

Why Some People Just “Can’t Get No Satisfaction”: Secure versus Insecure Attachment Styles Affect One’s “Style of Being in the Social World”

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Abstract

We first seek to explore the relationship between attachment styles of professional financial service customers and their ability to experience customer satisfaction and build relationships with a commercial bank. Secure attached people identify with the commercial bank, feel satisfied and are loyal with the commercial bank. Second, we question whether attachment styles and degrees of satisfaction are also reflected in a capacity to feel pleasure in attachments to luxury products, feel happiness and pro-activeness, develop positive relationships with others, and sleep well for multiple samples of non-commercial customers. Apparently, secure attached people form enjoyable attachments with luxury goods/brands. Equally, in life in general they show a proactive attitude and generosity toward others, and feel low envy. Anxious attachment style relates negatively with appraisal of and relationship formation with commercial banks, negatively with enjoyment and attachment to luxury goods, and negatively with generosity towards people and happiness. In addition, anxious attachment style relates positively with envy towards people and low sleep quality. Avoidant attachment style does not relate with any of the above variables except for a negative association with happiness with life in general. Finally, none of the attachment styles scales relates with the BIS-BAS scale, except that anxious attachment relates with the BIS scale, indicating largely that the attachment system does not function as an approach-avoidance system but helps in homeostatic regulation of stress due to the experience of quiescence with others. By studying how attachment styles affect people in commercial and general social domains we hope to pave the way for further exploration of the fundamental mechanisms that drive secure attached people as opposed to insecure attached people to generally experience positive emotions and outcomes in life. We tentatively suggest that compared to insecure attached people, secure attached people possess a different “style of being in the social world.”

Keywords: attachment system, attachment styles, happiness, satisfaction, style of being in the social world

“...it turns out that if you measure their heart rate during the separation the physiological signs indicate that inside the babies are miserable—one of the saddest research finding I know” (Alison Gopnik, 2009, p. 182, speaking about avoidant-attached children)

1. Introduction

An unexamined truism is that brand or company loyalty is a function of the degree of satisfaction felt by customers (Szymansky & Henard, 2001). However, some consumers feel little need to form close relationships with firms, and something more than satisfaction, perse, often undergirds customer loyalty. A case in point is the role of attachment styles in customer behavior. Mende et al. (2013) discovered that attachment styles—trait-like dispositions that motivate people to seek social ties and proximity to others specifically in times of need—affect whether some customers develop relationships with firms and brands whereas others do not. In the current research, we first focus on the role that attachment styles play in the experience of customer satisfaction and

relationship formation with a financial service (commercial bank). We then elaborate on this phenomenon to help managers understand why attachment styles matter in marketing practice by studying reactions of people in non-financial service contexts.

The attachment system is a biologically hardwired mechanism grounded by evolution but shaped early-on in child-caregiver interactions. It causes young children to motivate their caretakers (focal attachment figures) to come and keep them together in close proximity in case of need, so that psychological discomfort, pain, or stress can be regulated. In close contact, both mother and child experience skin-to-skin contact (such as touching, holding), allowing the child to experience the neuroception of safety which underpins quiescence. This, in turn, provides resources for co-exploration of the social environment. Hence the attachment system operates as a social homeostatic system. The attachment literature distinguishes three different attachment styles: secure, avoidant, and anxious; the latter two are also called insecure attachment styles (Mikulincer & Shaver, 2010). These attachment orientations are relatively stable over time but can be changed through natural life experiences or effective psychotherapy (see Mikulincer & Shaver, 2007, for a review), and affect how one forms diverse bonds in intimate relationships, friendships (Mikulincer & Shaver, 2010), relationships with brands (e.g., Swaminathan et al., 2009), religious affiliation (e.g., Kirkpatrick, 1992), relationship with animals (e.g., Kwong & Bartholomew, 2011), and firms (e.g., Mende & Bolton, 2011).

