the target deservingness is used by actor as an indicator of whether

the process of making the decision was fair, the product attribute is indicative of whether the outcome is in accordance with the person's performance. That is, envy which is the result of complex interpersonal interactions, is driven by two types of fairness are highly relevant; (i) process fairness, which is described as the fairness of the process (Brockner, Wiesenfeld, and Diekmann 2009) and (ii) outcome fairness which "refers to the degree that an outcome is consistent with, or can be justified by, a referent standard" (Skitka, Winkler, and Hutchinson 2003, 311).

Previous research indicates that acts of perceived unfairness influence the dynamics of both professional and personal relationships (Colquitt et al. 2013; Grote and Clark 2001). Both process and outcome (un)fairness have been shown to influence social exchange relationships (Colquitt et al. 2013), trust in personal relationships (Grote and Clark 2001), trust in authorities (Bianchi et al. 2015), etc. Within marketing and consumption context, different types of fairness have been associated with brand consumption (Aggarwal and Larrick 2012), and service rejection (Hui et al. 2004) among others.

Additionally, in line with outcome-focused and process-focused goal pursuit which suggests that depending on the focus, people are more likely to focus on the outcome or process (Bagozzi and Dholakia 1999; Salerno et al. 2018). The change in focus and the determination of whether there is any form of associated experience of any unfairness often leads to the experience of negative emotions in the consumption context (Aggarwal and Larrick 2012; Namkung and Jang 2010).

When an interpersonal interaction leads to the experience of envy, it is often associated with a sense of being treated unfairly as a result of upward social

comparison (Cohen-Charash 2009b; Lange et al. 2018; Smith et al. 1999; van de Ven et al. 2009). This feeling might be a result of the process were by an undeserving person was rewarded (process fairness), or the result of the reward attributes not matching the target's work (outcome fairness). As previously discussed, target deservingness which is used to judge the process fairness is more relevant when comparison is made within a relevant identity domain (Shaddy and Shah 2018).

Further research indicates that between the two types of fairness, process fairness is dominant, that is, when information about both process and outcome fairness is available, people would be more likely to use the information about the process than the outcome (Brockner 2002; Trautmann and van de Kuilen 2016). For instance, in a workplace, when a co-worker is rewarded, despite not working hard, the actor is likely to experience envy even if the reward is unattractive because the process was unfair. When the process is fair, that is for example the coworker deserves the reward, attractiveness of the reward determines the judgment of fairness and experience of envy. Therefore when the target is deserving but is rewarded unattractive, the outcome unfairness drives people to experience the higher levels of destructive motivation associated with malicious envy compared to when the product is attractive and therefore in line with the hard work put in by the deserving coworker.

Therefore, if the actor's attention is drawn to a specific set of information (product attractiveness vs target deservingness), this preference should be reversed. That is, it is argued, that even when the target is undeserving, if people's attention is focused on the outcome, their experiences of malicious and benign envy will start to be influenced by the attractiveness of the product which is indicative of the associated outcome fairness.

This will lead the target to the experience of more malicious and benign envy when the reward is attractive, and the target is deserving. When the target is deserving, information about process fairness is not enough to determine whether the actor should experience envy. Therefore, actor uses information about the outcome (reward) to determine their experience. However, when the actor's attention is drawn to the deservingness of the target and the fairness of the process, it will attenuate the influence of the outcome related information.

For instance, if a target coworker hasn't worked hard and doesn't deserve a bonus, under normal circumstances the actor will experience the same amount of benign, and malicious envy for both attractive, and unattractive product. However, when the actor specifically focuses on the outcome attractiveness, he/she will experience a higher level of malicious and benign envy for attractive product even when the target coworker is undeserving. On the other hand, when the target coworker has worked and deserves a bonus, under normal circumstances, the actor will experience more malicious envy when the product is unattractive than when it is attractive, suggesting that they experience a destructive motivation because the reward isn't representative of the hard work. However, when their attention is drawn to the fairness of the process this difference will disappear. Similarly, for benign envy, when their attention is drawn to the process, the difference between the attractive and unattractive products will disappear. To summarize it can be hypothesized that:

H3a: When target deservingness is low, and people are focused on the outcome fairness, they will experience more malicious & benign envy when products are

attractive compared to when they are not attractive. No such difference will be seen when the focus is on the process.

H3b: When target deservingness is high, and people focus on the outcome fairness people will experience more (less) malicious envy (benign envy) for unattractive products compared to attractive products. This difference will disappear when people focus on process fairness.

3.6 Consequences of Experiencing Envy

Behavioral consequences of experiencing malicious and benign envy are often different (Kristofferson, Lamberton, and Dahl 2018b; Salerno et al. 2018; Van de Ven et al. 2011). Malicious envy, which involves experiencing negative emotions, results in the actor desiring to denigrate the target (Lin and Utz 2015; Van de Ven et al. 2011). On the other hand, benign envy is an experience of positive affect and is often expressed through emulative behavior (Belk 2011; Crusius and Lange 2014; J. Lange and Crusius 2015; Lange et al. 2018; Parrott and Smith 1993; Van de Ven et al. 2011).

The malicious and benign dimensions of envy also influence consumption decisions. For instance, in a set of studies, Van de Ven et al. (2011) found that when people experienced malicious envy, they often preferred the same products as the target but diverged on the choice of brands. This, however, is moderated by the actor's self-esteem, that is, the divergence only occurred when the actor had low self-esteem (Kristofferson et al. 2018b). Further, research indicates that benign envy activates a process-oriented mindset which results in an increased desire for products that enhance

the process of self-improvement (Salerno et al. 2018). In comparison, malicious envy, which activates an outcome-oriented mindset, increases interest in products that emphasize outcome related framing (Salerno et al. 2018).

Therefore, based on the existing research, it can be predicted that benign envy is associated with positive motivation and desire to engage in constructive and positive behavior. Expanding on the previous work, along with emulation through product ownership, as predicted by previous research (Belk 2011; Lin and Utz 2015; Van de Ven et al. 2011), emulation (or desire to emulate) the target's behavior can be through engaging in positive mimicry such as engaging in prosocial behavior. For instance, if the actor "X" experiences benign envy, it is likely that along with trying to take the same trip as the target "Y", he or she will also try to emulate "Y"'s behavior in other domains like prosocial behavior. On the other hand, malicious envy, which is characterized by negative emotions, will result in denigration of both the target and the product. That is if the actor "X" experiences malicious envy, it is likely that along with complaining about the target, X will try to avoid using similar brands as the coworker "Y". Further, the actor would be more likely to disengage from downstream emulative behavior, such as being donating and associated prosocial behavior.

This is supported by previous research which suggests that engaging in prosocial behavior in a critical type of mimicry (van Baaren et al. 2004; Tanner et al. 2008). For instance, in a set of studies, Stel et al (2007) found that when people mimicked others, they were more likely to donate. Therefore, it is predicted that people would engage in distancing and emulative behavior not only in the immediate contexts but in other disassociated situations that are not related to the immediate reward.

Further, it is predicted that the target deservingness and product attractiveness will have an indirect influence on the choice to emulate and denigrate through the experience of benign and malicious dimensions of envy. That is, the experience of envy itself will not be characterized by the motivation to denigrate or emulate but will mediate the relationship between the predictors (target deservingness and product attractiveness) and the emulation and denigration decisions at both the product and the target level.

H4a: As benign envy (malicious envy) increases (decreases), emulative behavior will also increase.

H4b: Effect of product attractiveness and target deservingness on emulative behavior is mediated by the experience of benign and malicious envy.

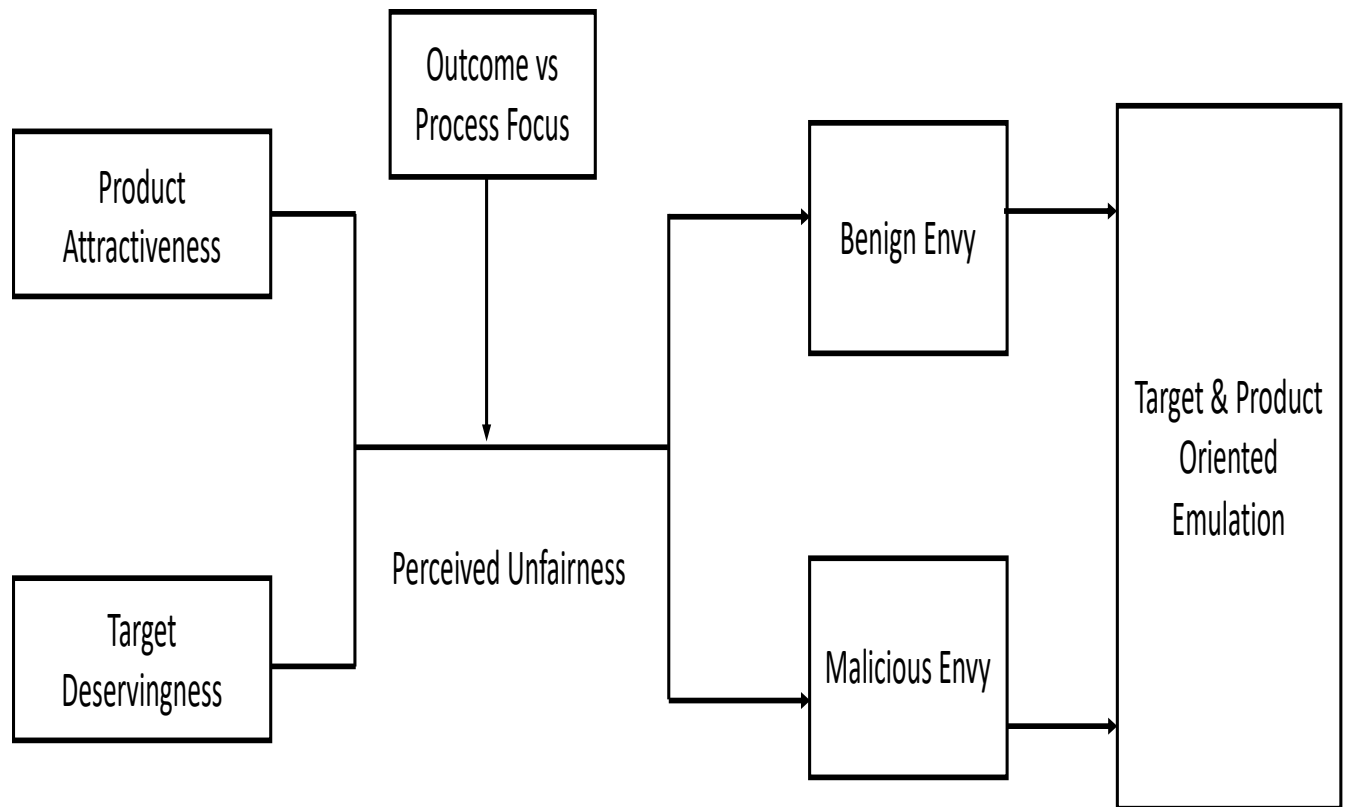


Figure 1. Theoretical model

4. EMPIRICAL STUDIES

4.1 Study 1a

This study is designed to investigate the effect of target deservingness on the experience of malicious and benign envy. Based on previous research, it is hypothesized that deservingness would negatively influence the experience of malicious envy and positively influence the experience of benign envy.

Method

To understand the effect of deservingness on envy, the between-subject experiment used two conditions (High deservingness vs Low deservingness). Data was collected from 198 Amazon mturk workers (approximately 63% were female) with a mean age of 36.26 years (SD=11.04).

Procedure

Participants read a scenario in which they were asked to imagine that their co-worker had received a performance bonus. In the high deservingness condition, the co-worker was described as being hardworking and therefore deserving the bonus. In the low deservingness condition, the co-worker was described as not being hardworking and thus not deserving the bonus (Stimuli in Appendix). Participants were informed that the co-worker used the bonus to buy a sound system for his home. The gender of the participant and the co-worker were matched to avoid gender-related perception biases.

After reading one of the scenarios, participants were asked to respond to a set of 12 questions (included in the Appendix) about maliciousness, and benign envy. These were adapted from previous research (Lange 2018). However, unlike previous studies, the questions were about the overall situation rather than being a target- or product-oriented. This was done to avoid anchoring participants to a specific mindset. These were followed by attention checks and data quality questions were asked and participants were debriefed.

Results

A manipulation check indicated that the deservingness manipulation worked. Participants in the high deserving condition found the described co-worker to be significantly more deserving than those in the low deserving condition ($\text{Mean}_{\text{high}}=6.32$, $\text{Mean}_{\text{low}}=2.73$, $p<0.001$). There was no gender difference in perceived deservingness ($\text{Mean}_{\text{female}}=4.46$, $\text{Mean}_{\text{male}}=4.68$, $p=.516$).

Based on previous research, two types of envy were identified, benign and malicious envy (Lange 2018). Benign envy was calculated by summing the emulation, positive feeling, and longing scores (Cronbach alpha=.545). Finally, malicious envy was calculated by summing the scores for anger, hatred, aggression, and hostility (Cronbach alpha= .894). Participants were also asked to respond to a direct question about experiencing envy.

Controlling for interest in music and technology, an independent sample t-test showed that target deservingness had a significant negative effect on the experience of envy ($\text{Mean}_{\text{High}}=3.52$, $\text{Mean}_{\text{Low}}=4.43$, $p=0.000$). Further deservingness negatively affected the experience of malicious envy ($\text{Mean}_{\text{High}}=2.51$, $\text{Mean}_{\text{Low}}=3.87$, $p=0.00$). While the effect of deservingness on the benign dimension was not significant ($\text{Mean}_{\text{High}}=4.29$, $\text{M}_{\text{Low}}=4.07$, $p=.195$), however, deservingness positively affected the desire to make positive changes ($\text{Mean}_{\text{High}}=5.15$, $\text{Mean}_{\text{Low}}=4.399$, $p=0.001$) which is associated with the experience of benign envy. These results provide partial support for hypotheses H1c was partially supported.

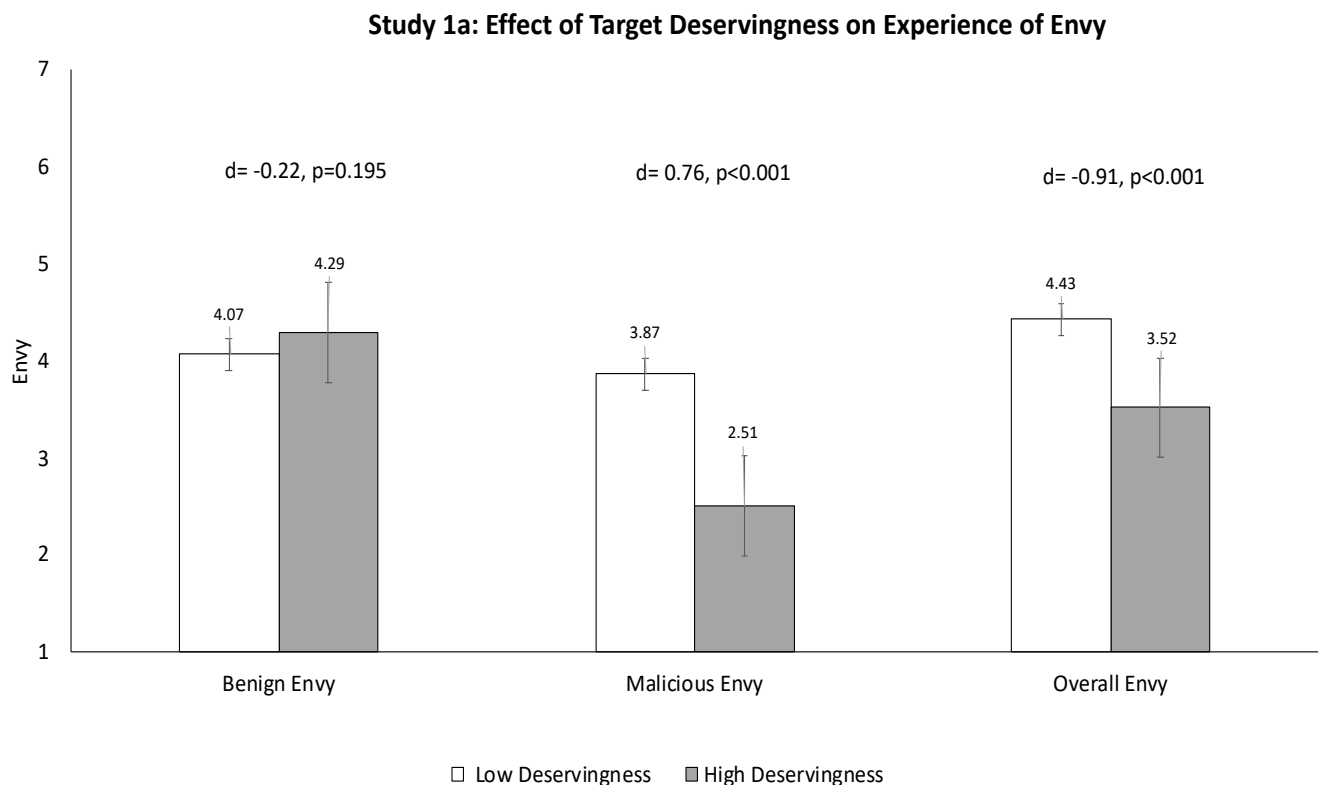


Figure 2. The effect of target deservingness on envy.

