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Outperformed: How the envy reflex influences status seeking service consumers’ engagement

Darren Boardman\textsuperscript{a,*}, Maria M. Raciti\textsuperscript{a}, Meredith Lawley\textsuperscript{a}

\textsuperscript{a}University of the Sunshine Coast, School of Business, Australia

\textsuperscript{*}Corresponding author at: University of the Sunshine Coast, School of Business, Locked Bag 4, Maroochydore DC, Queensland 4558 Australia. Ph: +61 437 498 080.

E-mail addresses: dboardma@usc.edu.au (D. Boardman), mraciti@usc.edu.au (M. Raciti), mlawley1@usc.edu.au (M. Lawley).
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Abstract

Purpose – The overall purpose of this paper is to assist service management academics and providers of positional services (i.e. services that provide status attainment benefits to consumers) to better understand how the envy reflex of outperformed consumers operates as an endemic emotional theme that, if properly managed, can be harnessed to improve consumer engagement outcomes.

Design/methodology/approach – The objectives of the research were addressed via two quantitative studies. In a preliminary descriptive study, the types of services consumers classify as ‘positional’ were identified (n = 351) and a measure of consumer perceived positional value was developed (n = 179). In the main study, a $2 \times 2$ between-subjects quasi-experimental design was adopted using a sample of positional service consumers (n = 265) with the data analysed via SEM and two-way MANCOVA.

Findings – The main study found a significant mediation effect of the envy reflex on the relationship between consumer perceived positional value and the overall likelihood of an engagement intention for outperformed positional service consumers. In addition, specific engagement intentions were predicted for outperformed consumers with a high envy reflex after considering how deserving they perceived a superior performer to be.

Originality/value – This research contributes to the burgeoning scholarly interest in the envy reflex as a consumption emotion by demonstrating its influence on consumer engagement outcomes. The research also demonstrates how tactics informed by appraisal theories of emotion
can be used to manage endemic emotional themes in service environments to improve engagement outcomes.

**Keywords:** Envy reflex, Cognitive appraisals, Consumption goals, Status, Consumer engagement, Positional services

**Paper type:** Research paper

### 1. Introduction

Status seeking is a fundamental human goal that is often expressed through consumption (Patsiaouras and Fitchett, 2012; Saad, 2013; Griskevicius and Kenrick, 2013). During consumption, consumers with status attainment goals compare themselves to other service consumers and when outperformed, they can experience envy (Bogaerts and Pandelaere, 2013; Park and Jang, 2015; Anaya *et al.*, 2016). Envy is an emotion that may be endemic to certain services, namely those services that enable consumers to enhance their social status such as beauty services or a university degree that gives access to a high-income profession (Marginson, 2016; Yazdanparast and Spears, 2018). Such services are referred to as ‘positional’ (Hirsch, 1977; Marginson, 2016). As argued by Richins (1997), by isolating specific emotions that are likely to emerge within a given service consumption context, service providers can better understand behavioural outcomes that are of direct relevance to that context. Accordingly, positional service providers who understand and manage envy may be able to influence consumer engagement behaviours.

Envy, a psychological pain reflex triggered by recognition of the superiority of another (and referred to hereafter as the envy reflex), is increasingly recognized in the marketing
literature as an important driver of both positive and negative consumer behaviour. For example, the envy reflex has been demonstrated to increase the willingness of consumers to purchase, and pay a higher price for, the same goods owned by an envied ‘other’ but can also drive consumers away from the brand of good owned by an envied ‘other’ (Van de Ven et al., 2011; Crusius and Mussweiler, 2012). Similarly, the envy reflex of service consumers who have witnessed the preferential treatment of other consumers in the service environment can either drive further purchasing (Park and Jang, 2015) or conversely harm the consumer-service relationship (Anaya et al., 2016). More recent research has examined how marketers may be able to leverage the envy reflex of social media users to motivate consumption of additional services such as travel (Hajli et al., 2018). However, little attention has been given to understanding how the envy reflex may operate as an emotional theme that forms part of the service experience to such an extent that it can influence consumers’ ongoing engagement with the service provider. Addressing this gap in the literature is the overall purpose of the current paper.

Emotions present during consumption play a critical role in shaping consumers’ overall service experience and their ongoing engagement with a service provider (Higgins and Scholer, 2009; Heinonen, 2018). Hence, providers who develop positive emotional themes within the service environment via psychologically informed service design can enhance consumers’ service experience (Dasu and Chase, 2013; Chase and Dasu, 2014). The same design principles, if extended to a positional service context, can help the providers of these services to manage the embedded influence of the envy reflex thereby mitigating its negative influence while encouraging the positive outcomes associated with the emotion. Thus, appropriate management of the envy reflex may improve consumers’ service experience resulting in increased retention and profitability.
This paper has two objectives. The first objective is to identify what types of services are perceived by consumers to be ‘positional’ and therefore may represent services in which the envy reflex is influential in shaping consumer engagement outcomes. The second objective is to develop and test a model of the envy reflex that can be used to predict positive and negative consumer engagement behavioural intentions within a positional service context.