Mende et al. (2013) found that insecure attached consumers (both anxious and avoidant) do not develop strong relationships with firms. We initially seek to replicate Mende's et al. (2013) findings and then explore the bases for them, as well as explore extensions. As we conceive attachment styles as biological concepts, we do not use domain-specific attachment styles as Mende et al. did in relation to attachment with a firm. Instead, we use dispositional attachment scales that reflect how people relate to other people in general as individual differences. In using general attachment scales to study why attachment styles are so pervasive in affecting people's relationships, we take an ontological stance (philosophical study of the nature of being) in order to look at how individual differences in attachment styles reflect people's sense of being in the social world (Heidegger, 1927). Attachment styles have been found to have pervasive effects on the experience of pleasure of, and attachment to, material goods, and we study how such experiences affect feelings of envy and generosity toward others. We come to this research question and view attachment styles in a twofold sense according to an embodied perspective (Beckes et al., 2014) and as a working model or mind-set (Mikulincer & Shaver, 2010). In this view, people build and conserve resources -- psychological resources, social, and temporal -- through seeking proximity with others, which allows them to co-explore their social world, share their enjoyment in the pleasures of their world, and cope with stress in that world. This approach takes into account feelings of relaxation or quiescence, in contrast to overly simple approach-avoidance models that have been taken in the past that we contrast below.

The presentation proceeds as follows. First, we present the embodied perspective on attachment styles (e.g., Beckes et al., 2014), as well as the working model, mind-set interpretation (Mikulincer & Shaver, 2010). Second, we use generic attachment style scales and not domain-specific ones to replicate findings in the Mende et al. (2013) study. We test whether attachment styles matter on a sample of professional customers of financial service firms, exploring whether they experience customer satisfaction and whether it affects their development of customer relationships, specifically identification with, and loyalty to, a commercial bank. Third, we explore whether customer satisfaction, which has hedonic dimensions, spills over to peoples' ability to experience luxury goods and form an attachment to clothing they themselves bought. Fourth, we ask whether attachment styles reflect how people experience overall happiness, whether they are pro-active in life, whether they experience envy or generosity toward others, and whether they experience high versus low sleep quality. Fifth, and finally, we study whether attachment styles relate to the BIS-BAS scale (Carver & White, 1994), and we hypothesize that the attachment system, especially for secure attached people, does not operate according to an avoidance (punishment)-approach (rewards) system but reflects a "style of being in the social world" experience allowing for homeostatic regulation of stress via key others and the sensation of quiescence.

2. The Attachment System and Attachment Styles

2.1 Attachment System Functioning

We take a biologically embodied perspective on attachment systems inspired by Beckes et al. (2014). The attachment system operates as a goal-directed homeostatic system which is a key element in bond formation between person and attachment figure(s), where both are receptive or act to seek or maintain proximity and from there reach a sense of security. This so-called primary proximal process serves to activate the attachment system. When danger or stress occurs in the proximity of the attachment figure, the person learns to develop effective

social beckoning behaviors over time, which motivates the attachment figure to bring the person to a desired end-state; that is, to provide comfort and security which allow the attachment system to deactivate and provide a “safe heaven”. Multiple sensory contacts such as sight, sound and touch by the attachment figure are key drivers that help the focal person deactivate their attachment system when prudent. Deactivation involves specific processes all related to managing proximity. First, thermoregulation of skin-to-skin contact between person and attachment figure, such as a handshake, induce a rise in skin and core body temperature. Second, proximity provokes feelings of safety and allows people to better regulate metabolic resources and save energy. This makes exploration of the environment easier when being together versus alone (e.g., see social base-line theory; Beckes & Coan, 2015). Third, proximity fosters the scaling down of perception and processing of threats in the social environment, which in turn lowers the hesitancy to explore the world alone (or with others), making it more comfortable to search the environment and reap potential benefits. Fourth, proximity motivates people to seek friends and build relationships, which results in the saving of energy by off-loading or sharing work needed in coping with stress, and permits exploration of the social situation. These embodied processes explain why attachment systems are functional for coping with stress, as it provides homeostatic regulation. Somewhat similar processes have been proposed in social psychology and are known as broadening and building processes (Fredrickson, 2001; Mikulincer & Shaver, 2010), referring to the fact that once a positive emotion such as contentment occurs, other positive emotions such as hope and passion become activated and function to reinforce coping as well.