4.2. Study 1b

The purpose of this study was to replicate and confirm the previous findings with a different product category. Further, the study is designed to investigate the effect of product attractiveness on the experience of malicious and benign envy.

Procedure

A simple between-subject experiment with two conditions of Deservingness (high vs low) was used to investigate the research question. Attractiveness was measured using a 7-point Likert scale. Data was collected from a total of 201 Amazon Mturk participants ($M_{age}=37.399$, $SD=12.15$, Female=125). The procedure was identical to that of the previous study. Only a different product (purchase of business class plane tickets) were used for this study.

Results

A manipulation check showed that perceived target deservingness was significantly higher in the “high deservingness” condition compared with the “low deservingness” condition ($Mean_{High}=6.43$, $Mean_{Low}=2.42$, $p=0.000$). As with the previous study, there was no influence of gender on perceived deservingness ($Mean_{Female}=4.44$, $Mean_{Male}=4.33$, $p=.766$).

Similar to study 1a, Benign Envy ($Alpha=.594$) was measured using 3 items each. For maliciousness, a 4-item measure ($Alpha=.909$) was developed. Controlling for interest in traveling, deservingness had a significantly negative effect on the experience of overall envy ($Mean_{High}=4.00$, $Mean_{Low}=4.57$, $p=0.023$). Target deservingness significantly influenced experience of malicious ($Mean_{High}=2.45$,

Mean_{Low}=4.02, $p=0.00$), and benign envy (Mean_{High}=3.99, $M_{Low}=4.43$, $p=0.017$). These provide support for Hypotheses H1c.

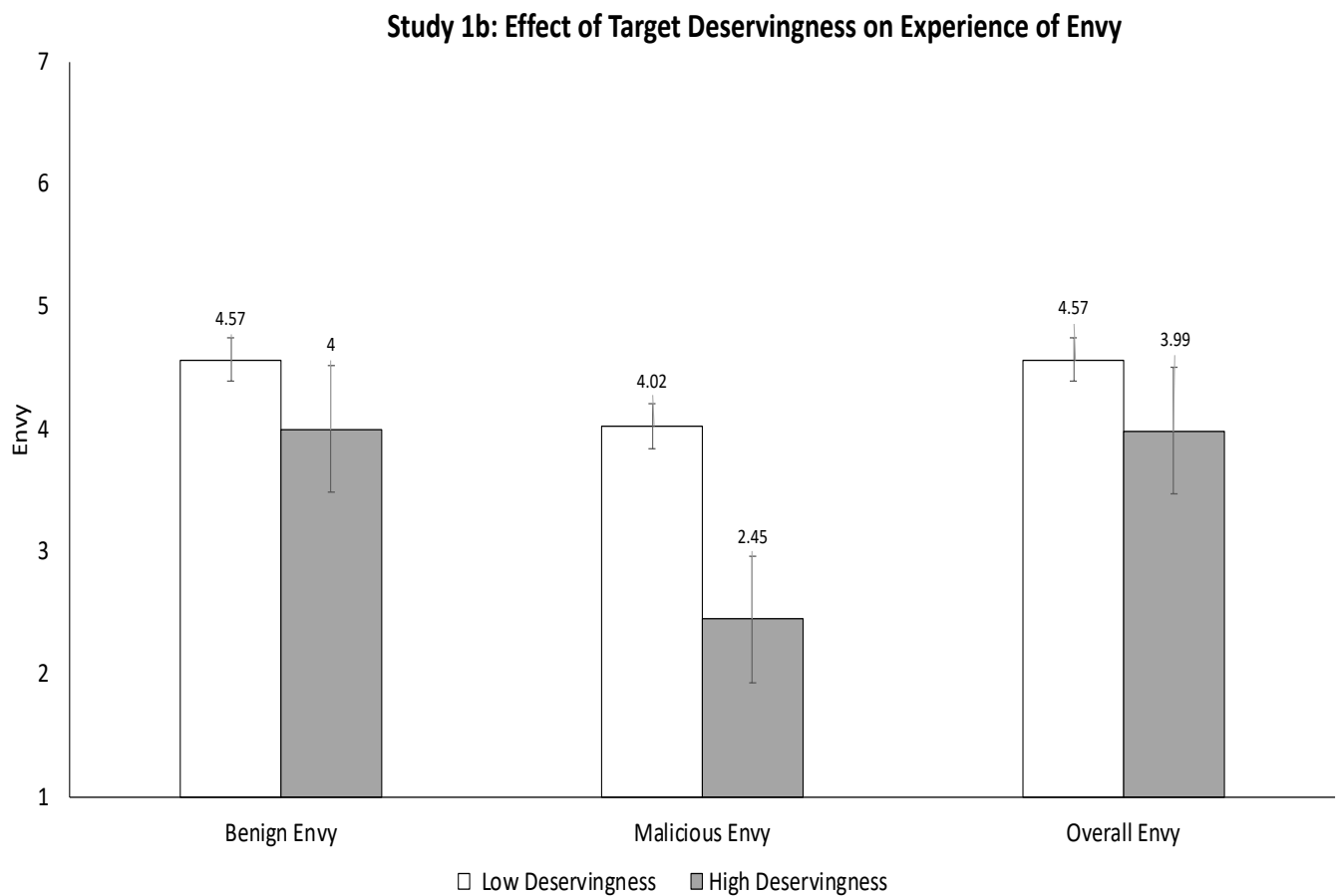


Figure 3. The effect of target deservingness on envy.

Regression analyses showed that product attractiveness significantly influences the experience of overall envy ($B=.284$, $p=.000$), and benign envy ($B=.175$, $p=0.001$).

Attractiveness did not influence malicious envy ($B=.039$, $p=.552$). Thus, only hypotheses H1a was supported. A floodlight analysis revealed that deservingness had a significant influence on envy at mean attractiveness (5.41) +1SD (7.10) ($p=0.00$) envy. When deservingness was low, the experience of envy increased linearly with increase in attractiveness. However, when deservingness was high, the experience of envy first increased with increase in attractiveness and then plateaued as attractiveness continued to increase.

Discussion

In line with previous studies and supporting our prediction, studies 1a and 1b show that more deserving the target is perceived to be, lesser is the experienced malicious envy experienced by the actor. On the other hand, deservingness has a positive influence on aspects of experiencing benign envy. One drawback of these studies is that product attractiveness was not manipulated. Also, a more detailed focus on benign and malicious envy is required. These are addressed in the following studies.

4.3. Study 2

The second study had two purposes. Firstly, it aimed to investigate the effect of perceived target deservingness on product and target-oriented behavior as a result of experienced envy. Secondly, the study was also designed to study the effect of product attractiveness on envy and resulting behavior. However, product attractiveness manipulation was not successful.

Procedure

Data was collected from 450 Amazon mTurk participants (Mean Age= 37.36, 273 were female). 5 participants reported that they had not provided quality data, leaving us with a final sample size of 445.

Similar to the previous two experiments participants were asked to respond to a hypothetical scenario which asked them to imagine an underserving (deserving) co-worker who had received a performance bonus. The co-worker bought economy (business class) plane tickets for a vacation with this bonus. Participants were then asked to respond to the same 12 envy related questions from study one. This was followed by a set of questions on how they would behave as a result of experiencing envy.

Results

Manipulation Check: Participants were asked to rate how much they perceived the participant to be deserving on a 7 point [1=not at all, 7=very much so]. An independent sample t-test showed that there was a significant difference in perceived deservingness between the two deservingness conditions [$Mean_{low}=2.65$, $Mean_{high}=6.36$, $t(443)$, $p=0.000$).

Envy: Deservingness negatively affects the experience of overall envy ($Mean_{low}=4.74$, $Mean_{high}=4.28$, $p=0.006$). Deservingness has a significant negative effect on the experience of malicious envy ($Mean_{low}=3.86$, $Mean_{high}=2.56$, $p=.000$) associated with

envy. On the other hand, benign envy is positively influenced by deservingness (Mean_{low}=3.85, Mean_{high}=4.55 $p=.003$). These analyses provide support for H1a-H1c.

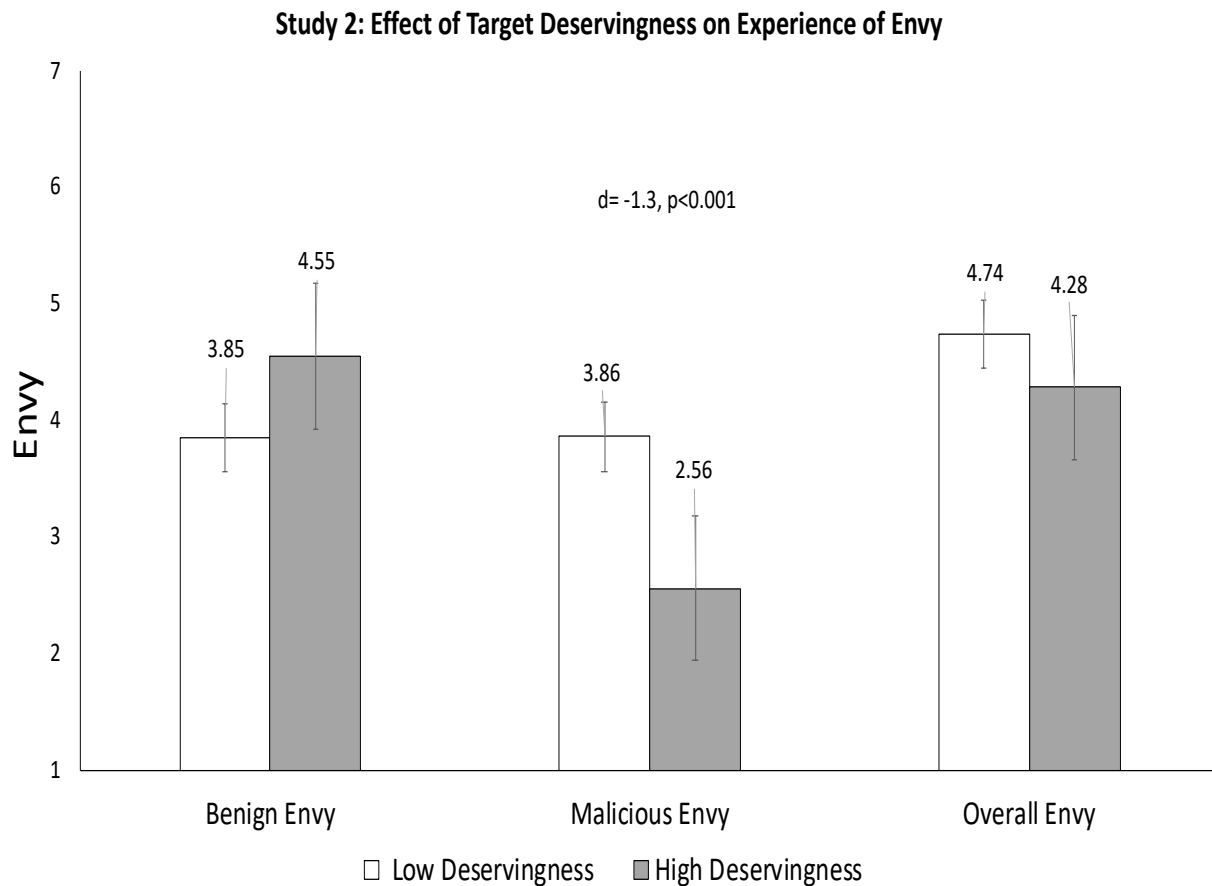


Figure 4. The effect of target deservingness on envy.

Positive Behavioral Consequences: Based on previous research participants were asked about product and target-oriented actions. More specifically, they were asked if they would be interested in buying tickets from the same airline (product-Oriented behavior) if they had other alternative resources. For target-directed actions, a two-item

scale was used where participants were asked how likely they were to praise and compliment the co-worker.

A linear regression analysis indicated that the benign dimension of envy had a direct effect on positive product ($B=0.561$, $p=.000$) and target-oriented behavior ($B=.656$, $p=.000$). Target-directed positive behavior was also negatively affected by the experience of malicious envy ($B=-0.365$, $p=.000$).

Deservingness had an indirect effect on positive target-oriented behavior through malicious and benign dimensions of envy. Benign envy further mediated the relationship between deservingness and desire to buy the plane tickets from the same brand (positive product-oriented behavior).

Negative Behavioral Consequences: Along with positive behavioral consequences, participants were also asked about negative product and target related consequences.

Regression analysis showed that envy had a positive effect on negative product-related consequences, that is, choosing a different brand ($B=.309$, $p=.000$). Envy also negatively influenced negative-target-related behavior ($B=.177$, $p=.000$). More specifically, malicious envy had a significant and positive effect on target-related negative behavior ($B=.704$, $p=.000$) but not negative product-related behavior. This provides partial support for H3b. Benign envy had a significant but unhypothesized effect on product-related negative behavior ($B=.416$, $p=.000$).

Deservingness's influence on the negative product- and target-oriented response was mediated by the experience of benign envy and malicious envy respectively.

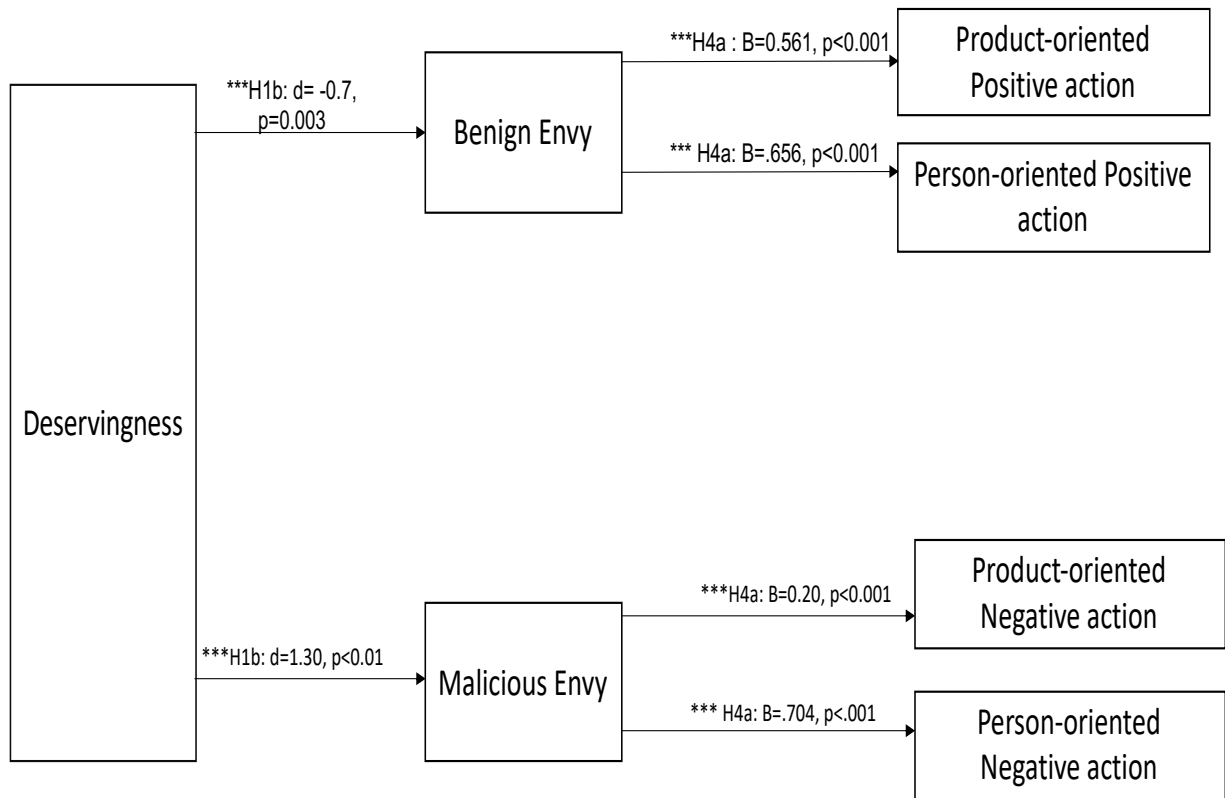


Figure 5. The mediated effect of target deservingness on behavioral actions.