The remainder of the paper is structured as follows. First, a review of the literature related to positional services is provided to clarify the service consumption context within which the model will be tested. This is followed by an outline of the conceptual issues surrounding the envy reflex and a conceptual model that addresses these issues is presented. Then, the literature underpinning hypothesis development is reviewed. The method and results for a preliminary and main study, which respectively align with objectives one and two, are provided. Finally, the implications of the main study findings for theory and practice are discussed.

2. Literature review

2.1 Positional services attract status seeking consumers who compare themselves to others

Positional services are defined as services that consumers perceive to offer status benefits. The following consumption domains have been identified as attracting the positional (or status) concerns of consumers: income (Solnick and Hemenway, 1998; Luttmer, 2005); physical attractiveness (Solnick and Hemenway, 1998); and clothing and house size (Solnick and Hemenway, 2005). In a more recent study, participants themselves (rather than the researcher as in previous studies) identified investing for future prosperity, education grades, intelligence,
physical fitness, weight, and attractiveness as domains that attracted their positional concerns (Hillesheim and Mechtel, 2013). These findings suggest that services that align with the domains will attract status seeking consumers. For example, beauty services align with the attractiveness domain and, therefore, will attract a consumer segment that is motivated by status attainment goals in this domain (Bloch and Richins, 1992; Saad and Gill, 2000; Yazdanparast and Spears, 2018).

Consumption goals are critical for understanding the behaviour of positional service consumers. This is because consumption goals influence which service offerings the consumer prioritizes during consumption (Suh and Yi, 2012). In addition, the consumer’s perception of value during consumption is based on how well the offerings they prioritize facilitate consumption goal achievement (Woodruff, 1997; Higgins and Scholer, 2009; Barbopoulos and Johannson, 2016). When the consumption goal is status attainment, consumers seek out services they perceive can advantageously position them relative to other consumers. Beckert (2011) refers to this positioning capacity of services as ‘positional value’. Furthermore, consumers with status attainment goals gauge the capacity of a service to provide positional value during consumption via positional comparisons with other service consumers (Bogaerts and Pandelaere, 2013). Thus, a consumer’s perception of the capacity of a service to provide positional value can be used to gauge the magnitude of their status attainment goal orientation toward a service and the likelihood they will make positional comparisons with other consumers during consumption.

However, services can vary in relation to the opportunities consumers have to interact with each other and, hence, the opportunity to make positional comparisons. The variation in consumer-to-consumer interaction (CCI) across services was first discussed by Martin and Pranter (1989) who identified seven characteristics service providers can use to assess the level
of influence CCI has in the service environment. These characteristics are: 1) close physical proximity of consumers; 2) consumers verbally interact; 3) consumers engage in a variety of activities; 4) consumer population is heterogenous; 5) development of compatible relationships between consumers is part of service provision (e.g. group assessment activities at university; shared fine dining experiences) 6) consumers occasionally wait for the service; and 7) consumers share service offerings (Martin and Pranter, 1989). In addition, CCI can be of low, moderate or high relevance to the consumer’s service experience (Zhang et al., 2010). Therefore, positional comparisons are more likely to occur in positional service environments, such as social media, where CCI is central to service provision and therefore highly relevant to the consumer experience (Bogaerts and Pandelaere, 2013). This, in turn, increases the likelihood that the envy reflex may play an influential role within the service environment.

2.2 The envy reflex

2.2.1 Conceptual issues and limitations

‘Envy’ has received considerable attention from scholars across a range of disciplines. However, competing theories have emerged across literatures resulting in conceptual inconsistencies that are problematic for ongoing research in the area. For example, Lange et al. (2018) identify three theoretical orientations including the malicious envy theory, the dual envy theory and the pain theory of envy. Briefly, malicious envy theory focuses on the inferiority and resentment associated with envy and how this leads to malicious behaviour towards a superior ‘other’ (Smith, Kim and Parrott, 1988; Parrott and Smith, 1993; Smith and Kim, 2007). Dual envy theory recognizes envy as having two distinct experiences: a benign form, which is characterized
by the motivation to level up to the superior performance of another consumer, and a malicious form, which is characterized by being critical of a superior-performing consumer to other consumers (Belk, 2011; Van de Ven et al., 2009; Van de Ven, 2016). Finally, the pain theory of envy focuses on how the pain or discomfort associated with being outperformed by a superior ‘other’ motivates a behavioural response which can be positive or negative (Cohen-Charash, 2009; Tai et al., 2012; Cohen-Charash and Larsen, 2017).