Crucial to the biologically embodied perspective is the observation that activation and deactivation of the attachment system are associated with neuroendocrine processes, which we consider here to be the proximal determinants of behavior. Note that such neuroendocrine processes occur throughout life and help regulate relationships and alliances, as described here after.

First, the attachment system becomes activated when a person experiences stress, setting off a chain reaction of biological responses. The HPA (hypothalamus-pituitary-adrenal) axis produces cortisol, which, via the bloodstream (crossing the blood-brain barrier), positively affects amygdala functioning, which amplifies the stress response and stimulates activation in the striatum. The amygdala is centrally involved in regulation of anxiety and fear (Le Doux, 2015), and the striatum is part of the dopamine system and helps regulate reward seeking and also interacts with the prefrontal cortex to engage executive self-control processes. These processes undergird actions and reactions. Too much cortisol in response to stress, however, weakens the self-regulation ability of a person. It is exactly this overall sequential state (stress-coping-self-regulation) that is toned down by activation of the attachment system (through seeking proximity and gaining a sense of security). Hence the attachment system functions as a homeostatic system helping people cope with stress and its negative effects.

Second, skin-to-skin contact produces oxytocin (OT), which is known to affect the degree to which people appraise others as trustworthy and cooperative, and whether they seek to create strong bonds. OT has inhibitory effects on carbohydrate preferences (lower need for food intake) and also allows better thermoregulation in the homeostatic system. In addition, OT receptors in the amygdala and nucleus accumbens (located in the ventral striatum) tone down the amygdala so to speak which is already intensely activated due to stress. HPA axis activation is reduced as well.

Third, during skin-to-skin contact, opioids become critical substrates for consummatory rewards in the brain, which reduces the experience of pain and bring “the organism back to homeostasis related to primary drives such as governing sex, hunger and thirst” (Beckes et al., 2014 p. 7). Secondary drives involved in motivation and goal pursuit are grounded in these primary drives.

Fourth, OT activation stimulates the vagus nerve and affects the peripheral control of the action state of humans; specifically it provokes a switch from sympathetic output to parasympathetic output and allows the person to switch to immobility (relax) under conditions of stress when needed, and thus promotes smooth and calm interactions with others (known as the “neuroception of safety” in the literature) (Porges, 2007). Operating in concert, these biological processes act to switch the attachment system from activation to deactivation, allowing the person to co-explore with others the social environment and reap the joint gains and enjoyments that come with it. It is important to note that OT receptors are found in the dopamine brain system; the OT and dopamine systems are thus closely interconnected and function in synchrony. Dopamine system activations entail a wanting, liking and learning cycle (Berridge, 2000). Proximity attained from attachment figures comes with liking responses for a target, and the person learns about this appraisal and thus seeking/attaining proximity from attachment figure is something desired.

2.2 Attachment Styles

Within attachment theory, the biological processes described above imply that attachment systems have both embodied and representational components, the latter which are also known as working models. The working models are a kind of script which guide people in how to seek proximity with others to relieve stress (Mikulincer & Shaver, 2010). Working models, operating largely on the unconscious level, are the result of a chain of cognitive/affective processes involving negative/positive conditioning events (e.g., association between a significant person and relief/resolution of distress/joy), social expectancy-valence processes (“What can I expect from others?” and “Do I really value being with others?”), activation of the social reward and motivation system (“Should I approach other people or not?”), and, finally, experiencing positive affect or even a kind of euphoria as a result of interacting with other people (“I really enjoy being with this person!”), (Bartz et al., 2015). In addition, the different working models of the attachment system affect peoples’ ability to both learn from, and about, others. This has also been called theory of mind in the neuroscience literature (e.g., “Can and will this person help me if needed?”) and the ability to engage in regulation of one’s own emotions (e.g., “When do I need others in case of need?”).

Although the attachment system is relatively flexible over a lifetime in application, many researchers suggest that the biggest impact on attachment plasticity is during early interaction between a person and attachment figure(s), a time period called the critical window of opportunity (e.g., Hensch, 2004), when this psychological orientation and behavioral system first becomes codified.