Discussion

Study two along with confirming the previous findings also provides support to the hypothesis that the target deservingness's influence on product and target-oriented behavior is mediated by the malicious and benign elements of envy. This study is

however limited by the failed product attractiveness manipulation and the lack of a more detailed focus on benign and malicious envy. This is addressed in the following study.

4.4 Study 3a & 3b

Studies 3a and 3b were designed to investigate the effect of product attractiveness on the experience of envy and the associated consequences. These studies also explore the interaction effect of product attractiveness and target deservingness on the experience of envy. A final goal was to unpack the various aspects of benign and malicious envy and to explore how deservingness and attractiveness impact them. For this purpose, I ran two separate experiments, studying benign and malicious envy independently. This was done to tease out the experience of the two types of envy and the resulting behavior.

Method

Both studies had a 2(Attractiveness: High vs Low) X 2 (Deservingness: High vs Low) between-subject experimental design. Data was collected from a total of 199 participants for the experiment 3a which focused on benign envy ($Mean_{age}=36.37$, 67.8%(135) women participants). For experiment 3b, which involved studying malicious envy, data was collected from 201 participants ($Mean_{age}=36.77$, 64.7% (130) women participants).

Procedure

Similar to the previous studies, 3a and 3b required participants to respond to a hypothetical scenario. After reading the hypothetical scenario participants were asked to

respond to a set of questions (in the Appendix). Based on whether they were in study 3a or study 3b they were asked to respond to benign or malicious envy related questions respectively. This was followed by demographic and debrief questions.

Measures

Target Deservingness: Similar to the previous studies, participants were asked to imagine a co-worker who worked hard (were lazy) and received a performance bonus. Participants further read that the co-worker was deserving (undeserving). The gender of the co-worker and participant was matched to avoid any gender-based biases. In the experiment 3a (benign envy), a manipulation check showed that participants in the high deserving condition were more likely to perceive the co-worker as being deserving than those in the low deserving condition ($\text{Mean}_{\text{High}}=5.72$, $\text{Mean}_{\text{Low}}=.60$, $t(197)=2.397$, $p=0.000$). Similarly, in experiment 3b (Malicious envy), there was a significant difference between the high and low deservingness (“I think the person is undeserving”, $\text{High}=1.74$, $\text{Low}=4.98$, $p=0.000$).

Product Attractiveness: For both experiments 3a and 3b I focused on vacations as a product category, primarily because being hedonic in nature, vacations allowed for better qualitative manipulation of product attractiveness. Participants were asked to imagine that the co-coworker described above bought a cruise and a stay at a resort. In both study 3a and 3b the attractiveness manipulation worked and there was significant difference between the high and the low attractiveness conditions (Benign: Q=“The product is desirable”, $\text{Mean}_{\text{High}}=5.91$, $\text{Mean}_{\text{Low}}=4.76$, $t(197)=5.42$, $p=.000$; Malicious: Q=The product is undesirable, $\text{Mean}_{\text{High}}=1.81$, $\text{Mean}_{\text{Low}}=3.36$, $t(199)=6.85$, $p=.000$)

Benign Envy (Experiment 3a): Participants were asked 10 benign envy related questions regarding i) motivation, ii) happiness, iii) positive feelings, iv) empowerment, v) being contented, vi) perceived fairness, vii) supportiveness, viii) upliftment, ix) Receptiveness & x) opportunity-seeking behavior (items in appendix). These scales were summed to form an overall benign envy measure (Cronbach alpha=0.965). Along with these, participants were separately asked about their feelings about the target (co-worker) and the product (the vacation) (items in the appendix). Finally, participants were also asked about experienced envy on a direct 7-point Likert scale (1=disagree, 7=agree).

Malicious Envy (Experiment 3b): Similar to the Study 3a, the participants were asked a direct question about envy. They were also asked ten questions about i) frustration, ii) motivation, iii) perceived fairness, iv) hostility, v) contentment, vi) anger, vii) aggressiveness, viii) avoidance, ix) supportiveness, x) negative feelings. These scales were again summed to form a malicious envy scale (Cronbach alpha=0.951) (items in appendix). Like the previous study, participants were also asked about their behavior towards the target and the product.

Benign Envy Results

Envy: The experience of self-reported envy is significantly affected by product attractiveness ($\text{Mean}_{\text{High}}=4.09$, $\text{Mean}_{\text{Low}}=3.46$, $t(197)=-2.22$, $p=0.027$). Further, the overall experience of benign envy is affected by product attractiveness ($\text{Mean}_{\text{High}}=4.35$, $\text{Mean}_{\text{Low}}=3.88$, $p=0.026$). A two-way ANOVA revealed that there is an interaction effect

of attractiveness and deservingness on the experience of benign envy ($F(1,195)=5.81$, $p=.017$). A posthoc analysis indicated that product attractiveness only became important in the high deservingness condition ($\text{Mean}_{\text{Low}}=4.51$, $\text{Mean}_{\text{High}}=5.42$, $p=.005$) and its influence on the experience of benign envy was not significant when the target deservingness was low ($\text{Mean}_{\text{Low}}=3.206$, $\text{Mean}_{\text{High}}=3.17$, $p=0.999$).

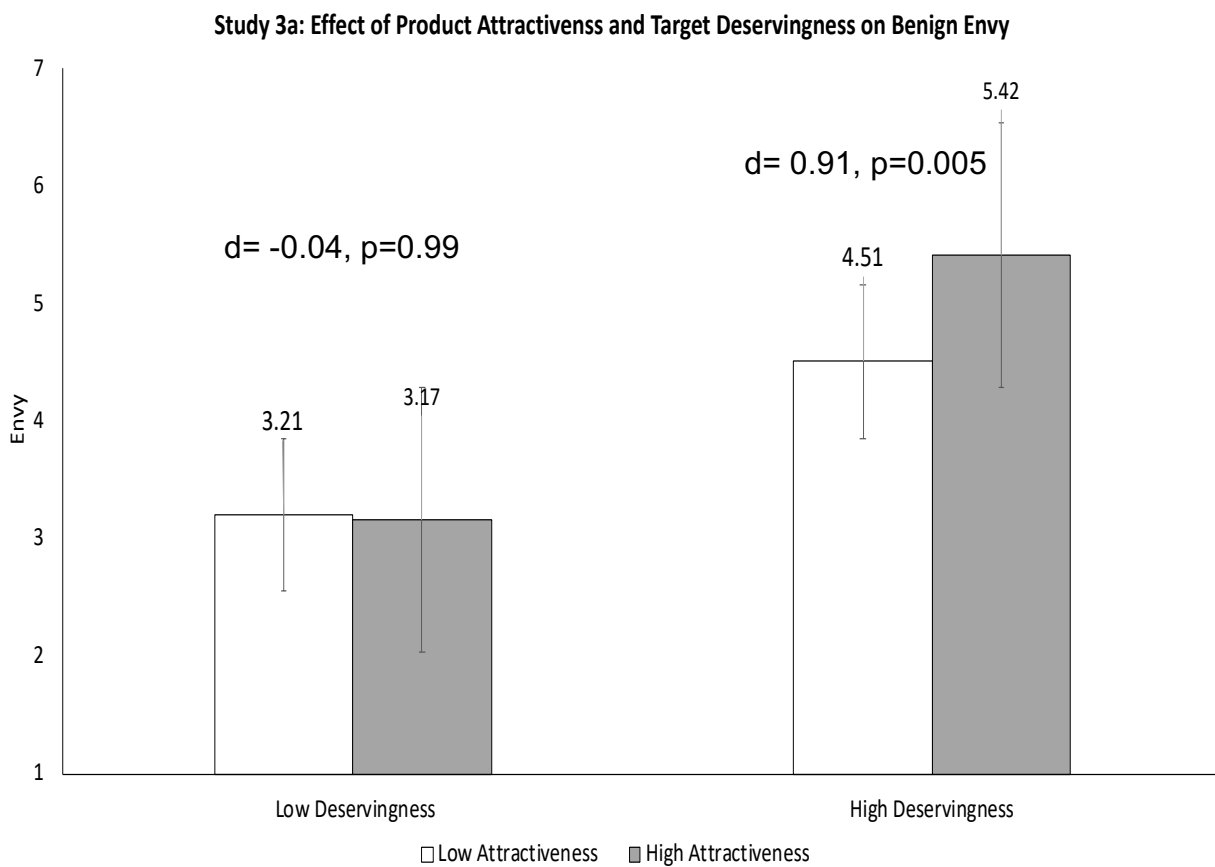


Figure 6. The effect of attractiveness and deservingness on benign envy.

Emulation of Target: Desire to emulate was significantly influenced by experienced envy ($B=.2467$, $p<0.001$) and associated benignness ($B=.9369$, $p<0.001$). Further, this was directly affected by target deservingness ($\text{Mean}_{\text{High}}=4.82$, $\text{Mean}_{\text{Low}}=2.78$, $p=.000$) but not by product attractiveness ($\text{Mean}_{\text{High}}=3.87$, $\text{Mean}_{\text{Low}}=3.87$, $p=.848$). Moreover, there was a significant and positive indirect influence of product attractiveness on emulation through perceived envy and associated benign envy.

Product Ownership: Product attractiveness had a significant and positive influence on product ownership ($\text{Mean}_{\text{High}}=5.67$, $\text{Mean}_{\text{Low}}=4.67$, $p=.000$), while target deservingness ($\text{Mean}_{\text{High}}=5.14$, $\text{Mean}_{\text{Low}}=4.68$, $p=0.077$) had a positive but marginal effect on Ownership. However, there was no significant interaction effect. Desire for ownership was also directly influenced by experience of envy ($B=.3456$, $p<.001$) which mediated the relationship between attractiveness and ownership desire.

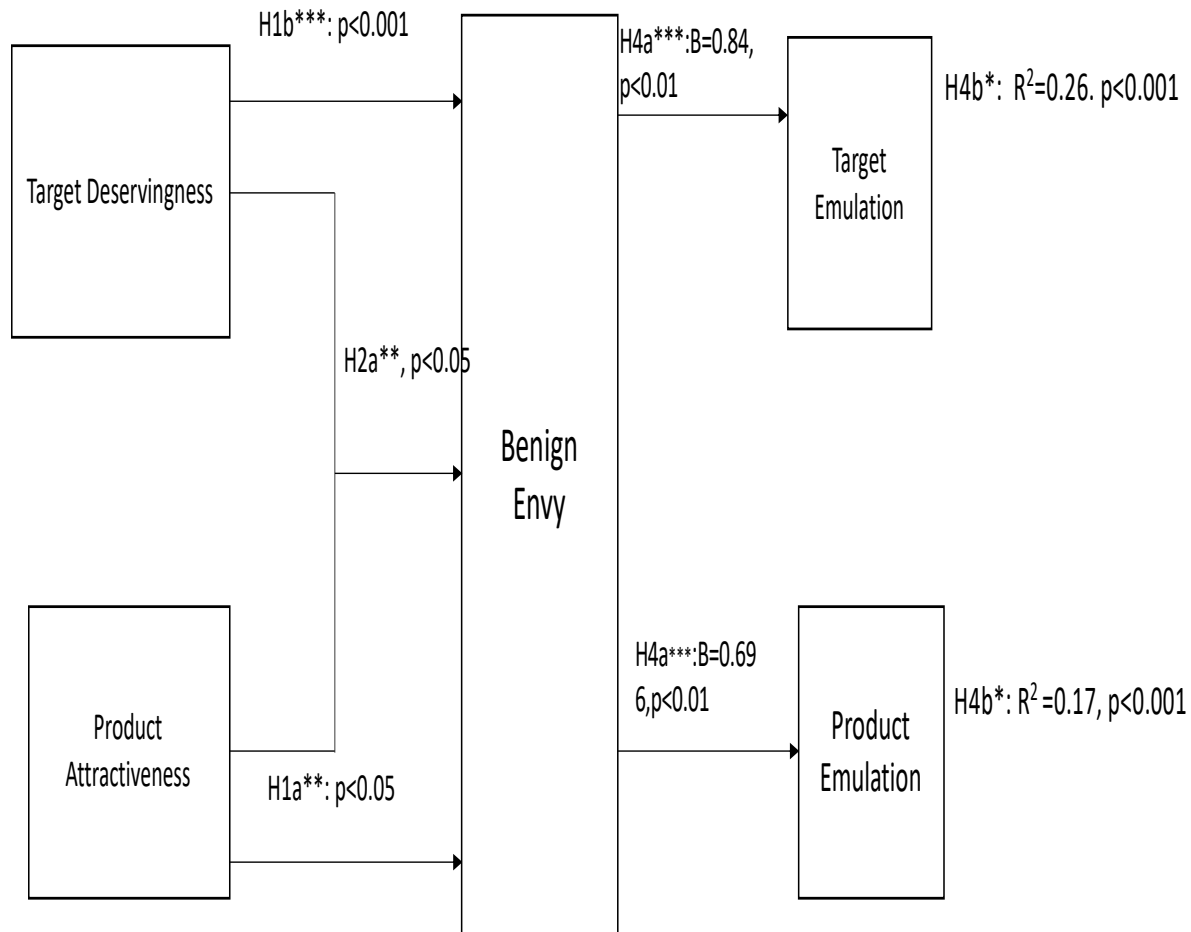


Figure 7. The mediated effect of attractiveness and deservingness on emulation.

Malicious Envy Results

Envy: A two-way ANOVA revealed that attractiveness had a direct and positive affect on the experience of self-reported envy ($\text{Mean}_{\text{High}} = 4.20$, $\text{Mean}_{\text{Low}} = 3.03$, $p = .000$). However, experienced maliciousness was not significantly influenced by product attractiveness in the low target deservingness condition. In the high deservingness condition, participants

experienced more malicious envy when product attractiveness was low than when it was high ($\text{Mean}_{\text{High}}=1.74$, $\text{Mean}_{\text{Low}}=2.66$, $p=.020$).