To integrate the various explanations, Lange et al. (2018) recently forwarded the Pain-driven Dual Envy (PaDE) theory. The PaDE theory posits that preoccupation (i.e. with being outperformed) and inferiority are painful, and this pain drives one of two independent types of envy: benign or malicious (Lange et al., 2018). However, criticisms levelled at the dual envy theory also apply to the PaDE theory. For example, Tai et al. (2012, p. 107) argue that envy is a ‘singular’ construct they define as a painful reaction to being outperformed. Furthermore, it is only the behavioural intentions associated with envy that can be characterized as benign or malicious and it is an additional, or secondary, post-envy cognitive appraisal process that drives the different intentions (Tai et al., 2012). This argument is supported by the findings of Anaya et al. (2016) who demonstrate that it is secondary emotions that emerge from post-envy (i.e. secondary) cognitive appraisals that more directly drive service consumers’ behavioural intentions rather than the envy reflex. Thus, the PaDE theory is limited in that it is based on a conceptualization of envy that conflates behavioural intentions with the emotion itself and fails to account for the influence of separate, but interrelated, cognitive appraisal processes on these intentions. Furthermore, the PaDE theory does not adequately explain the role of transmutation (i.e. how the envy reflex transforms into other emotions) in shaping the behavioural outcomes associated with the emotion.
2.2.2 Envy: a pain reflex that drives the engagement intentions of outperformed consumers

To address the conceptual issues surrounding the construct, this paper focuses on the functional role the envy reflex plays in human motivation. Specifically, when viewed from an evolutionary psychological perspective, the envy reflex serves a similar function to physical pain. Just as physical pain alerts an individual to a physical threat they may need to respond to, the envy reflex alerts an individual to the existence of a social threat that may require a response (Hill and Buss, 2008; Eisenberger, 2012; Tai et al., 2012). Viewing envy as a pain reflex is supported by neuroscientific evidence for the existence of evolved neural circuits that are automatically activated (i.e. they are reflexive) in response to threat (Woody and Szechtmam, 2011; LeDoux, 2012). Furthermore, neuro-imaging research shows that the area of the brain activated when envy is experimentally elicited coincides with the area of the brain that activates during physical pain experience (Takahashi et al., 2009). Thus, envy is a psychological pain reflex (i.e. it has non-physical causation) that occurs when the neural circuit responsible for recognizing social threat is triggered (i.e. it is non-volitional) by an unfavourable positional comparison (Takahashi et al., 2009; Menon and Thomson, 2010; Tai et al., 2012).

The pain of the envy reflex acts to draw attention to the threat of being outperformed so that an appropriate behavioural response can be made (LeDoux, 2012). However, being outperformed in a situation where status attainment is of heightened personal significance results in a more intense envy reflex compared to situations where status attainment is of low personal significance (Cohen-Charash, 2009; Lin and Utz, 2015; Anaya et al., 2016). Because there is a relationship between consumption goals and consumer perceived value (Woodruff, 1997; Higgins and Scholer, 2009; Barbopoulos and Johansson, 2016), when status attainment is of heightened personal significance to a service consumer, then the positional value offered by a
service is more salient to them and the more likely they are to have an envy reflex when outperformed by another consumer. In addition, a more intense envy reflex results in heightened threat perception thus increasing the likelihood that a behavioural response to the threat of being outperformed is required with implications for ongoing engagement with the service (Berntson and Cacioppo, 2008; Roseman, 2011). The suggested relationships relevant to the envy reflex are presented in Figure 1.

As depicted in Figure 1, the envy reflex is proposed to share direct relationships with consumer perceived positional value and the overall likelihood of a consumer engagement intention. In addition, consumers engage with services they perceive to offer goal-relevant value (Woodruff, 1997; Barbopoulos and Johansson, 2016) and changes to their engagement are driven by the emotions experienced when consumption goals are threatened (Higgins and Scholer, 2009). Therefore, the envy reflex mediates the relationship between consumer perceived positional value and the overall likelihood of a consumer engagement intention. Accordingly, we propose:

**H1a:** There is a significant positive relationship between consumer perceived positional value and the envy reflex for outperformed consumers.

**H1b:** There is a significant positive relationship between the envy reflex of outperformed consumers and the overall likelihood of a consumer engagement intention.
**H1c:** There is a significant positive indirect relationship between consumer perceived positional value and the overall likelihood of a consumer engagement intention (dashed line in Figure 1.) as the envy reflex mediates the relationship between the two constructs.

2.3 *Secondary appraisals influence the specific engagement intentions of envious consumers*

Appraisal theory posits that emotions emerge from the cognitive appraisal, or evaluation, of a given consumption situation and these evaluations help consumers identify appropriate ways of responding. However, appraisal theorists disagree as to how the different types of cognitive appraisals that may be relevant to a particular emotion are processed. The parallel processing perspective suggests emotions are experiences that emerge from the simultaneous (i.e. parallel) processing of a specific combination of appraisal types (Moors *et al.*, 2013). Conversely, the sequential processing perspective differentiates between primary and secondary appraisals (Moors *et al.*, 2013). Primary appraisals evaluate goal-relevant information with a specific emotion occurring when a threat to goal realization is recognized. Secondary appraisals are considered more complex post-emotion evaluative processes that assess coping options for addressing a recognized threat so that a socially appropriate behavioural response can be made (Castelfranchi, 2000; Scherer, 2001).