Basically, the literature on attachment supports the conclusion that when the attachment figure consistently helps to relieve the stress of a person in need, via proximity, then the attachment system develops into a secure working model (a secure attachment style mind-set). It is estimated that some 65% of the population have a secure attachment style (van IJzendoorn et al., 1999; Bakermans-Kranenburg & van IJzendoorn, 2009; c.f., Feeney, 1994). Typically, when secure people encounter stress, they first activate the attachment system but then scale down the threats by seeking proximity with attachment figures in their social environment. Secure people explore their social circumstances but also know that they can fall back on a safe environment (safe heaven) where attachment figures, friends, and members of their social circle are available to help to alleviate the distress (negative conditioning) and facilitate offloading or sharing of some of the effort to attachment figures. Psychologically speaking, the working models of secure people are characterized by a positive outlook on life, a tendency to trust others, the ability to share feelings, the capability to relieve others’ stress and anxiety, and the inclination to engage in positive self-attributions. A secure attached person feels oneself as worthy, competent, and even lovable, which in turn allows one to co-explore with others their social environment and enjoy the associated pleasures of discovery, as well as joint problem solving.

However, in practice, some attachment figures are not consistently nurturing and their behavior is open to variation. Especially early in life, the wiring of the attachment system is vulnerable and variable, depending on one’s specific attachment experiences. Various socio-environmental factors—such as unfortunate economic situations, job requirements such as long hours, or ambition, which force caretakers to be away from the home a lot, parental abuse or neglect or parental divorce which causes tension in the family—affect how the attachment system is configured early-on to become either secure or insecure and to play-out later in life (Mikulincer & Shaver, 2010).

Some caretakers find aspects of the activated primary attachment system of their child (e.g., seeking proximity to gainstress relief via tactile contact) as inappropriate, uncomfortable, or irritating. In such cases the caretaker may respond in reserved ways, so that child’s stress or anxiety is not muted well via OT release (because little or no OT is produced). The child then feels no euphoria (because little or no opioids are produced) and does not obtain much in the way of neuroception of safety via others (as a function of vagus nerve stimulation). In other words, because the normal OT system and dopamine system interconnections and synchronicity are not fully activated, children do not learn well to see krelief from stress via proximity, and healthy liking responses do not develop, plus there is an absence in a desire for contact. Hence these children are not influenced much by positive incentives or reinforcements but remain sensitive to negative signals. For instance, when confronted with negative faces, people with an avoidant attachment style, as this is called, remain especially alert to threatening faces (Vritcka & Vuillemier, 2012). This embodied process illustrates what is called “shutting down of the attachment system” when avoidant attached people experience stress. Psychologically speaking they become overly self-reliant, seeking to cope with stress alone and not showing much trust in others. Thus they do not engage in much co-exploration of their social environment, which takes more initiative and energy, and they feel more agitated and miss out on opportunities to experience joyful events. To compensate for the lack of care from caretakers, avoidant individuals over accentuate a positive self-image and become even proud of their

self-reliance, which serves to hide their insecurity. Some researchers argue that, while avoidant attached people are self-reliant, in fact they might be resilient (meaning they cope by themselves and become stronger due to stress), and so they might experience some degree of satisfaction about their accomplishments due to their resiliency. About 20% of the population is avoidant attached (van Ijzendoorn et al., 2006).

Other caretakers display inconsistent nurturing behavior (e.g., on some days mothers are caring but on other days they remain aloof), thus affecting functioning and synchronicity of their child's OT-dopamine system. Concretely, when such children are in need (e.g., experience stress) they become uncertain as to whether they will attain relief or the neuroception of safety. In effect, their dopamine system constantly codes for "error" which inhibits OT-dopamine system synchronicity in the brain (Beckes & Coan, 2015). Anxious attached people, as this style of relating is called, find it difficult to scale down threats in their social environment, even if the threat is seemingly insignificant. Thus, while they strive for proximity because they value it, they are uncertain that others will provide them with relief from distress. This inconsistent perspective makes them prone to focus on potential negative signals which only exacerbates their striving for proximity. This is called "hyperactivation" of the attachment system (Mikulincer & Shaver, 2010). In short, as anxious attached persons perceive their social environment as unpredictable and experience stress and high arousal in HPA activation, they compulsively seek relief for their stress from caretakers/friends, yet neither they, themselves, nor their social environment are willing or able to smoothly engage in co-exploration of the social environment, which taxes their energy resources. Therefore, they miss-out on the enjoyment that people typically receive when exploring their environment. Nevertheless, because anxious attached people are highly sensitive to negative social signals, they develop an ability to read other people's emotions and even develop better theory of mind judgements (Vritcka & Vuilleumier, 2012). About 16 % of the population is anxious attached (van Ijzendoorn et al., 2006).