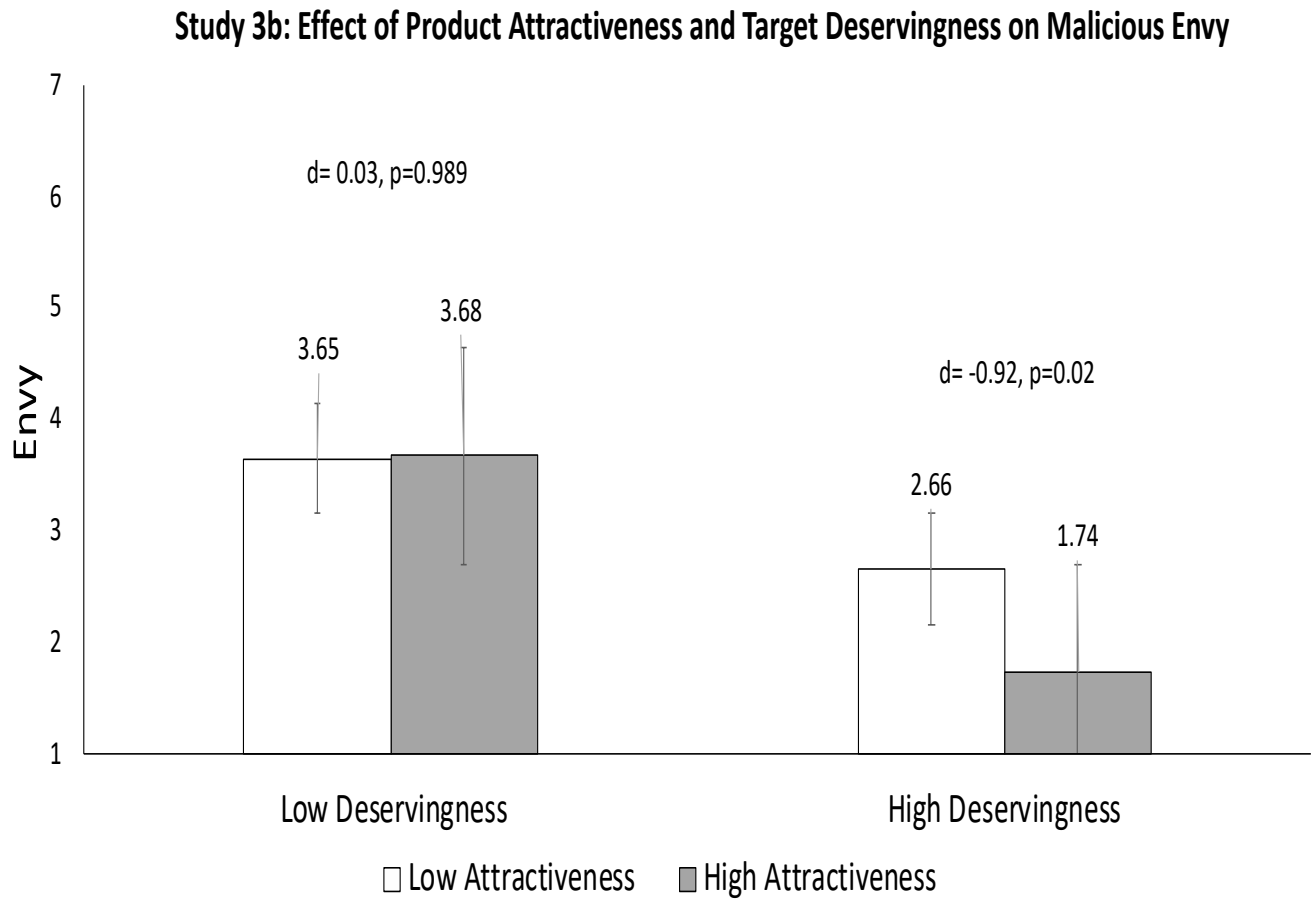


Figure 8. The effect of attractiveness and target deservingness on malicious envy

Emulation of Target: The desire to emulate the target (co-worker) was significantly and positively influenced by the product attractiveness ($\text{Mean}_{\text{High}}=4.681$, $\text{Mean}_{\text{Low}}=3.941$,

$p=.005$) and the target deservingness ($\text{Mean}_{\text{High}}=5.499$, $\text{Mean}_{\text{Low}}=3.130$, $p=.005$). While there was no significant direct interaction effect of target deservingness and product attractiveness, it had an indirect effect on emulation through Malicious Envy.

Product Ownership: The desire for product ownership (i.e., the wish to be able to go on a similar vacation as the co-worker) was significantly influenced by the attractiveness of the vacation ($\text{Mean}_{\text{High}}=5.931$, $\text{Mean}_{\text{Low}}=4.260$, $p=0.000$) but not by the target deservingness ($\text{Mean}_{\text{High}}=5.217$, $\text{Mean}_{\text{Low}}=4.974$, $p=0.000$). Self-reported envy had a positive effect on the desire to own ($B=.273$, $p=.000$), and associated maliciousness also had a negative influence on the desire to own ($B=-.450$, $p=.000$). Further envy and associated maliciousness mediated the interaction effect of target deservingness and product attractiveness on ownership desire.

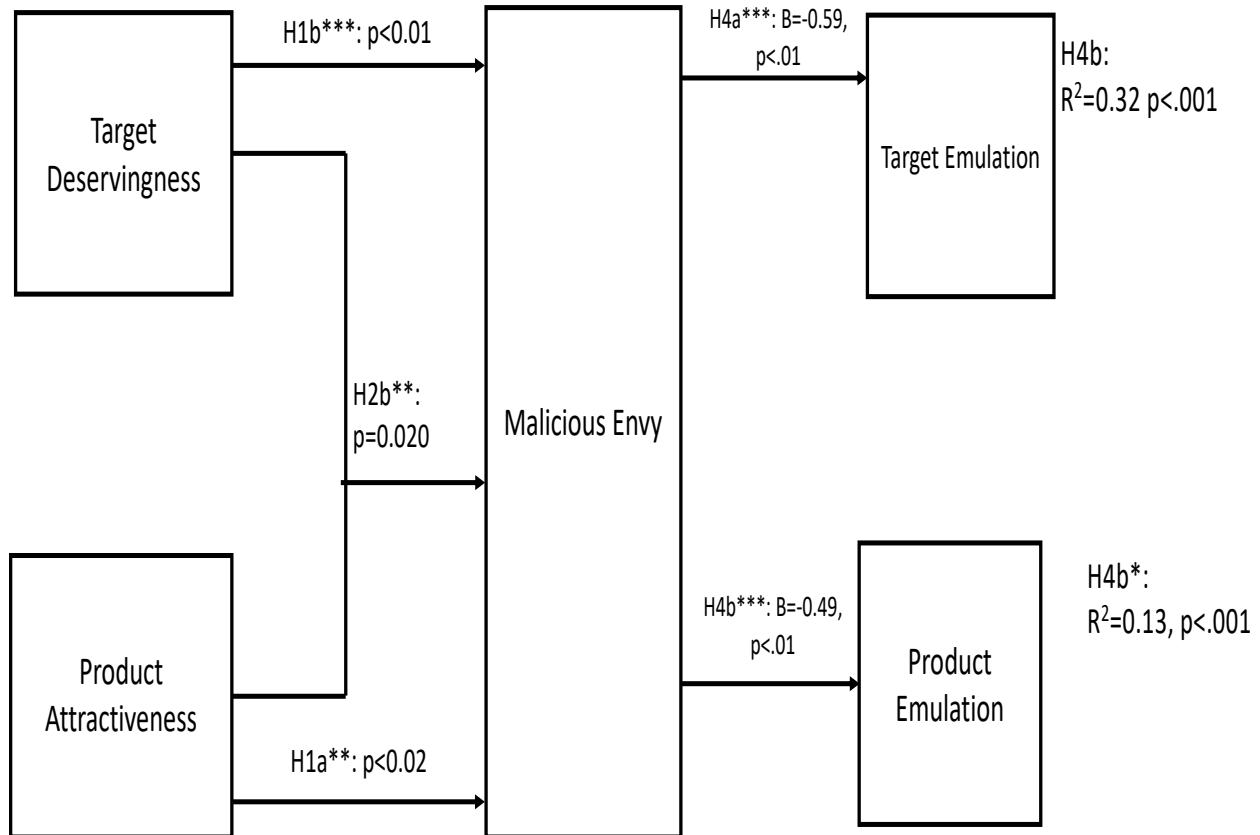


Figure 9. The mediated effect of attractiveness and deservingness on emulation.

Discussion

Study 3a and 3b confirm that while product attractiveness is important for experiencing, this factor only becomes relevant only when target deservingness is high. Further, this study shows that interest in emulating the target and product ownership is affected by target and product characteristics. However, the experience of benign and malicious envy itself is not dependent on these motivations as suggested by previous research. These two studies, however, are limited by the fact they don't ask consumers

to make actual choices. Further, these studies don't study the impact of control on the experience of envy.

4.5 Study 4

Previous studies have primarily compared situations that involved different degrees of product attractiveness. However, it is also essential to explore whether envy is experienced when products are completely unattractive, that is, whether people are interested in unattractive products which they will not buy under other circumstances. Therefore, the goal of this study is to replicate previous findings for unattractive products.

Method

The study had a 3(Attractiveness: High vs Moderate vs Low) X 2(Deservingness: High vs Low) between-subject design. Data was collected from 300 participants, however, 18 participants failed to respond correctly to the attention check questions. Therefore, the final number of participants was 282 (Mean_{age}= 38.65, 130 female and 118 male participants).

Procedure

Similar to previous studies, participants were asked to respond to a hypothetical scenario about the vacation that their co-worker has received as a part of their bonus package. The vacation was very attractive, moderately attractive, or unattractive, depending on the condition (Stimuli in Appendix). Further, they also learned that their

coworker had worked hard for the bonus and deserved it, or they had been lazy, and the reward was undeserved (Stimuli in Appendix). After reading the hypothetical scenario they responded to a set of questions regarding their emotional experience (Appendix). These were followed by demographic questions and debriefing.

Measures

Target Deservingness: Like previous studies, deservingness was manipulated by asking participants to imagine a co-worker who was hardworking (lazy) and received a performance bonus they deserved (did not deserve). As with the previous studies, the gender of the co-worker and the participant were matched to avoid any gender-based biases. Participants were asked to rate the deservingness of the co-worker using a 7-point scale (1=not at all and 7=very much so). The co-worker was perceived to more deserving in the high deserving condition compared to the low deserving condition ($\text{Mean}_{\text{High}} = 5.71$, $\text{Mean}_{\text{Low}} = 2.82$, $t(279.6) = -14.871$, $p < 0.001$).

Product Attractiveness: Similar to previous studies, a hypothetical performance bonus which included a vacation was used. Participants were asked to imagine that their co-worker had received a bonus which included a cruise and a stay at a resort. In all three conditions, a news article about the cruise and resort was provided. In the low attractiveness condition, the article described the package as being of a very low quality which previous vacationers had not enjoyed and had given negative reviews. In the high attractive condition, the vacation was described as being amazing and having very positive reviews. The moderate attractiveness condition involved a moderately worded

description of the vacation. As a manipulation check, participants were asked to rate the attractiveness on a 7-point scale. The attractiveness of the vacation was rated as being the highest in the high attractiveness condition, followed by the moderate attractiveness condition and lowest in the low attractiveness condition ($\text{Mean}_{\text{High}} = 6.22$, $\text{Mean}_{\text{Moderate}} = 4.63$, $\text{Mean}_{\text{Low}} = 2.33$, $F(2, 279) = 164.1$, $p < 0.001$).

Benign & Malicious Envy: Participants were asked about their experience of benign envy on a 3-item scale which asked about their sense of empowerment, motivation, and positive feeling (Cronbach alpha=0.87). For malicious envy, they responded to a four-item scale which asked about their feeling of hostility, anger, negative feeling, and aggressiveness (Cronbach alpha=0.91). They were also asked about their global experience of Envy using a single item. (They rated their experience on a 7-point scale (1=Disagree and 7= Agree)).

Results

Benign Envy: Analyses showed that benign envy is significantly affected by both product attractiveness ($\text{Mean}_{\text{high}} = 3.84$, $\text{Mean}_{\text{Moderate}} = 3.63$, $\text{Mean}_{\text{low}} = 2.91$, $F(2, 276) = 5.55$, $p = 0.005$) and target deservingness ($\text{Mean}_{\text{high}} = 4.28$, $\text{Mean}_{\text{low}} = 2.68$, $F(1, 276) = 73.47$, $p < 0.001$). Further, there is an interaction effect of product attractiveness and target deservingness on the experience of benign envy ($F(2, 276) = 7.40$, $p < 0.001$). A post- hoc analysis revealed that product attractiveness positively impacted the experience of benign envy only when target deservingness was high ($\text{Mean}_{\text{high}} = 4.88$, $\text{Mean}_{\text{Moderate}} = 4.63$, $\text{Mean}_{\text{low}} = 3.21$) and not when people were

perceived to be undeserving (low target deservingness ($\text{Mean}_{\text{high}} = 2.85$, $\text{Mean}_{\text{Moderate}} = 2.56$, $\text{Mean}_{\text{low}} = 2.63$). More specifically, when target deservingness was high people in the low product attractive condition experienced significantly less benign envy compared to those in the moderate ($d = -1.42$, $p < 0.001$) and high attractiveness condition ($d = -1.67$, $p < 0.001$). There was no significant difference between the moderate and the high product attractiveness condition ($d = -0.35$, $p > 0.1$). This provides further support hypothesis 2a.

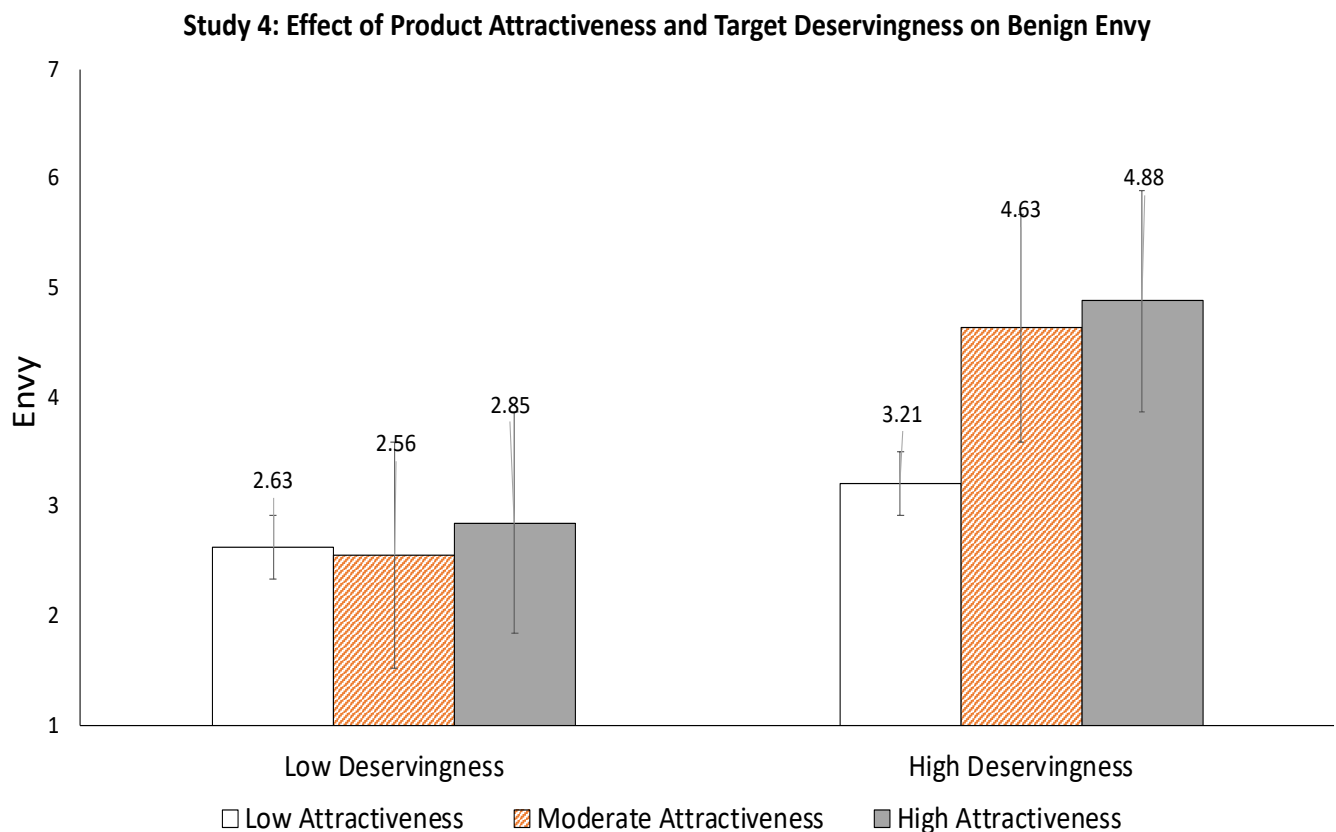


Figure 10. Study 4: The effect of attractiveness and deservingness on benign envy.