Distinguishing between primary and secondary cognitive appraisals as supported by the sequential processing perspective is consistent with the envy reflex research. Specifically, as the positional comparison process evaluates information that is relevant to achievement of status attainment goals, an unfavourable positional comparison represents the necessary primary appraisal antecedent of the envy reflex (Parrott and Smith, 1993; Smith and Kim, 2007). In
addition, researchers have consistently identified deservingness and controllability cognitive appraisals as influential in shaping envy-related outcomes (Testa and Major, 1990; Van de Ven et al., 2012; Boardman et al., 2016). Thus, deservingness and controllability cognitive appraisals represent specific types of secondary cognitive appraisals that occur post-envy reflex.

The utility of the sequential processing perspective for predicting specific consumer behaviours has been demonstrated in the marketing literature (Anaya et al., 2016; Obeidat et al., 2017; Cai et al., 2018). Furthermore, application of the sequential processing perspective to the envy reflex not only facilitates prediction of specific behavioural intentions but also addresses the issue of transmutation which can explain how the envy reflex drives both positive and negative outcomes (Smith, 2004; Smith and Kim, 2007; Lange et al., 2018). As argued by Roseman (2011, 2013), secondary emotions that emerge from the secondary appraisal of a threat motivate specific behavioural responses to that threat. This has been demonstrated in relation to the behaviour of envious service consumers by Anaya et al. (2016). Accordingly, specific predictions can be made about the engagement intentions of consumers who have recognized the threat of being outperformed via the envy reflex and have subsequently made deservingness and controllability secondary appraisals of the situation. However, because the function of the envy reflex is to draw attention to the threat of being outperformed so that a response is prioritized (see H1b in the previous section), deservingness and controllability secondary appraisals are more likely to predict the specific type of consumer engagement intention for high envy reflex consumers only. To illustrate, Figure 2 presents a conceptual model of the relationship between the envy reflex and specific consumer engagement intentions as moderated by deservingness and controllability secondary appraisals.
As shown in Figure 2, two hypotheses are developed that correspond with each of the secondary appraisals that are relevant to the envy reflex (i.e. deservingness and controllability). Deservingness, defined by Feather (2006) as the perception of something earned because of a person’s actions or qualities, is an evaluation of both the worthiness of a superior performer and the environment within which the performance occurred. If an individual is outperformed by someone they consider deserving, this is a reminder that with the same effort, similar success can be attained (Hafer and Bègue, 2005; White et al., 2012). In this situation, the superior performance is what Roseman (2013) describes as motive-consistent in that it coincides with the beliefs and goals of the outperformed individual and therefore elicits positive secondary emotions, such as hope and joy, that motivate increased engagement. Conversely, a secondary appraisal of a superior performer as undeserving is motive-inconsistent and tends to decrease engagement due to the elicitation of negative secondary emotions such as fear and sadness (Roseman, 2013).

Research also demonstrates that deserving and undeserving secondary appraisals of a superior performer respectively motivate consumers to either level up to or criticize a superior performer (Feather and Sherman, 2002; Van de Ven et al., 2012). The former motivation is referred to as a benign engagement intention and the latter as a malicious engagement intention due to their respective association with benign and malicious envy in the marketing literature (Belk, 2011; Van de Ven et al., 2012). As such, we propose multiple hypotheses in relation to deservingness secondary appraisals as follows:
**H2:** High envy reflex consumers who make a secondary appraisal of the superior performer as…

a. …deserving are more likely to have a benign intention.

b. …deserving are more likely to have an increased behavioural engagement intention.

c. …undeserving are more likely to have a decreased behavioural engagement intention.

d. …undeserving are more likely to have a malicious intention.

Controllability is the belief that a situation is alterable (Testa and Major, 1990). If controllability in relation to a threat is perceived as low, the threat circumstances are perceived as unalterable and instead, the actors involved in the threat (e.g. the superior performing ‘other’) become the focus of a coping response due to negative secondary emotions such as dislike (Roseman, 2013; Crusius and Lange, 2014). Conversely, if controllability is perceived as high in a threatening situation, behavioural responding involves the mobilization of resources to address the threat: a response that is driven by action-oriented secondary emotions including frustration and anger (Roseman, 2013; Crusius and Lange, 2014). For example, if being outperformed in a service environment is recognized as a threat, consumers with high controllability perceptions would tend to increase their use of service offerings to address the threat. That is, they would display an increased behavioural engagement intention.

Low controllability has been shown to result in decreased task persistence which is akin to a decreased behavioural engagement intention (Testa and Major, 1990). However, the Crusius and Lange (2014) finding that a malicious outcome is likely when secondary appraisals are focused on the envied person may also be connected to low controllability. This is because
coping responses to being outperformed are directed at the superior performer when resources are not available to improve performance (Roseman, 2013). As such, we propose multiple hypotheses in relation to controllability secondary appraisals as follows:

**H3:** High envy reflex consumers who make a secondary appraisal of...

a. …high control are more likely to have an increased behavioural engagement intention.

b. …low control are more likely to have a decreased behavioural engagement intention.

c. …low control are more likely to have a malicious intention.