3. The Relationship between Attachment Styles across Different Domains

The functioning of the attachment system underpins our overall hypothesis: namely, secure attached people confronted by stress seek proximity with others and experience their social environment as worth exploring, both alone and jointly with others; this yields corresponding benefits such as enjoyment of friends, satisfaction with ones' relationship, ability to sleep well, and enjoy consumption and commerce with the world. By contrast, insecure attached people do not seek proximity much in case of stressor and do so in suboptimal ways, making them less able to scale down threats in their social environment. This consumes energy inefficiently within themselves and from their surroundings. The result is a reduction in motivation to explore the social environment, both alone and together with others, and a failure to benefit effectively from positive experiences in their situation. As a consequence, insecure attached individuals benefit less from friends, are less satisfied by their relationships, and do not sleep well and nor enjoy consumption and commerce with the world. We explore this line of thought in the next sections.

4. Study 1: The Relationship between Attachment Styles and Satisfaction with Financial Services

An essential goal of firms is to make their customers (in our study professional clients) feel satisfied with their services and products so that customers identify with the firm's brand and remain loyal. Customer satisfaction arises from a cognitive evaluation following the purchase and experience of goods or services. In general, having bought the product or service, customers compare their expectations with what is actually attained (Szymanski & Henard, 2001). Evaluations concerning satisfaction with commercial services are subjective, implying both cognitive processes (e.g., "Are our expectations met or not?") and affective processes (e.g., elation, gladness, surprise). Note that such evaluations require reflection over a period of time and are not momentary "snapshots". Satisfaction is usually provoked by such drivers as the effort employees make (e.g., being available for customers, willingness to be patient, forthcoming, and provide details while answering customer's questions, and eagerness to remain friendly when customers make complaints). Customer boundary-spanners can undertake special effort to shape customer satisfaction. Two studies in the literature thus far are noteworthy. First, Mende et al. (2013) found that attachment styles measured with a domain-specific firm attachment scale affected consumers' degree of satisfaction with the firm's services: avoidant and anxious attachment styles correlated $r = -.50$ and $r = -.31$, respectively, with customer satisfaction (defined as satisfied, content, and happy with the service). Another article on service satisfaction of consumers (Mende & Bolton, 2011) found similar negative correlations between avoidant and anxious attachment styles and customer satisfaction, $r = -.34$ and $r = -.58$, respectively. Similarly, Paulssen (2009) showed that avoidant attached customers were less satisfied with the firm with which they worked.

4.1 Objectives and Hypothesis

Herein we use an attachment-styles scale originally developed by Hazan and Shaver (1987), revised by Collins

and Read (1990), and adapted by us to fit the context. With this scale we gauge the relationship between financial professionals' measures of customer satisfaction with a commercial bank in terms of contentment and expectations. Although we seek to replicate previous findings, as outlined above, we use an embodied perspective of attachment styles to explain the findings in Mende and Bolton (2011). Insecure attached people consume so much energy in either being self-reliant (avoidant attached) or in worrying about what might go wrong in their social environment (anxious attached) that this affects their ability to provide positive appraisals of the services they have bought. As shown below in an analysis of responses on a questionnaire, this low level of energy spills over to affect the perceptions of reliability of the service over time.