Malicious Envy: Experience of malicious envy was directly influenced by target deservingness ($\text{Mean}_{\text{high}} = 3.42$, $\text{Mean}_{\text{low}} = 2.21$, $F(1,276) = 37.87$, $p < 0.001$), but not by product attractiveness ($\text{Mean}_{\text{high}} = 2.96$, $\text{Mean}_{\text{Moderate}} = 2.62$, $\text{Mean}_{\text{low}} = 2.89$, $F(2, 276) = 0.83$, $p = .44$). However, there is a marginally significant interaction effect of target deservingness and product attractiveness on the experience of malicious envy ($F(2, 276) = 7.40$, $p = 0.07$). When target deservingness is high there is a significant effect of product attractiveness ($\text{Mean}_{\text{high}} = 2.23$, $\text{Mean}_{\text{Moderate}} = 1.85$, $\text{Mean}_{\text{low}} = 2.59$). However, product attractiveness does not drive the experience of malicious envy when target deservingness is low ($\text{Mean}_{\text{high}} = 3.17$, $\text{Mean}_{\text{Moderate}} = 3.45$, $\text{Mean}_{\text{low}} = 3.17$). More specifically, when target deservingness is high people experience more malicious envy when the product is unattractive (low product attractiveness) compared to when the product attractiveness is moderate ($d = 0.74$, $p = 0.07$). This provides partial support for hypothesis 2b.

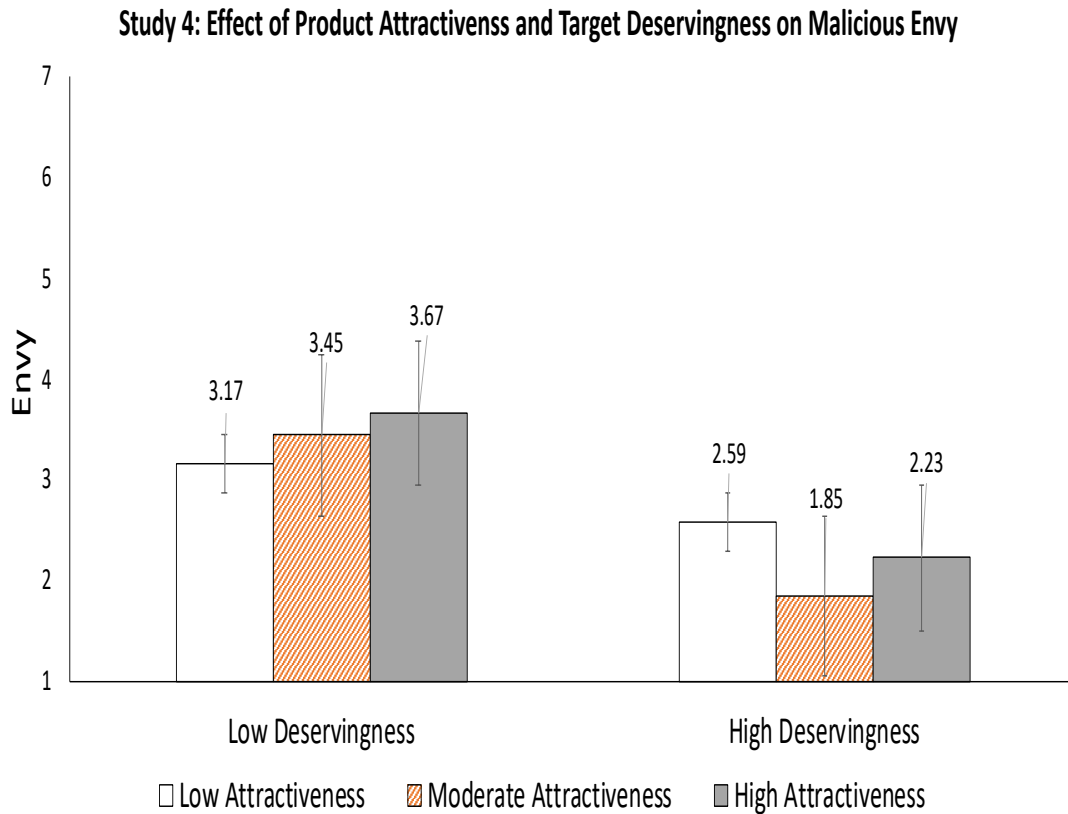


Figure 11. The effect of attractiveness and deservingness on malicious envy.

Discussion

This study provides support for the previous findings. However, the study is limited in that it does not explore the phenomenon in the context of actual behavior. Further, in previous studies, participants were asked about whether they would emulate the target within the context of the study (e.g. work as hard as the co-worker or buy the vacation on their own). In the next two studies, we explore emulation in unrelated contexts in which the target has contributed in some way (e.g. donation to a charity).

4.6. Study 5

In the previous studies, participants were asked to respond to hypothetical scenarios and predict how they would respond in those situations. However, research suggests that hypothetical scenarios might not be an accurate representation of participants' actual behavior (Morales, Amir, and Lee 2017). Therefore, this study is designed to study the phenomenon in the context where participants are introduced to a realistic situation in which the target is rewarded more for work both perform. Further, in this study, a direct and concrete consumption consequence is introduced, in place of asking participants to speculate about whether they would emulate the target (van Baaren et al. 2004; Tanner et al. 2008).

Method

Similar to the previous study, this study had a 2(Product Attractiveness: High vs Low) X 2 (Deservingness: High vs Low) between-subject experimental design. Data was collected from a total of 214 participants (Mean_{age} = 35.59, 70 female, 143 male participants, and 1 no response).

Procedure

The study had a 2(Target Deservingness: High vs Low) X 2(Product Attractiveness: High vs Low) between-subject design. In this study, participants were paid to organize a list of references chronologically and were provided with a sample to help them complete the task. The sample accuracy was used to manipulate target

deservingness. After completing the task and the associated manipulation task, participants asked to imagine their experience on envy, if the person whose work was used as a sample (the target) had received an Amazon gift card. The gift card amount was used to manipulate product attractiveness. Additionally, participants were asked if they were given an additional \$0.50 whether they would be willing to donate it to a random charity or the charity chosen by the target. At the end of the experiment, participants were debriefed.

Measures

Target Deservingness: Participants were asked to work on arranging a list of references (included in the appendix) in chronological order from the newest to the oldest references. They were provided an example completed by another mTurker. In the high target deservingness condition, the example list was arranged in the correct chronological order, suggesting that the target had done the work carefully and was deserving. In the low target deservingness condition, the example list was not correctly arranged, indicating a low level of effort. These stimuli were tested in the pilot study (55 Amazon mechanical Turk participants) which showed a significant difference between the perceived deservingness of participants between the high and the low deservingness conditions ($\text{Mean}_{\text{high}} = 7.04$ and $\text{Mean}_{\text{low}} = 2.00$, $p < 0.001$).

Product Attractiveness: Gift cards were used as a product in this study. Participants were asked to imagine that the target had received an amazon gift card instead of the standard payment. The value of the gift card was used to manipulate product

attractiveness. In the high attractiveness condition participants were told that the target had received a \$25 gift card, while in the low attractiveness condition they were told that the target received a \$1 gift card. Manipulation check showed that the gift card was significantly more desirable in the high attractiveness condition compared to the low attractiveness condition ($\text{Mean}_{\text{high}} = 6.36$, $\text{Mean}_{\text{low}} = 4.27$, $p < 0.001$).

Benign & Malicious Envy: Unlike previous studies, in this study, participants were directly asked to measure their experience of benign and malicious envy on 7-point Likert scales (1=Not at all, 7= A lot). Benign envy was described "*as envy which also makes you feel positive, inspired, and willing to engage in constructive actions like working harder, praising the person, etc.*". Malicious envy was described as "*envy which makes you feel hostile, angry, and willing to engage in destructive actions like complaining, avoiding the coworker, etc.*". Participants were asked to rate how likely they would experience each type of envy towards the target.

Emulation (Desire to Donate): As previously discussed, an engaging in prosocial behavior like donating to charity chosen by the target is also a way in which the actor expresses a desire to emulate (van Baaren et al. 2004; Tanner et al. 2008). There in this study I use desire to donate as a way to concretely test emulation as result of experienced envy. Participants were asked to rate how likely they would be to donate to a charity the target donates to compared to a randomly chosen charity on a 7 point scale (1= The charity chosen by the other mTurker, 7= Randomly chosen charity) if they were given an additional \$0.50.

Results

Benign Envy: The experience of benign envy was significantly affected by product attractiveness ($\text{Mean}_{\text{high}} = 4.41$, $\text{Mean}_{\text{low}} = 3.24$, $p < 0.001$). Additionally, the interaction effect of product attractiveness and target deservingness was marginally significant ($F(1, 210) = 2.74$, $p < 0.099$). Target deservingness moderated the influence of product attractiveness. When target deservingness was low there was no significant difference between the impact of high and low product attractiveness ($\text{Mean}_{\text{high}} = 3.4$, $\text{Mean}_{\text{low}} = 4.11$, $p = .27$). The effect of product attractiveness only became significant when target deservingness was high ($\text{Mean}_{\text{high}} = 3.08$, $\text{Mean}_{\text{low}} = 4.70$, $p < 0.001$). However, there was no direct effect of target deservingness ($p > 0.10$). These results support the hypotheses H1a and H2a, that is, product attractiveness has a positive effect on the experience of benign envy, which is moderated by the deservingness of the target. However, no support is found for H1b, that is, the direct effect of target deservingness on benign envy.

Study 5: Effect of Product Attractiveness and Target Deservingness on Benign Envy

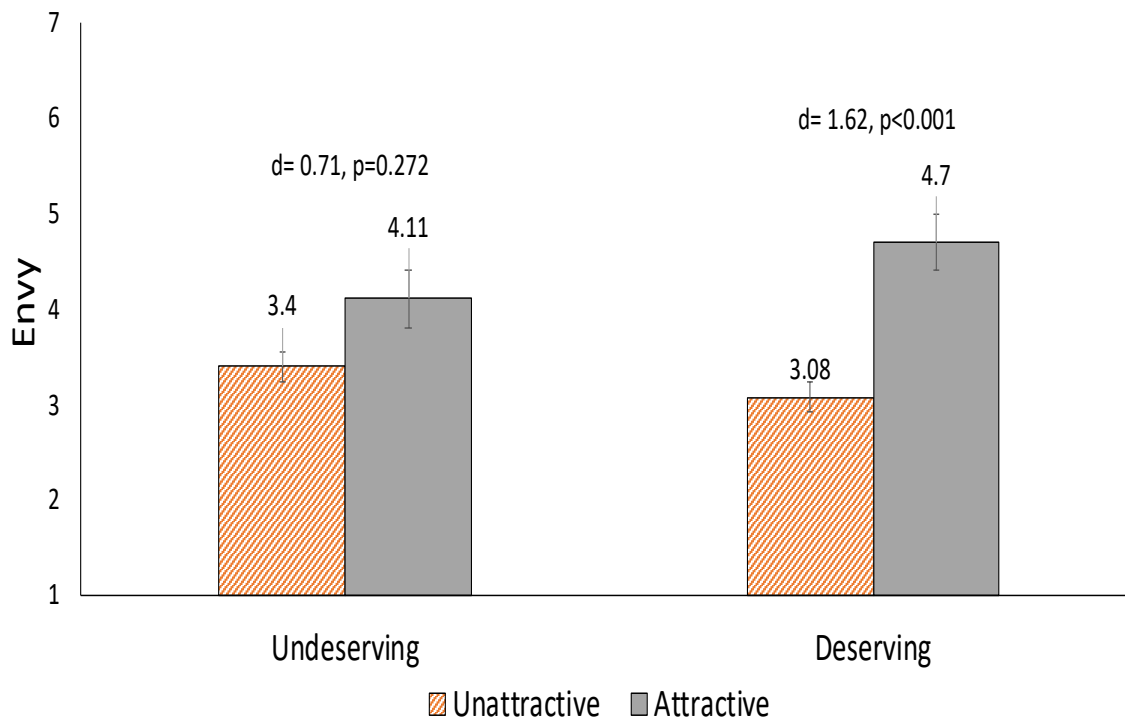


Figure 12. The effect of attractiveness and deservingness on malicious envy.

Malicious Envy: Both target deservingness and product attractiveness had a significant effect on the experience of malicious envy. Participants experienced more malicious envy = in the high product attractiveness condition compared to the low product attractiveness condition ($\text{Mean}_{\text{high}} = 2.85$, $\text{Mean}_{\text{low}} = 2.85$, $p=0.03$). Target deservingness negatively affected experience of malicious envy ($\text{Mean}_{\text{High}} = 2.26$, $\text{Mean}_{\text{low}} = 2.88$, $p=0.027$). However, there was no significant interaction effect of target deservingness and product attractiveness ($F(1, 210) = 0.135$, $p=.71$). These results support hypotheses, H1a, and H1b, that is, product attractiveness and target

deservingness have a direct effect on the experience of malicious envy. However, no support is found for H2b, that the effect of product attractiveness on malicious envy is moderated by the deservingness of the target.

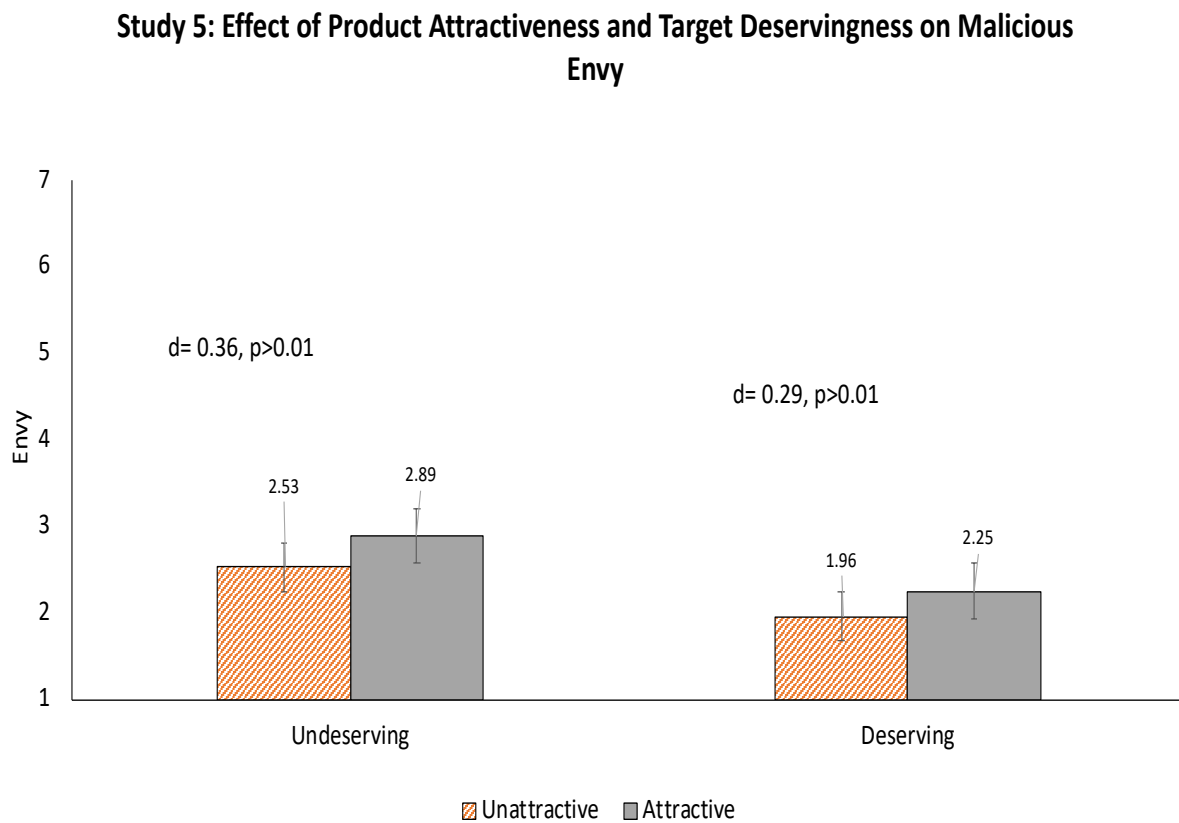


Figure 13. The effect of attractiveness and deservingness on malicious envy.