3. **Method and results**

3.1 **Preliminary study overview**

A preliminary study with two aims was conducted. The first aim was to identify services that consumers considered to be ‘positional’. The second aim was to develop a measure of consumer perceived positional value for use in the main study.

In relation to the first aim, Australian adult consumers (n = 372; 55% female; age: 18-30 years = 25.3%; 31-50 years = 38.4%; 51-64 years = 20.2%; 65 years and over = 16.1%), recruited via an online research panel provider participated in an online survey. Study participants were presented with a list of 30 services and asked to indicate the main type of value they perceived each service to offer where three options were provided: positional, hedonic and
utilitarian. Based on 351 useable responses, frequency analysis identified that the top 10 services in order of positional value classification were: premium airline, cosmetic procedure, personal sports coach, university education, beauty, financial planning, master builder, fine dining, social media and trade training course services.

In relation to the second aim, consumers who identified as having personally used one of the services they classified as offering positional value responded to 17 items. Status-related consumption items were adapted from the literature and used to measure the consumer perceived positional value construct. Respondents were asked to indicate the extent to which they agree or disagree with each statement using a 7-point Likert-scale (1 = strongly disagree; 7 = strongly agree). An exploratory factor analysis (n = 179) supported a unidimensional solution where 11 items were retained (variance explained = 67.89%; AVE = 0.64; α and composite reliability both 0.95). Items and factor loadings are presented in Table I.

3.2 Main study

In line with the literature (see section 2.1), the main study service context needed to be a positional service where CCI is of high relevance to consumers’ service experience. Accordingly, CCI relevance was assessed in relation to the top 10 services by positional value classification. As university education services were assessed as having the highest CCI relevance rating, this was chosen as the service context for the main study (see Appendix AI for CCI relevance rating method).
3.2.1 Method

Two hundred and sixty-five university undergraduates (168 females. Age: ≤ 24 years – 70.6%; 25 to 34 years – 17.4%; ≥ 35 years – 12.0%) participated in a 2 (deservingness: deserving, undeserving) × 2 (controllability: high control, low control) between-subjects quasi-experimental design. A quasi-experimental approach involving sequential allocation to treatment conditions was adopted as the study design required an even number of high and low envy reflex participants in each condition. Study participants were recruited on campus at an Australian university and a link was emailed to the nominated email address of 508 potential participants with 265 completed surveys received by the closing date (see Appendix AII for the survey).

3.2.2 Procedure

Participants completed the consumer perceived positional value scale in relation to their consumption of university education services which consisted of the 11 items identified via exploratory factor analysis in the preliminary study. Participants were then presented with an envy reflex stimulus consisting of a scenario that described the superior performance of a same-sex target in relation to obtaining a desirable internship. Participants’ envy reflex was measured immediately after presentation of the stimulus and scores were classified as high or low based on the median score identified via pre-testing (i.e. ≥ 14 on the 4-item, 7-point scale was considered a high envy reflex case).

High and low envy reflex participants were sequentially allocated to one of four treatment conditions so that each condition contained approximately an even number of high envy reflex participants (as required by H2 and H3). Treatment conditions included: 1) deserving/high control; 2) undeserving/high control; 3) deserving/low control; and 4)
undeserving low control. Participants were presented with an addendum to the original envy reflex stimulus (see Appendix A III for stimulus and addendums) containing information that served as a manipulation of the deservingness of the stimulus target (either deserving or undeserving) and the participant’s capacity to address the superior performance of the stimulus target (i.e. high vs low controllability). After presentation of the addendum, participants completed manipulation check questions. Finally, the four dependent variables (i.e. benign, increased behavioural, decreased behavioural and malicious consumer engagement intentions) were measured.

3.2.3 Measures

Consumer perceived positional value was measured using the scale developed in the preliminary study. A confirmatory factor analysis of the scale using the main study sample indicated model fit was acceptable based on the fit statistics interpretation recommendations of Iacobucci (2010) (fit indices: $\chi^2 = 167.73 \ (p < 0.001); \chi^2/df = 3.81; \ SRMR = 0.04; \ CFI = 0.94$). The 11-item scale also demonstrated adequate convergent validity (AVE = 0.59) and reliability (composite reliability = 0.94).

An initial draft of the envy reflex scale was developed using items drawn from Smith et al. (1988) and Parrott and Smith (1993). The initial 7-item scale was pretested using a small convenience sample from the target population (n = 39; 26 females, mean age of 20.33 years). Four items were retained including: feel inferior, feel hostile, feel resentment, feel envy. Respondents were asked to indicate the extent to which they agree or disagree with each statement using a 7-point Likert-scale (1 = strongly disagree; 7 = strongly agree). In the main
study, these four items demonstrated adequate convergent validity (AVE = 0.56) and reliability (composite reliability = 0.83).

In relation to the three manipulation check items, pre-testing indicated that there were two aspects to controllability including: 1) seeking out information about the superior performance, and 2) evaluating the capacity to address the superior performance based on this information. As a result, three manipulation check items were developed – one for deservingness and two for controllability. Respondents were asked to indicate how they think most university students would respond to each statement using a 7-point Likert-scale (1 = definitely not; 7 = definitely yes).