Second, in replicating the Mende et al. (2013) findings on the relationship between attachment style and one's connection with a firm, we propose that the financial professional's scores on avoidant and anxious attachment styles will correlate negatively with both loyalty and identification with the bank. This is due to over self-reliance and the inability to form relationships in the case of avoidant attachment. Likewise, for anxious attachment, people who overly focus on small threats are not able to develop strong loyalty to the bank, because their worries lead them to seek-out relationships with alternative banks to resolve stress and anxiety. Being bothered by small negative details concerning quality (e.g., the availability of the account manager) people find it difficult to identify with their bank. We expect secure-attached professionals to identify loyally with the bank, because the bank offers considerable comfort. This leads to the following hypotheses:

Hypothesis 1: The higher the financial professional's secure attachment score, the higher their customer satisfaction with the bank; the higher the financial professional's insecure attachment (anxious or avoidant) score, the lower their customer satisfaction with their bank.

Hypothesis 2: The higher the financial professional's secure attachment score, the higher their customer loyalty to the bank; the higher the financial professional's insecure attachment (anxious or avoidant) score, the lower their customer loyalty to their bank.

Hypothesis 3: The higher the financial professional's secure attachment score, the higher their identification with their bank; the higher the financial professional's insecure attachment (anxious or avoidant) score, the lower their identification with their bank.

4.2 Method

4.2.1 Participants

A group of financial professionals (n=1051) was surveyed, using the scale mentioned above.

4.2.2 Materials and Procedure

We used scales from Ahearne et al. (2005) to measure customer satisfaction, customer loyalty, and customer commitment. The anxious attachment scale had an alpha of .70; the avoidant attachment scale an alpha of .56, and the secure attachment scale an alpha of .64. Examples for anxious attachment scale items are "My desire to be very close with others sometimes scares them away" or "I need a lot of reassurance that I am loved by others around me." Examples for the avoidant attachment items are "I am nervous when other people get too close to me" or "I try to avoid getting too close to others." Examples for the secure attachment items are: "I turn to others for many things, including comfort and reassurance" or "It helps to turn to others in times of need". The customer satisfaction items had an alpha of .88, the identification with bank scale an alpha of .73, and the loyalty to bank scale an alpha of .88. An example of customer satisfaction item is "How far are you happy with the services delivered by your bank?" and example item of customer loyalty is "How likely is it that you keep buying the services and products of your bank?", and an example item of customer commitment is "To what degree do you feel connected with your bank?".

4.3 Results

Using multiple regression with attachment styles as independent variables and satisfaction, identification, and loyalty as dependent variables, we found that secure attachment style related positively with satisfaction with the bank ($b = .14, p < .01$), loyalty to the bank ($b = .14, p < .01$) and identification with the bank ($b = .13, p < .01$), (Table 1). As anticipated, anxious attachment style related negatively with satisfaction with their bank ($b = -.15, p < .01$), not being loyal to their bank ($b = -.14, p < .01$) and identification with the bank ($b = -.11, p < .01$), (Table 1). Our findings are consistent with findings in Mende et al. (2013). Avoidant attachment was not related significantly with satisfaction, loyalty, or identification. These latter findings fail to replicate findings in Mende and Bolton (2011).

Table 1. Results of linear regressions for studies from 1 to 3

	Study 1 (N=1051)			Study 2 (N=120)		Study 3 (N=91)	
	Identifi-cation bank $\alpha=.73$	Loyalty to bank $\alpha=.88$	Satisfac-tion with bank $\alpha=.88$	Pleasure watch $\alpha=.82$	Pleasure shoes $\alpha=.90$	Pleasure jacket $\alpha=.91$	Pleasure clothing $\alpha=.93$
R2	.02	.02	.03	.06	.09	.11	.04
Anxious	-.11**	-.14**	-.15**	.06	.07	.12	.09
Avoid	.05	.03	.05	-.11	-.13	.04	.05
Secure	.13**	.13**	.14**	.20*	.24*	.28*	.17*

4.4 Conclusion

Although all professional customers surveyed were from the same bank, their attachment styles make a difference as to how they appraise and relate to the bank. This observation might make a marketing manager wonder, “If the bank invests more in customer contact would anxious attached professional customers become more satisfied or loyal?” or “What can our customer contact people do better to engage avoidant customers?”. Field experiments applying various service approaches (e.g., intensifying service for anxious attached customers) might help in determining whether the motivation of some segments of customers can be enhanced.