Donation: To measure emulation in a consumption context, donation behavior was behavior. ANOVA analyses revealed that there was no significant interaction effect of product attractiveness and target deservingness ($F(1, 210) = 0.63, p = 0.43$). There was a direct effect of deservingness ($\text{Mean}_{\text{high}} = 4.84, \text{Mean}_{\text{low}} = 4.54, p = 0.046$) but no direct effect of attractiveness ($\text{Mean}_{\text{high}} = 4.41, \text{Mean}_{\text{low}} = 4.41, p = 0.298$). Participants were more likely to donate to a charity chosen by the target when targets were deserving. This was mediated by the experience of malicious envy ($\text{ACME} = -0.147, p = 0.023, \text{CI} [-0.37, -0.03]$) but not by the experience of benign envy ($\text{ACME} < 0.001, p = 0.854$). Further experience of malicious envy also mediated the effect of product attractiveness on donating behavior ($\text{ACME} = 0.15, p = 0.016, \text{CI} [0.02, 0.40]$). An increase in the experience of malicious envy leads to a higher likelihood of donating to a random charity compared to a charity chosen by the target ($B = 0.253, p < 0.001$). This partially supports hypotheses H4 and H5.

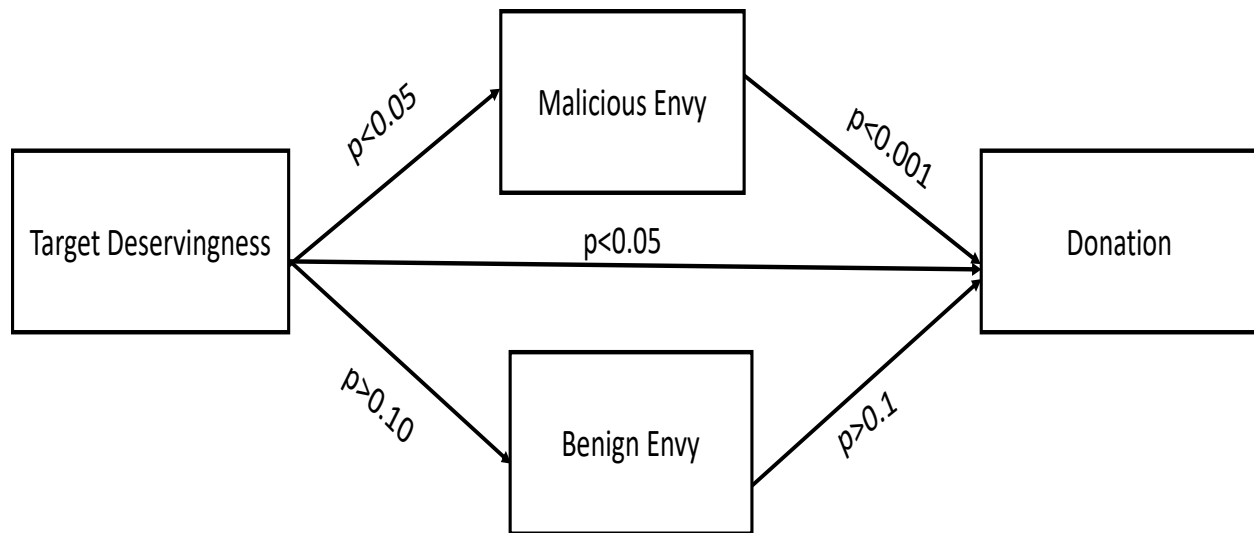


Figure 14. The mediated effect of target deservingness on donation.

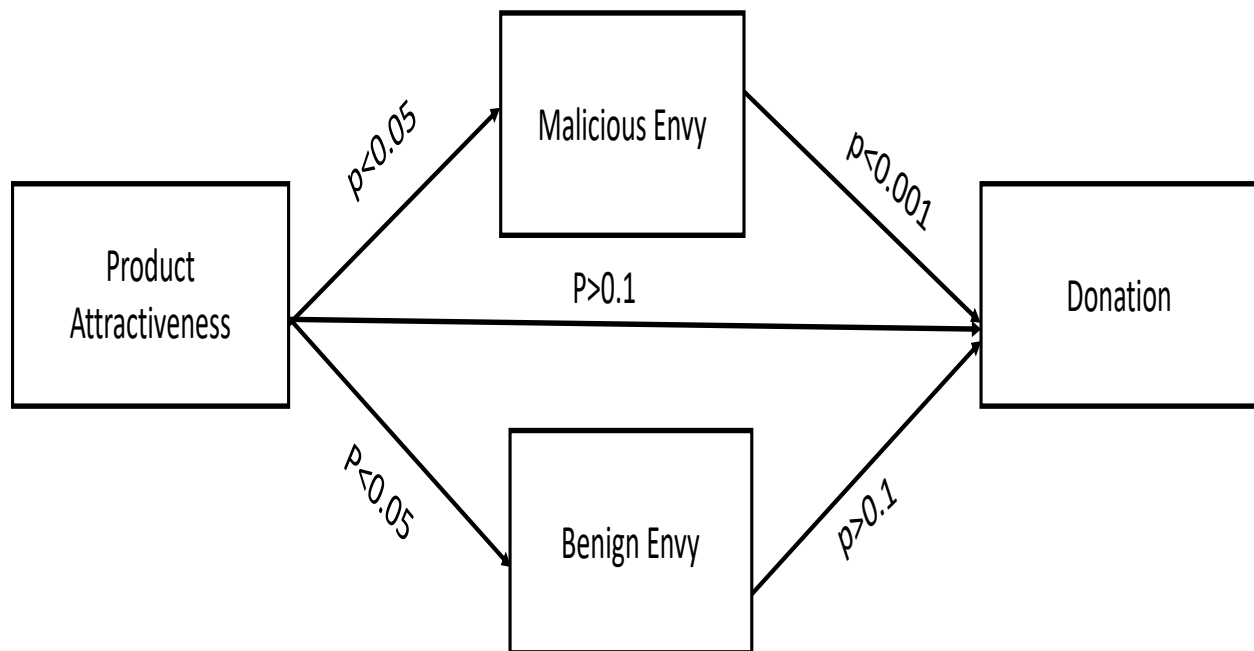


Figure 15. The mediated effect of product attractiveness on donation.

Study five provides support for the proposition that product attractiveness and target deservingness influence experience of benign and malicious envy which in turn influence emulative donation behavior. Along with the exploration of emulation in the consumption context, this study also explores the propositions for actual behavior instead of hypothetical scenarios. However, this study provides mixed results for malicious envy which deviate from previous studies. Further, this study is limited in not having investigated the underlying. The next study is designed to provide a process explanation for the influence of product attractiveness and target deservingness on the experience of benign and malicious envy.

4.7 Study 6

Study 6 is designed to investigate the underlying process of experiencing benign and malicious envy as a function of changes in product attractiveness and target deservingness. Research shows that a key mechanism that influences the experience of complex emotions such as envy is the perception of fairness and justice (Feldman and Kirman 1974; Zeng et al. 2020). This study focuses on two types of fairness, procedural and outcome fairness which particularly important for interpersonal interactions revolving around a product or experience (Brockner et al. 2009; Skitka et al. 2003). Therefore, this study is designed to investigate these in the context of the phenomenon being studied.

Method

The study had a 2 (Product attractiveness: High vs Low) X 2 (Target Deservingness: High vs Low) X 2 (Fairness Focus: Outcome vs Procedural) between-subject design. The study had 309 participants (Mean_{age} =38.84, 193 female and 114 male participants, 2 did not answer).

Procedure

Similar to study four, participants were asked to imagine that their co-worker had received a performance bonus which included a vacation, and a cruise. The deservingness of the co-worker and the attractiveness of the bonus were manipulated. Further, the participants were asked to focus on either the reward (outcome fairness) or the process used to decide the bonus (process fairness) (Stimuli in the appendix). After reading the scenarios, they answered questions about their experience of envy and emulative donation behavior. At the end of the study, they were debriefed.

Target Deservingness and Product Attractiveness: Target deservingness and product attractiveness were manipulated in the same way as in Study 4. For target deservingness, participants were told that their coworker was hardworking (lazy) and deserved (didn't deserve) the bonus they received. A manipulation check showed that people perceived their co-worker to be more deserving in the high deservingness condition than in the low deservingness condition (Mean_{high} = 6.16, Mean_{low} = 2.03, $p < 0.001$). The vacation was described as being highly reviewed or poorly reviewed based on the condition. Manipulation check showed that people were likely to find the

vacation to be desirable in the high product attractiveness condition compared to a low product attractiveness condition ($\text{Mean}_{\text{high}} = 5.83$, $\text{Mean}_{\text{low}} = 2.65$, $p < 0.001$).

Fairness Focus: To manipulate the fairness focus, the order of presentation of information was changed. In outcome focus conditions, the information about the bonus (product) was first presented followed by the information about the process regarding the person's deservingness. In the process focus conditions, information about the process was presented first. Additionally, depending on the condition, the elaboration about the attractiveness of the product (outcome fairness) or the deservingness of the target was provided (process fairness) was provided. Finally, to strengthen the manipulation, participants were asked to think about the product and the associated fairness, or the deservingness of the target and the associated judgment of fairness. Participants were asked to rate whether they thought the outcome or the process was more important as a manipulation check (7-point scale, 1=process, 7=outcome). They found the outcome to be more important when asked to focus on the outcome and the process to be more important in the process fairness condition ($\text{Mean}_{\text{outcome}} = 4.52$, $\text{Mean}_{\text{process}} = 2.97$, $p < 0.001$).

Benign and Malicious Envy: Similar to study four, three-, and four-item scales were used for measuring benign ($\alpha = 0.88$) and malicious ($\alpha = 0.89$) envy respectively.

Emulation (Desire to Donate): Similar to study 5, to operationalize emulative behavior, participants were again asked about their donation behavior. They were asked to allocate a \$100 between either a charity their co-worker donates to and a charity randomly chosen by their company.

Results

Benign Envy: An ANOVA analysis showed that product attractiveness ($p < 0.001$) and target deservingness ($p < 0.001$) had a significant direct effect on the experience of benign envy, while focus ($p = 0.59$) didn't have a significant direct effect on experience on benign envy. The three-way interaction between attractiveness, deservingness, and focus was not significant ($F(1, 301) = 0.17, p = 0.68$). However, there was a significant interaction effect of (i) attractiveness and focus, and (ii) deservingness and focus. When participants were asked to focus on the outcome, they were significantly more likely to experience benign envy when the product was attractive compared to when it was unattractive ($\text{Mean}_{\text{high}} = 4.004, \text{Mean}_{\text{low}} = 3.199, p = 0.03$). There was no significant difference when they were asked to focus on the process ($\text{Mean}_{\text{high}} = 3.41, \text{Mean}_{\text{low}} = 3.45, p = .998$). When asked to focus on the outcome, people experienced more benign envy when the target was deserving compared to when he/she was underserving ($\text{Mean}_{\text{high}} = 4.43, \text{Mean}_{\text{low}} = 2.68, p < 0.001$). When asked to focus on the process, people experienced more benign envy when the target was deserving compared to when he/she was undeserving ($\text{Mean}_{\text{high}} = 4.70, \text{Mean}_{\text{low}} = 2.23, p < 0.002$). However, the difference between the high and the low deserving conditions was greater when asked to focus on the process ($d_{\text{outcome}} = 1.74, d_{\text{process}} = 2.47$). This provides support for H1a,

H1b, H2a that is, people's experience of benign envy is influenced by product attractiveness and moderated by target deservingness. However, there is no support for H3a, that is the underlying phenomenon is driven by perceived fairness. We also find that there is an unhypothesized moderation effect of focus on the experience of benign envy as a function of product attractiveness and target deservingness independently.

Study 6: Effect of Fairness Focus on Interaction for Benign Envy

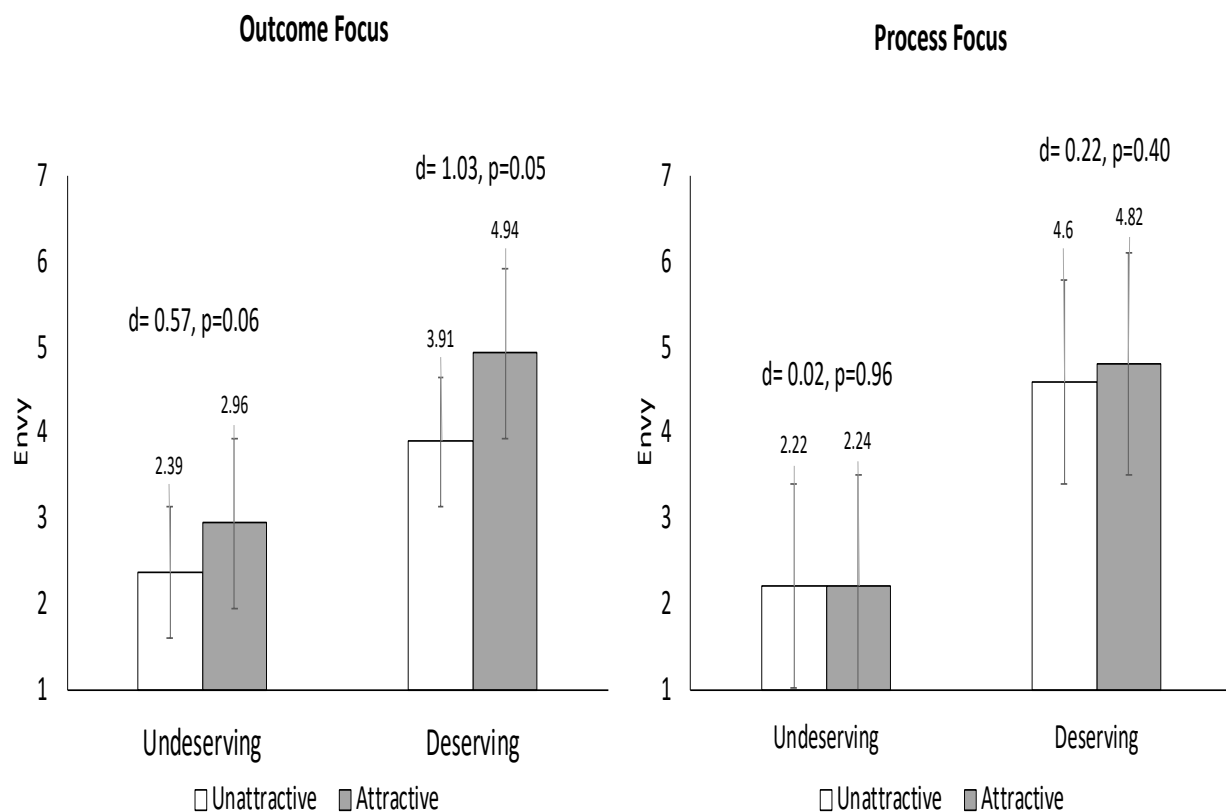


Figure 16. The effect of attractiveness and deservingness on benign envy.

Malicious Envy: An ANOVA analysis indicated that there was a direct effect of product target deservingness ($p < 0.001$) but not of product attractiveness ($p = .21$) and focus ($p = .13$). However, there was significant three-way interaction of product attractiveness, target deservingness, and focus ($F(1,301) = 4.77$, $p = 0.03$). When the target is underserving (i.e. the process was unfair irrespective of the bonus attractiveness), and people focused on the outcome, they were more likely to experience malicious envy when the product was attractive compared to when it was unattractive ($\text{Mean}_{\text{high}} = 4.08$, $\text{Mean}_{\text{low}} = 3.24$, $p < 0.01$). There was a similar difference when asked to focus on the process ($\text{Mean}_{\text{high}} = 4.5$, $\text{Mean}_{\text{low}} = 3.68$, $p = 0.01$). However, the difference between the high and low attractiveness conditions was higher when participants were asked to focus on the outcome compared to the process ($d_{\text{outcome}} = 0.84$, $d_{\text{process}} = 0.82$). When the target was deserving (i.e. the process was fair), participants experienced significant envy when the product was unattractive compared to when the product was attractive ($\text{Mean}_{\text{high}} = 1.50$, $\text{Mean}_{\text{low}} = 2.62$, $p < 0.001$). This difference disappeared when they were asked to focus on the process ($\text{Mean}_{\text{high}} = 2.26$, $\text{Mean}_{\text{low}} = 1.98$, $p = 0.47$). These findings provide support for H1a, H1b, H2b, and H3b, that is, there is an interaction effect of the product attractiveness and target deservingness, which is driven by the type of fairness participants focus on.