The four consumer engagement intentions were operationalized according to the service context and the focus of the positional comparison in the envy reflex stimulus (i.e. an internship). For example, an increased behavioural engagement intention was operationalized as the increased use of university education service offerings to obtain an internship opportunity (see Appendix AII for all consumer engagement intention questions). Respondents were asked to indicate how likely it actually is that most university students would respond in the way the statement describes using a 7-point Likert-scale (1 = highly unlikely; 7 = highly likely).

Finally, a control measure was included. As optimism and pessimism represent personality-driven tendencies towards making positive and negative appraisals respectively (Gerrans and Scherer, 2013), it was deemed important to assess their potential to confound the predicted relationship between secondary appraisals and consumer engagement intentions. Accordingly, the two-item optimism/pessimism measure utilizing a 7-point Likert-scale (1 = not at all optimistic/pessimistic; 7 = extremely optimistic/pessimistic) was included in the final survey (see Kemper et al., 2015).
3.3 Main study results

The main study data analysis was conducted with composite variables. The composites were formed in two ways. First, the 11 consumer perceived positional value scale items were summated to obtain a composite score as unidimensionality had been established with an appropriately sized sample (Gerbing and Anderson, 1988). For the remaining constructs, composites were formed by obtaining the average score for all construct items. This process was used for the four envy reflex scale items, the two controllability manipulation check items (α = 0.76) and the four consumer engagement intention items (α = 0.13). The low internal consistency between the four consumer engagement intention items was not relevant as the items were: 1) used to assess an absolute increase across the four consumer engagement intention variables that was not related to their interdependence (i.e. H1b and H1c), and 2) assessed independently in relation to H2 and H3.

3.3.1 Hypothesis 1

The first hypothesis was tested using Structural Equation Modelling in Amos graphics software version 24. Specifically, a structural model was run to test hypotheses H1a and H1b and incorporated a bootstrap analysis with 2000 resamples to test the mediation proposed by H1c (see Fig. 1.). The results are summarized in Table II.

[Table II near here]
As shown in Table II, the direct relationships proposed in \textbf{H1a} and \textbf{H1b} were supported. Thus: consumer perceived positional value is a significant positive predictor of the envy reflex for outperformed consumers (\textbf{H1a}) and the envy reflex was a significant positive predictor of the overall likelihood of a consumer engagement intention for outperformed consumers (\textbf{H1b}). While support was found for the envy reflex as a mediator of the relationship between consumer perceived positional value and the overall likelihood of a consumer engagement intention, results indicate that a full mediation relationship exists rather than the predicted partial mediation relationship. Therefore, \textbf{H1c} was partially supported.

\textit{3.3.2 Hypotheses 2 and 3}

In the final analysis, a two-way MANCOVA was used to test the hypothesized influence of the deservingness and controllability manipulation on consumer engagement intentions. However, two preliminary analyses were necessary. First, as \textbf{H2} and \textbf{H3} were investigated in relation to high envy reflex consumers, a median split was conducted to identify high envy reflex cases. Second, the effectiveness of the deservingness and controllability manipulations was assessed.

The median split process adopted in the main study was guided by the recommendations of Iacobucci \textit{et al.} (2015). Specifically, high envy reflex cases were first defined as those equal to or above the median envy composite score (i.e. 4.25) resulting in 142 high envy reflex cases (53.6\% of the total sample). Sample size breakdown across the treatment conditions was: deserving/high control (n = 40); undeserving/high control (n = 38); deserving/low control (n = 33); undeserving/low control (n = 31). A t test, \(t(263) = 4.43, p < 0.001\), found the high envy reflex (n = 142) group scored significantly higher on the consumer engagement intention
composite than the low envy reflex group (n = 123), thus supporting use of the median split and retention of the high envy reflex cases for the final data analysis.

The deservingness and controllability manipulations were found to be effective. Specifically, participants in the deserving treatment conditions rated the stimulus target as significantly more deserving than those in the undeserving treatment conditions (t(140) = 11.44, \( p < 0.001 \)) and participants in the high control treatment conditions had significantly higher scores on the controllability composite than those in the low control treatment conditions (t(140) = 3.23, \( p < 0.01 \)). The manipulations did not influence each other, and no interaction effects were found, indicating that perceptions of deservingness and controllability were influenced primarily by their corresponding manipulations.

The main effects of the secondary appraisal manipulations on consumer engagement intentions were assessed via two-way MANCOVA with the inclusion of optimism and pessimism as covariates in the model. The two IVs included: 1) a deservingness IV, consisting of a deserving level and undeserving level, and 2) a controllability IV, consisting of a high control level and a low control level. Results of the MANCOVA are summarized in Table III. The table also provides effect sizes for significant findings using the partial \( \eta^2 \) statistic which are described as small, medium and large based on the benchmark values of 0.01, 0.06 and 0.14 respectively (Cohen, 1988).