Study 6: Effect of Fairness Focus on Interaction for Malicious Envy

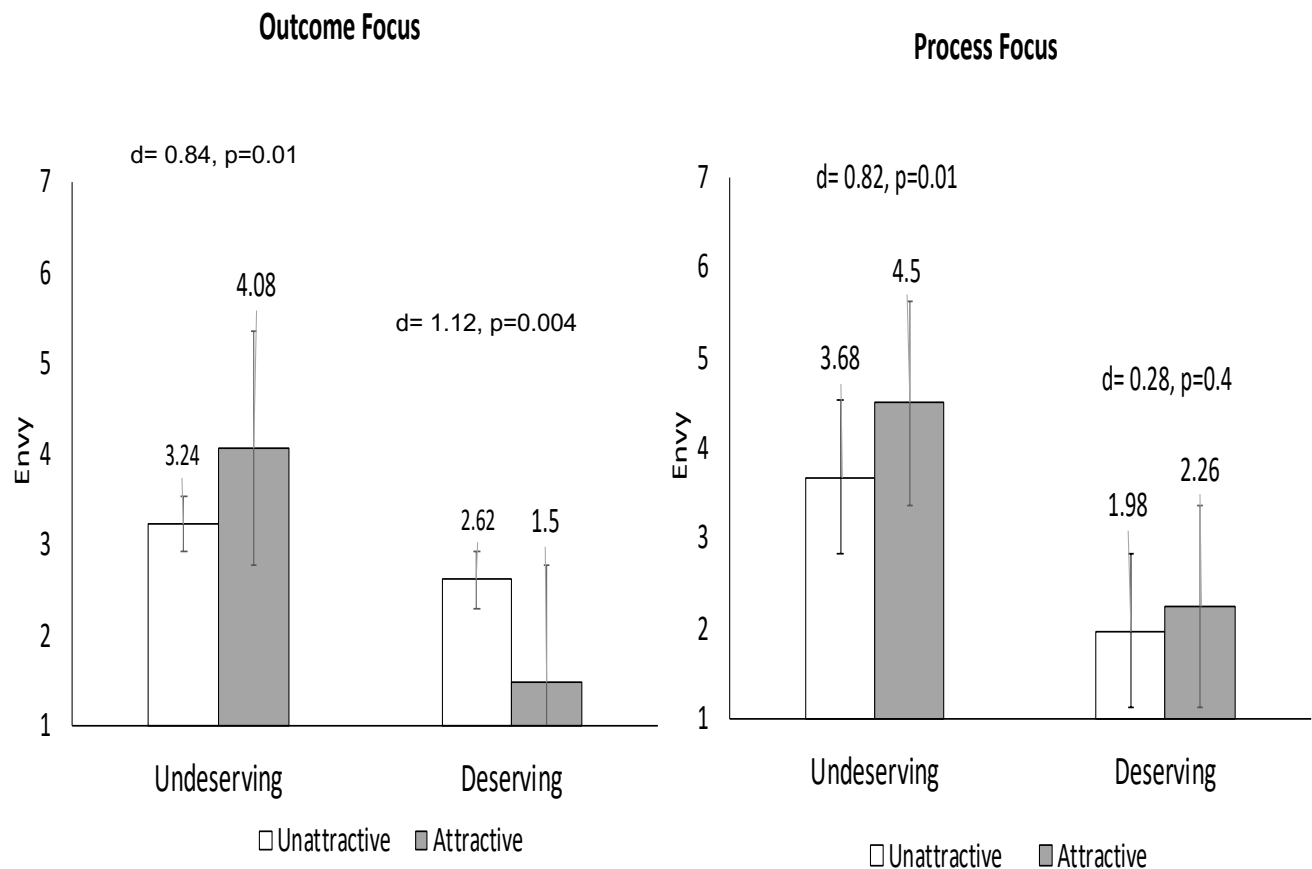


Figure 17. The effect of attractiveness and deservingness on malicious envy.

Donation: Both malicious and benign envy has a direct influence on donation behavior. As malicious envy decreases ($B=-4.374$, $p<0.001$) and benign envy increases ($B=5.476$, $p<0.001$) there is an increase in the amount donated to the charity chosen by the target. An ANOVA analysis indicates that there is a significant two-way interaction between product attractiveness and target deservingness ($F(1, 301) = 5.32$, $p=0.02$), however,

they don't interact with focus ($F(1, 301)=0.75, p=.39$). When target deservingness is high, people are more likely to donate to the charity chosen by the target, when the bonus attractiveness was low compared to when it was high ($\text{Mean}_{\text{high}} = 52.66, \text{Mean}_{\text{low}} = 62.79, p=0.02$). There was no significant difference when the target was undeserving ($\text{Mean}_{\text{high}} = 33.06, \text{Mean}_{\text{low}} = 29.72, p=0.3998$). The interaction effect was not mediated by experience of benign ($\text{ACME}=-0.48, p=0.29, \text{CI}[-1.99, 0.12]$) and malicious envy ($\text{ACME}=-0.84, p=0.33, \text{CI}[-3.295, 0.59]$). Product attractiveness had an indirect effect on donation behavior which was mediated by benign envy ($\text{ACME}=0.062, p=0.062, \text{CI}[-4.74, 0.02]$). These results support H4a, that is, the benign and malicious envy influences emulation but only partially supports H4b that experience of envy mediates the effect of product attractiveness and target deservingness on donation behavior.

Study 6: Effect of Product Attractiveness and Target Deservingness on Donation

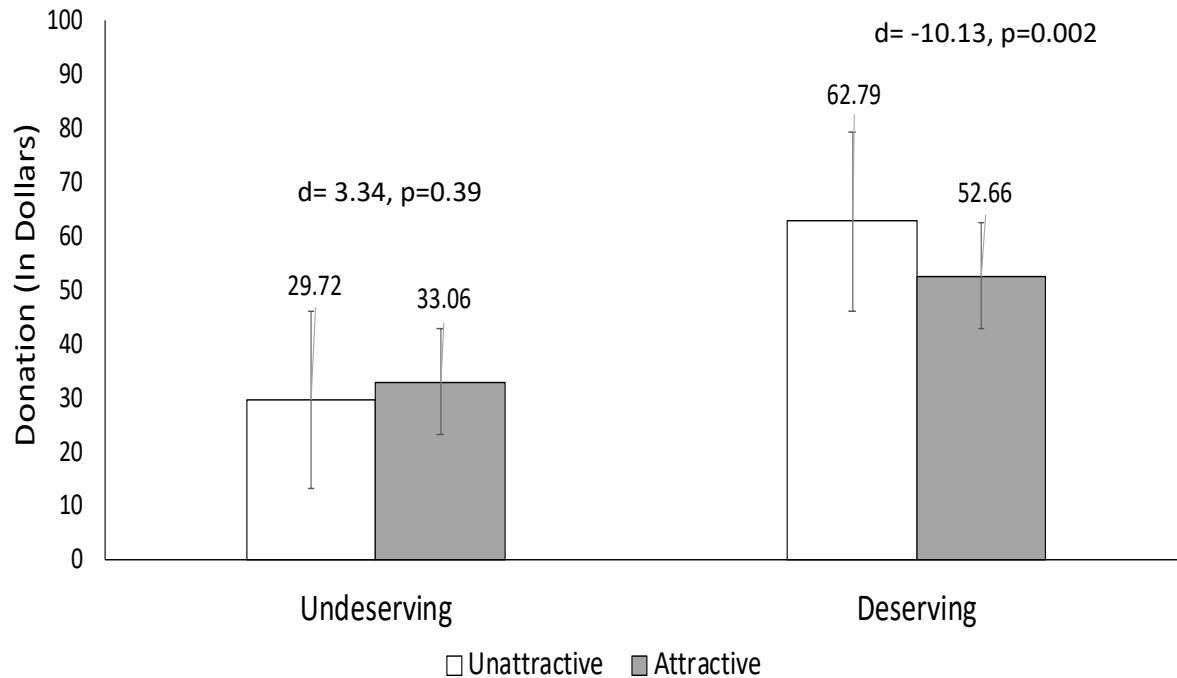


Figure 18. The effect of attractiveness and target deservingness on donation amount.

Discussion

To summarize, this study was designed to study underlying mechanisms. Results show that people's experience of malicious envy is driven by a sense of fairness which is determined by the interaction of product attractiveness and target deservingness. This is however attenuated when people are asked to focus on the outcome or the process specifically. Further, we find support for the idea that experience of envy influences emulative behavior in the context of donations.

5. CONCLUSION

5.1 General Discussion

The current research investigates the two important factors which influence the experience of malicious and benign envy. Firstly, this research tests the influence of product attractiveness on envy. Secondly, it postulates a moderation by target deservingness, which is defined as the deservingness of the envied person. Thirdly, an explanation for the observed phenomenon is identified in the form of the perceived unfairness experienced by the actor (the envier). Finally, the emulative and denigrative consequences of experiencing malicious and benign envy is studied both within and outside the envy context.

Overall the six completed studies show that target deservingness and product attractiveness influence the experience of malicious, and benign envy directly. Secondly, I find, that malicious and benign envy are primarily negative and positive motivations that are not intrinsically target and product-oriented. Rather, the dimensions of envy mediate the relationship between the antecedents and the consumption related consequences.

Particularly, the studies showed that the process used to determine why the target received a reward was a more dominant factor than product attractiveness. In line with the resource-goal complementarity (Leventhal et al. 1980; Shaddy and Shah 2018) and social exchange theories (Colquitt et al. 2013), since envy is experienced as a result of an unfair upward social comparison, information about target deservingness which signals process fairness and is more relevant to envier's experience of inferiority would be the dominant determinant compared to product attractiveness which signals

outcome fairness. Only when the process is fair, that is, the target is deserving, does the information about product attractiveness become relevant to the determination of the experience of envy. Therefore, when the target is undeserving, people experience more malicious envy than benign envy and this is irrespective of the attractiveness of the product because people are only using the information about the process. When the target is deserving, people experience more benign envy than malicious envy. The majority of the studies indicate that when target deservingness is high their experience of benign envy increase with the increase in product attractiveness, while their experience of malicious envy decreases within product attractiveness. This likely happens because people's judgment is heavily influenced by the product attractiveness and the associated fairness.

However, when people's attention is drawn specifically to the process, this bias in judgment disappears. Similarly, when people focus on the outcome and the target of their envy is undeserving, a difference in the experience of envy appears between the attractive and the unattractive products. This project also provides initial evidence that malicious and benign envy are only types of motivation which can result in both emulative and denigrative behavior both within the immediate context and other unrelated situations, particularly concerning prosocial behavior.

Through this work, I hope to develop a comprehensive picture of Envy based on the pain theory proposed by Lange et al. (2018). By doing so I hope to provide a more complete picture of not only the factors which drive experience of envy but the resulting consumption behavior in relation to the actor-object-target triad proposed by existing

work. Further, by exploring various moderating conditions, I hope to understand some of the boundary conditions for this phenomenon.

5.2 Limitations and Future Directions

To conclude, I hope to provide a more nuanced understanding of envy related consumption practices. However, one limitation of this study is that it focuses on envying an individual. Therefore, in future studies, I hope to also investigate how envy of a group would influence consumption practices.

A second limitation of this work is that it primarily focuses on immediate consumption consequences. Future work should also explore the change in consumption with an increase in temporal distance, as the experience of the three dimensions decay differently over time (Lange et al. 2018).

Additionally, in future investigations, a field study should be used to verify the results. This is particularly necessary to understand the experience of envy in the real world. Additionally, this study has primarily focused on the moderation and underlying process in the relationship between product attractiveness and experience of two types of envy. Even though we explore the consumption consequences of experiencing envy, more study is required to understand the boundary conditions impacting the consumption practices resulting from the experience of envy.

This research is further limited in its exploration of the process and the role of perceived fairness. Future studies are required to acquire a more nuanced understanding of different types of fairness and associated underlying mechanisms. Finally, this research focused on the influence of product attractiveness and target

deservingness on an experience of envy towards an individual. Further research is required to explore how these factors impact the experience envy of a group.

Beyond expanding on the current studies, future studies should also investigate how changes in social distance, that is the “feeling of closeness” (Loewenstein and Small 2007) and psychological distance between the envier and the envied impact experience of envy as a function of target deservingness and the impact of consumption decisions. social distance is the “feeling of closeness” between individuals (Loewenstein and Small 2007). Research indicates that as perceived closeness between people increases, there is an increase in social comparison (Helgeson and Mickelson 1995) and enhanced emotional responses (Loewenstein and Small 2007; Small and Simonsohn 2008) because of increased similarity. Therefore, it is essential to understand how changes in psychological distance between the envied and the envier would impact the current results. Answering this question becomes particularly relevant for the context of social media and digital marketing, because consumers are not only influenced by the behavior or their friends but also by more psychologically distance individuals such as celebrities and influences.

Another, route of exploration which would be of interest in the future to understand the experience of envy in the context of experiential consumption, particularly within the context of renting economy. Currently the sharing economy has increased product accessibility and ownership isn't always necessary for consumption-related experiences (Bardhi and Eckhardt 2017). Also, the sharing economy often modifies consumption (Bardhi and Eckhardt 2017; Belk 2014). Consumption moving towards a more ephemeral sharing economy. Further, if a person cannot afford to

purchase the same product as the envied person acquires, he or she might be able to rent something similar through various sources like Airbnb. Therefore, it is critical to understand how the experience of envy changes in contexts where ownership isn't critical and product experience can be dissociated from ownership.

To summarize, in addition to replicating the current results in more realistic contexts with multiple products and experiences, as next steps it is also critical to expand the theoretical understanding for envy within an adapting marketplace. This could include various approaches including looking at rental economy and investigating psychological distances on social media platforms.

5.3 Managerial Implications

In a world of personalization and customer-centric behavior, it is essential to not only understand how people respond but their emotional journey. Additionally, in a digitally connected environment that expands the scope of conspicuous consumption, envy is a key driver of consumer decisions. Therefore, firms need to understand the exact circumstances under which their customers experience envy. Additionally, an understanding of how external motivators like information about the envied person and the product attributes can help to determine how to position products, the value benefits to promote and the brand storytelling they want to emphasize.

Particularly, this research provides an understanding of how otherwise unattractive products can be positioned and promoted. Wanting what another person has is a strong motivation for consumer purchases. However, it is often difficult to

promote functional products like insurance, preventative health tests, or products that are considered aesthetically unpleasing, like imperfect produce because they will not generally invoke a sense of longing as a result of an upward comparison using envy. However, if products by themselves are not considered high status or experiential enough, firms can enhance the experience by the customer by focusing on the traits of the role model promoting on the product or focusing on how the role model acquired the product. Additionally, on social media feeds where people scroll through images and updates on people's lives, the experience of benign envy is common, that is, people want what others like them have. This is a strong motivator for unplanned impulse buys of products consumers may not otherwise have desired.

On the flip side, the research indicates that while it is possible to promote unattractive products, it is very important for firms to recognize that choice of the correct promoter is essential. This is particularly true when firms use influencers/social media opinion leaders to promote the products. Consumers view them as being similar and while this can enhance envy driven purchases, it can also be detrimental if the influencer is seen to be taking advantage of their access to brands without genuinely being deserving of the attention. For instance, even a luxury product cannot drive longing related envy, if the influencer is seen to have acquired the item through unfair means and therefore is undeserving.

Additionally, this research suggests that both malicious and benign envy can influence emulative behavior. For instance, benign envy leads people to donate more to charities chosen by the people they envy. Malicious envy, on the other hand, is

detrimental to emulation. These results can help firms and organizations design strategies to nudge people and to increase of different public policy-related issues.

Therefore, to conclude, understanding how product and target related attributes influence envy driven consumption is essential because it helps companies to develop promotional plans particularly for digital marketing purposes. Additionally, it helps in identification of factors which can hinder positive evaluation of products. A final implication of this study is that people can be driven to engage in constructive behavior as a result of experiencing envy.

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APPENDIX

Target Deservingness, Product Attractiveness and Fairness Focus Stimuli

Study 1a

“Imagine you have a co-worker, Robert. He is a hard worker. Along with being a team player, he is also dedicated to the company. This year he received a bonus for his exceptional performance. Everyone agrees that this was a well-deserved bonus.

With this performance bonus, he bought a high-end sound system for his home.”

Studies 1b & 2

“Imagine you have a co-worker, Robert. He is a hard worker. Along with being a team player, he is also dedicated to the company. This year he received a bonus for his exceptional performance. Everyone agrees that this was a well-deserved bonus.

With this performance bonus, he bought business class plane tickets for a vacation (plane tickets).”

Studies 3a & 3b

High Deservingness X High Desirability “ : Imagine you have a co-worker, Robert. He is a hard worker. Along with being a team player, he is also dedicated to the company.

This year he received a bonus for his exceptional performance. Everyone agrees that this was a well-deserved bonus.

With this performance bonus, he bought a **luxury vacation package**. The package included a luxury cruise and a stay at an exclusive island resort.

Here is a recent article on the package:

The cruise's ocean-inspired elegant interiors and multiple world-class gourmet restaurants have received rave reviews. A perfect complement to this cruise, the island with its private beaches and world-class spas help guests unwind and forget their busy lives.

One couple on recently took the trip described it as being “one of their most memorable vacations”. Other guests have complimented the amazing service and friendly staff.

This is one of the most popular packages right now.

Imagine that you did not receive this bonus”

Low Deservingness X Low Desirability “: Imagine you have a co-worker Robert. He is not a hard worker. He is neither a team player nor dedicated to the company. This year he received a bonus, even though his performance was average. Everyone agrees that this was not a well-deserved bonus

With this performance bonus, he bought a **vacation package**. The package included a cruise and a stay at an island resort.

Here is a recent article on the package:

The cruise has interiors inspired by the ocean and multiple restaurants. Along with this cruise, the resort with its beaches and spas also helps guests unwind.

One couple on the trip described it as being “a good vacation”. However, other guests mentioned that the staff wasn’t very friendly. It is not surprising, that the package has received some good reviews but there is still room for improvement.

Imagine that you did not receive this bonus”

Study 4

High Product Attractiveness X High Target Deservingness:

Imagine you have a co-worker, Robert. He is a **hard worker**. Along with being a team player, he is also **dedicated to the company**. This year **he received a bonus** for his exceptional performance. Everyone agrees that this was a **well-deserved bonus**.

This performance bonus included a **luxury vacation package which had received mostly 5 stars (out of 5 stars) reviews**. The package included a **luxury cruise and a stay at an exclusive island resort**.

Here is a recent article on the package:

The cruise's **ocean-inspired elegant interiors** and **multiple world-class gourmet restaurants** have received rave reviews. A perfect complement to this cruise, **the island with its private beaches** and **world-class spas** help guests unwind and forget their busy lives.

One couple on recently took the trip described it as being “**one of their most memorable vacations**”. Other guests have complimented the **amazing service and friendly staff**. This is one of the most popular packages right now.

Moderate Product Attractiveness X High Target Deservingness:

Imagine you have a co-worker, Robert. He is a **hard worker**. Along with being a **team player**, he is also dedicated to the company. This year he **received a bonus** for his exceptional performance. Everyone agrees that this was a **well-deserved bonus**.

This performance bonus included a **vacation package which had received mostly 3 stars (out of 5 stars) reviews**. The package included a **cruise and a stay at an island resort**.

Here is a recent article on the package:

The cruise has **interiors inspired by the ocean** and **multiple restaurants**. Along with this cruise, the **resort with its beaches** and **spas** also helps guests unwind.

One couple on the trip described it as being “**a good vacation**”. However, other guests mentioned that the **staff wasn't very friendly**. It is not surprising, that the package has received some good reviews but **there is still room for improvement**.

Low Product Attractiveness X High Target Deservingness:

Imagine you have a co-worker, Robert. He is a **hard worker**. Along with being a **team player**, he is also **dedicated to the company**. This year he **received a bonus** for his exceptional performance. Everyone agrees that this was a **well-deserved bonus**.

This performance bonus included **a vacation package** which **had received mostly 1-1.5 stars (out of 5 stars) reviews**. The package included a **cruise and a stay at an island resort**.

Here is a recent article on the package:

The cruise has **outdated ocean-inspired interiors** and **average restaurants**. Along with this cruise, the **resort with its beaches** and **spas** also helps guests unwind but is often **overcrowded**.

One couple on the trip described it as being “**the worst vacation ever**”. Other guests mentioned that the **staff was rude and inefficient**. It is not surprising, that the package has received poor reviews **with a lot of room for improvement**.

Low Product Attractiveness X Low Target Deservingness:

Imagine you have a co-worker Robert. He is **not a hard worker**. He is **neither a team player nor dedicated to the company**. This year **he received a bonus**, even though his performance was average. Everyone agrees that this was **not a well-deserved bonus**.

This performance bonus included **a vacation package** which **had received mostly 1-1.5 stars (out of 5 stars) reviews**. The package included a **cruise and a stay at an island resort**.

Here is a recent article on the package:

The cruise has **outdated ocean-inspired interiors** and **average restaurants**. Along with this cruise, the **resort with its beaches** and **spas** also helps guests unwind but is often **overcrowded**.

One couple on the trip described it as being “**the worst vacation ever**”. Other guests mentioned that the **staff was rude and inefficient**. It is not surprising, that the package has received poor reviews **with a lot of room for improvement**.

Study 5

High deservingness (Accurately arranged references):

“Imagine that you are helping update an online reference library.

You will be asked to arrange a group of articles in chronological order with the newest (most recent) one first.

On the next page, **the same task submitted by another Mturk participant from Part 1 of this study is provided as an example.** We would also like your feedback about this work.

Please go through this example carefully before moving on to the task. “

Example of a chronologically arranged articles with the most recent one first:

2015: Keele, L.. The statistics of causal inference: A view from political methodology. *Political Analysis*, 23(3), 313-335.

2010: Ladicky, L., Russell, C., Kohli, P., & Torr, P. H. Graph cut based inference with co-occurrence statistics. In *European Conference on Computer Vision* (pp. 239-253). Springer, Berlin, Heidelberg.

2009: Pearl, J. Causal inference in statistics: An overview. *Statistics surveys*, 3, 96-146.

2006: Hothorn, T., Hornik, K., Van De Wiel, M. A., & Zeileis, A. A Lego system for conditional inference. *The American Statistician*, 60(3), 257-263.

2005: Hall, P., & Horowitz, J. L. Nonparametric methods for inference in the presence of instrumental variables. *The Annals of Statistics*, 33(6), 2904-2929.

Example of a chronologically arranged articles with the most recent one first:

2015: Keele, L.. The statistics of causal inference: A view from political methodology. *Political Analysis*, 23(3), 313-335.

2010: Ladicky, L., Russell, C., Kohli, P., & Torr, P. H. Graph cut based inference with co-occurrence statistics. In *European Conference on Computer Vision* (pp. 239-253). Springer, Berlin, Heidelberg.

2009: Pearl, J. Causal inference in statistics: An overview. *Statistics surveys*, 3, 96-146.

2006: Hothorn, T., Hornik, K., Van De Wiel, M. A., & Zeileis, A. A Lego system for conditional inference. *The American Statistician*, 60(3), 257-263.

2005: Hall, P., & Horowitz, J. L. Nonparametric methods for inference in the presence of instrumental variables. *The Annals of Statistics*, 33(6), 2904-2929.

Low deservingness (Inaccurately arranged references):

Example of a **chronologically arranged** articles with the **most recent one first**:

2009: Pearl, J. Causal inference in statistics: An overview. *Statistics surveys*, 3, 96-146.

2015: Keele, L.. The statistics of causal inference: A view from political methodology. *Political Analysis*, 23(3), 313-335.

2006: Hothorn, T., Hornik, K., Van De Wiel, M. A., & Zeileis, A. A Lego system for conditional inference. *The American Statistician*, 60(3), 257-263.

1975: Hill, B. M. A simple general approach to inference about the tail of a distribution. *The annals of statistics*, 1163-1174.

2004: Chapman, N., Huxley, R., Anderson, C., Boussier, M. G., Chalmers, J., Colman, S., ... & Warlow, C. Effects of a perindopril-based blood pressure-lowering regimen on the risk of recurrent stroke according to stroke subtype and medical history: the PROGRESS trial. *Stroke*, 35(1), 116-121.

Task given to participants

Now Please arrange the following articles in chronological order starting with the newest (most recent) one.

2004: Gao, X., & Jiang, L.. Biophysics: water-repellent legs of water striders. *Nature*, 432(7013), 36.

1991: Sansom, M. S. The biophysics of peptide models of ion channels. *Progress in biophysics and molecular biology*, 55(3), 139-235.

1965: Shik, M. L., & Orlovskii, G. N. Biophysics of complex systems and mathematical models.

2008: Deniz, A. A., Mukhopadhyay, S., & Lemke, E. A. Single-molecule biophysics: at the interface of biology, physics and chemistry. *Journal of the Royal Society Interface*, 5(18), 15-45.

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2013: Popp, F. A., & Belousov, L. V. (Eds.). *Integrative biophysics: biophotonics*. Springer Science & Business Media.

1995: Chan, V., Graves, D. J., & McKenzie, S. E. The biophysics of DNA hybridization with immobilized oligonucleotide probes. *Biophysical journal*, 69(6), 2243-2255.

1966: Small, D. M., Bourges, M. C., & Dervichian, D. G. The biophysics of lipidic

Low product attractiveness

“Please think about how you would feel if the mTurker received a **\$1 Amazon Gift Voucher for the example you were previously shown.**”

High product attractiveness

Please think about how you would feel if the mTurker received a **\$25 Amazon Gift Voucher for the example you were previously shown.**

Study 6

High Product Attractiveness X High Deservingness X Outcome Focus

“Imagine you have a co-worker, Robert. This year he received a performance bonus.

This performance bonus included a vacation package which had received mostly 5 stars (out of 5 stars) reviews. The package included a luxury cruise and a stay at an exclusive island resort.

Here is a recent article on the package:

The cruise's ocean-inspired elegant interiors and multiple world-class gourmet restaurants have received rave reviews. A perfect complement to this cruise, the island with its private beaches and world-class spas that help guests unwind and forget their busy lives.

One couple on recently took the trip described it as being “one of their most memorable vacations”. Other guests have complimented the amazing service and friendly staff. This is one of the most popular packages right now.”



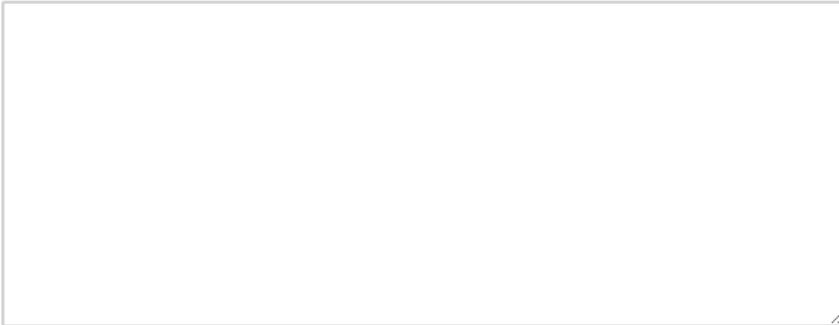
“Your coworker Robert is a hard worker. He is a team player and dedicated to the company. Everyone agrees that the vacation package he received as a bonus is a well-deserved bonus.”



There are **two things** to consider in this scenario:

1. **The reward(bonus)**: The **bonus vacation package with 5 stars** and poor reviews
2. **The process**: The **deserving coworker being chosen over others**

Focus on the **reward/bonus** (The vacation package with 5 stars) **independently** (without considering the process). Write your **opinion about the bonus** and whether you would want it. Think about how **attractive or unattractive the bonus is** and whether it is a **fair or unfair bonus**.



Low Product Attractiveness X Low Deservingness X Process Focus

“Imagine you have a co-worker, Robert. He is **not a hard worker**. He is **neither a team player nor dedicated to the company**.

This year he received a **performance bonus**. Everyone agrees that the **vacation package he received as a bonus is not a well-deserved bonus**. The management's **decision** to give him this bonus was a **biased** one which **does not seem to have been a correct representation** of his **yearly performance**.

Robert had **missed multiple project deadlines**, and his **performance review** indicated that not only did **he not do his part for the team**, but the **work quality was poor** and often needed to be **redone by his coworkers**. Another employee who had worked with Robert mentioned that he was **often uncooperative and irresponsible**.

In the following page, a description of the vacation package is provided.



“Robert's performance bonus included **a vacation package which had received mostly 1- 1.5 star (out of 5 stars) reviews**. The package included **a cruise and a stay at an island resort**.”



There are **two things** to consider in this scenario:

1. **The reward(bonus):** The **bonus vacation package with 1-1.5 stars** and poor reviews
2. **The process:** The **undeserving coworker being chosen over others**

Focus on the **process** (choosing the coworker) **independently** (without considering the bonus). Write your **opinion about the process**. Think about how **deserving or undeserving your co-worker is** and whether the **process is fair or unfair**.

Please rate which was **more important in the situation described**, the **process fairness** or the **reward/bonus fairness**.

Process Fairness 1	2	3	4	5	6	Reward(bonus) Fairness 7
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Envy Measures:**Study 1 & 2**

Self-reported experience of envy
I would experience envy.
Benignness
I would feel a desire to emulate.
I would be motivated to make positive changes.
I would experience longing.
Maliciousness
I would feel aggressive.
I would feel hostile.
I would feel angry.
I would experience hatred.
Perceived Control
I would feel that I don't have control over the situation.

Studies 3a & 3b

Benign Envy	Malicious Envy
The situation empowers me.	The situation frustrates me.
The situation appears fair to me.	The situation appears unfair to me.
The situation uplifts me.	The situation depresses me.
The situation makes me supportive.	The situation makes me hostile.
The situation makes me contented.	The situation makes me discontented.
The situation makes me happy.	The situation makes me angry.
The situation makes me receptive.	The situation makes me aggressive.
I want to seek out this situation.	I want to avoid being in this situation.
The situation motivates me.	The situation demotivates me.
The situation arouses positive feelings.	The situation arouses negative feelings.

Studies 4 & 6

Benign Envy	Malicious Envy
The situation empowers me.	The situation makes me angry.
The situation motivates me.	The situation makes me aggressive.
The situation arouses positive feelings.	The situation demotivates me.
	The situation arouses negative feelings.

Studies 5

Benign Envy

Benign envy is described as **envy** which also makes you **feel positive, inspired, and willing to engage in constructive actions** like working harder, praising the coworker, etc.

Please rate how much "benign envy" would you be likely to experience?

Not at all 1	2	3	4	5	6	A lot 7
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Malicious Envy

Malicious envy is described **as envy** which makes **you feel hostile, angry, and willing to engage in destructive actions** like complaining, avoiding the coworker, etc.

Please rate how much "malicious envy" would you be likely to experience?

Not at all 1	2	3	4	5	6	A lot 7
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Behavior Measures

Study 2

Positive Product-Oriented
If I have other resources, I will buy plane ticket from the same airlines.
Positive Person-Oriented
I would congratulate the co-worker.
I would speak highly of the co-worker.
I would want to be like the co-worker.
Negative Product-Oriented
If I had other resources, I would buy plane tickets from a different airline.
Negative Person-Oriented

I would complain about the co-worker.
I would be rude to the co-worker.

Study 3

Study 3a	Study 3b
Person & Product Related Action:	Person & Product Related Action
I want to emulate the person described.	I do not want to emulate the person described.
I would be proud to own the product described.	I would be ashamed to own the product described.

Study 5

If you were given **additional \$0.50 to donate**, would you be likely to **donate it to a charity** the other **mTurker**(whose work you reviewed) donated to or a **randomly chosen charity**?

The charity chosen by the other mTurker 1	2	3	4	5	6	A randomly chosen charity 7
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Study 6

Imagine that **you have \$100** that you want **to donate**. You **can split your donations** between a **charity your coworker (described previously) has donated to** and a charity **your company has chosen**. **How** would you **split** the **\$100** between the two charities (you can also **choose to donate the entire 100 dollars to one of the two charities**)?

	Amount
Charity chosen by your coworker	\$ <input type="text" value="0"/>
Charity chosen by your company	\$ <input type="text" value="0"/>
Total	\$ <input type="text" value="0"/>

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