Results in Table III highlight the primary influence of the deservingness IV on the dependent variate, after controlling for optimism and pessimism, as shown by the significant
multivariate main effect \( (F(4, 133) = 15.65, p < 0.001) \). No significant multivariate main effect was found on the controllability IV, and no interaction effects were present. Similarly, the univariate main and interaction effects show the deservingness IV to have a significant influence across three of the four DVs with no significant univariate effects found for the controllability IV. Thus, \( H_3 \) was not supported. Pairwise comparisons were examined to identify how the different levels of the deservingness IV influenced the DVs in order to address \( H_2 \). The results are summarized in Table IV where the level of the deservingness IV with the highest mean for each of the DVs is identified.

\[ \text{[Table IV near here]} \]

The results in Table IV indicate that the deserving level of the IV is related to a significant elevation of scores on the benign and increased behavioural engagement intention DVs. Conversely, the undeserving level of the IV is related to a non-significant increase (i.e. 0.05) in the decreased behavioural engagement intention DV and a significant increase in the malicious intention DV. These results indicate that sub-hypotheses \( H_{2a}, H_{2b} \) and \( H_{2d} \) were supported. While sub-hypothesis \( H_{2c} \) was not statistically significant, it is noted that the significance level of 0.05 was not exceeded and the effect size was comparable to the significant finding in relation to \( H_{2b} \) (partial \( \eta^2 = 0.03 \)).

4. Discussion

This paper identifies the types of service environments within which the envy reflex may be an endemic emotion and demonstrates how it influences consumer engagement intentions. The main
study demonstrated that consumer perceived positional value is a significant predictor of the envy reflex (H1a) for outperformed consumers of services where CCI is of high relevance. Similarly, the envy reflex is a significant predictor of the overall likelihood of a consumer engagement intention (H1b) and fully mediates the relationship between consumer perceived positional value and the overall likelihood of a consumer engagement intention (H1c). These findings are consistent with the previous research indicating that the envy reflex is stronger in domains in which status is of heightened personal significance (Cohen-Charash, 2009; Lin and Utz, 2015; Anaya et al., 2016). Similarly, the findings support the evolutionary psychology perspective of the envy reflex as a social threat alarm where a more intense envy reflex corresponds with a heightened perception of threat thereby increasing the likelihood of a behavioural response (Berntson and Cacioppo, 2008; Roseman, 2011). However, identifying how the envy reflex mediates the relationship between outperformed consumers’ perception of positional value and their engagement with a positional service provider is a novel finding.

The main study also demonstrated the significant influence of deservingness secondary appraisals in shaping the engagement intentions of high envy consumers. Generally, those in the deserving treatment conditions were more likely to have elevated scores on the positive consumer engagement intention DVs (i.e. benign and increased behavioural engagement intentions; H2a and H2b respectively) while those in the undeserving treatment conditions were more likely to have elevated scores on the negative consumer engagement intention DVs (i.e. malicious and decreased behavioural engagement intentions; H2c and H2d respectively). This finding supports previous research demonstrating the influence of deservingness secondary appraisals on envy-related outcomes (Van de Ven et al., 2012; Boardman et al., 2016) and
contributes a new model of the envy reflex to the marketing literature that uses deservingness to predict specific consumer engagement intentions in a service context.

Previous research has provided mixed findings in relation to the role of controllability secondary appraisals in shaping outcomes associated with the envy reflex. As such, the failure to demonstrate a controllability effect in this paper is consistent with some studies (Van de Ven et al., 2012) while contradicting others that demonstrate or acknowledge the important role of controllability secondary appraisals in shaping envy-related outcomes (Testa and Major, 1990; Roseman, 2013; Anaya et al., 2016). However, the main study offers two explanations which may help clarify the varied findings in relation to controllability.

As H3 was examined using data from the high envy reflex consumer group only, the characteristics of this group provide the first explanation of the findings in relation to controllability. Follow-up analyses showed that high envy reflex consumers were more experienced service users and scored higher on the second controllability manipulation check question compared to low envy reflex consumers. This suggests that in addition to being more willing to exert control over service offerings to achieve their goal, high envy reflex consumers may have greater awareness of what service offerings are available to them due to being more experienced service users. These characteristics of high envy reflex consumers may have reduced their sensitivity to the controllability manipulation in the main study.

The second explanation for the lack of influence of controllability in the main study may relate to the service context itself. Specifically, university education services provide access to a range of supplementary offerings consumers can use to improve their performance relative to other consumers (e.g. academic skills advisers and feedback processes). Thus, a controllability mechanism is effectively built into the service via supplementary offerings that are more likely to
be accessed by high envy reflex consumers which may have impacted on the relevance of the controllability manipulation in the main study. However, this interpretation suggests that it may be problematic for service providers who do not give high envy reflex consumers adequate opportunity to improve their performance. Further clarification of the specific circumstances in which controllability secondary appraisals may be influential is required.

4.1 Theoretical implications

This paper presents a model that predicts the engagement intentions of outperformed positional service consumers with a high envy reflex. Furthermore, the model adopts a refined and parsimonious definition of the important consumption emotion of envy as a psychological pain reflex and incorporates appraisal theory to explain how the conceptually problematic issue of transmutation drives the dual outcomes (i.e. positive and negative) associated with the emotion. Thus, this paper addresses key limitations with current conceptualisations that fail to functionally separate the envy reflex from its associated secondary appraisal process and outcomes. The final research model is presented in Figure 3.

[Figure 3 near here]

The clarification offered by this research in relation to the role of secondary appraisals in shaping the engagement of envious consumers has important implications for service management. Specifically, Dasu and Chase (2013) argue that emotional themes can be managed within service environments via tactics that encourage consumers to appraise aspects of service
provision in a particular way. Thus, identifying that deservingness secondary appraisals shape both positive and negative engagement intentions gives positional service providers a specific point of intervention on which appraisal-based tactics can be developed to encourage positive engagement outcomes. The critical aspect of this type of intervention, from a service management perspective, is that it is based on the consumer’s goal orientation toward the service as indicated by their perception of the value it has to offer them. Therefore, use of appraisal-based tactics to influence consumer engagement maintains the integrity of why consumers originally decide to engage with a service. The result is a less intrusive approach to intervention that supports the consumer’s ongoing journey with the service provider while encouraging their sense of control and ownership over that journey (Anker et al., 2015; Jussila et al., 2015; Harmeling et al., 2017). Positional service providers, and service providers generally, who approach consumer engagement strategy in this way can develop deeper and more authentic relationships with consumers that result in reputational benefits and competitive advantage.

The research findings may also inform a generalisable approach to developing a consumer engagement strategy across different service contexts. Specifically, this paper identified how consumer perceptions of value relate to their consumption goals and successfully predicted positive and negative consumer engagement intentions from the interrelationship between the emotional and cognitive (i.e. secondary appraisal) response to consumption goal threat. As there are limited consumption goal orientations (Barbopoulos and Johansson, 2016), the model in Figure 3 represents a framework for mapping specific emotion and secondary appraisal relationships that predict likely engagement outcomes across different service settings where consumers’ goals are not adequately met by service provision. Thus, this research offers a
potentially structured approach for developing non-intrusive appraisal-based tactics to improve consumer engagement outcomes across different service contexts.

4.2 Managerial implications

The findings indicate that favourably influencing how superior-performing consumers are perceived within the service environment can increase desirable behavioural engagement intentions while reducing malicious engagement intentions. To achieve this, positional service providers can design fairness into the service through embedding policies and procedures that enhance perceptions of fairness thus reducing the likelihood that superior performing consumers are perceived as underserving. Conversely, the absence of information on which deservingness secondary appraisals can be made can result in malicious engagement intentions (i.e. criticism of other consumers) with implications for the quality of the service experience for other consumers. Thus, positional service providers may benefit from examining the frequency of negative comments or complaints about other consumers as a diagnostic of the incidence of malicious engagement intentions which would indicate the need for service design processes that promote fairness. This could be achieved through the implementation and monitoring of feedback/complaint information obtained from feedback forms, social media channels or direct communication with consumers.

While standardized and clearly communicated procedures promote consumer deservingness appraisals by enhancing the capacity of all consumers to perform well, this may not be effective in all positional service environments. For example, positional comparisons with other consumers in beauty, gyms and fitness, and university education services may be based on
perceived superior personal attributes (e.g. attractiveness, physical fitness and intelligence) that are independent of their service performance. As such, appropriate training of the frontline staff in these positional services is critical for managing the potential impact of malicious engagement intentions. As demonstrated by this research, a malicious consumer engagement response involves being critical of superior-performing consumers and communicating this to others. Frontline staff can be trained to recognize this as a potential indicator that the consumer is being critical because they perceive themselves to be inferior. In this circumstance, frontline staff can be trained to provide an appropriately empathic response and redirect the situation through an attentive focus on the consumer’s needs.

4.3 Limitations and future research

Limitations associated with the cross-sectional design of this research, and the reduced generalizability of quasi-experimental designs in comparison to fully randomized experimental designs, are acknowledged. In addition, model testing was limited to only one service, market segment and country. As such, the generalizability of the findings to other services, segments, countries and cross-cultural settings needs further investigation. To address these limitations, future research could provide a more detailed analysis of the demographic characteristics of the ‘positional’ consumer segment across different service contexts. For example, the demographics for positional consumers of premium airline services are likely to be different to the demographics of positional consumers of university education services. However, application of the research model presented in this paper should facilitate prediction of consumer engagement outcomes across service contexts regardless of the demographic makeup of the positional
consumer segment. This could be confirmed by future research. Similarly, future research could examine how culture influences what services are perceived as positional and confirm the generalisability of the research model across cultures. Finally, the research model could be extended more broadly to the investigation of relevant appraisal, emotion and behavioural factors in utilitarian and hedonic service contexts where service failure can result in strong consumer emotional responses including anger and fear.

References


Appendix

[Table A I near here]

[Table A II near here]

[Table A III near here]