Here we propose simply that anxious attached customers expend so much energy worrying about negative or uncertain signals from sales people at the bank that they experience dissatisfaction, lack of identification, and disloyalty to the bank. For secure attached professional customers, the sense of satisfaction and demonstrations of loyalty and commitment emerge from the fact that the bank offers them a kind of comfort in case of need. Interestingly, the indifference that avoidant attached professional customers show to the bank in essence reflects their strong motivation to remain independent from others. The biology inspired attachment scale used herein, just as the domain-specific scale used by Mende et al. (2013), shows a difference in scores of secure versus anxious attachment styles in relation to customer satisfaction and relationship with the bank but with a different population (professional customers versus consumers). Anxious attached professional customers actually show resistance in relating to the bank, as expressed in the negative association with identification and loyalty. The avoidant attached professional customers appraise and interact with the bank relatively indifferently.

In the commercial literature researchers make a distinction between the satisfaction one attains having consumed the services (after sales) and the pleasure one seeks from buying products (before the sale) (Kotler, 2008). While the above study focused on the first question, satisfaction, we now focus on the second question, pleasure, moving from professional customers to general consumers (here a student population). Will consumers with different attachment styles experience pleasure from luxury goods that people normally buy to gain satisfaction in ways that mimic our first study?

5. Study 2: The Relationship between Attachment Styles and Pleasure with Products

When confronted with luxury consumer products such as clothing or cars people not only seek functionality or economic utility (“I could wear these clothes at work”) but also hedonic utility (“I would really enjoy wearing such clothes”). We define the latter as “utility derived from the feelings or affective states that a product generates”. Hence this pleasure has hedonic connotations (as with hedonic happiness) (Sweeney & Soutar, 2001).

Products induce positive emotions such as enjoyment because of the aesthetic qualities embedded in their design. We assume that the intangible perception of luxury, uniqueness, or conspicuous goods strongly correlates with pleasure, happiness, and inspiration (Dubois & Laurent, 1994; Sweeney & Soutar, 2001). When discussing their own relationship to products, most consumers say that buying clothes or shoes makes them dream of a better life (“Clothing makes life more beautiful,” “I like nice clothes”), (Dubois & Laurent, 1994). Pleasure of this sort is frequently reported to be a fundamental factor of the motivation that activates human experience (Tsai, 2005).

When dealing with abstract attachment figures such as brands (H&M, Apple), companies (Microsoft, Google), or religion (Muslim, Catholic), the literature on attachment theory makes the distinction between correspondence theory and compensation theory (Granqvist et al., 2010). Correspondence theory implies that people’s attachment style similarly affects their social as well as abstract attachment figures. According to the embodied perspective on attachment, when people experience warmth in relationships with others, they will seek or find the same in objects. Note that we would call this “embodied correspondence theory.” Compensation theory argues that abstract attachment figures might compensate for the lack of social attachment figures. For instance, Swaminathan et al. (2008) show that brands have personalities (like sincerity, exciting; see e.g., Aaker, 1996),

and as anxious people have a negative self-image, they buy brands to create a more positive ideal self; hence anxious attached people seek sincere brands (based for instance on the personality trait of a brand). Here they compensate for their lack of safety in the social world, due to low proximity seeking with other people, with abstract commercial attachment figures.

5.1 Objectives and Hypothesis

We investigated the emotional value dimension at a brand level by showing participants pictures of luxury goods, assuming these are high on emotional value (Sweeney & Soutar, 2001). Past research suggests that viewing luxury branded products elicits relatively intense positive emotions such as pleasure, desire, and joy (Pozharliev et al., 2015; Hagtvedt & Patrick, 2009; Kapferer, 1997; Sweeney & Soutar, 2001).

It is easy to argue that only secure attached people should seek pleasure in consumer goods because they experience the world as safe and thus can explore the world and enjoy joyful moments that come with it (akin to our embodied description of attachment). This pleasurable experience should not always happen to insecure attached people. The literature reports mixed results: in line with the compensation hypothesis, Swaminathan et al. (2008) argue that when primed with anxious attachment figures people prefer sincere brands. But when primed with luxury brands, avoidant attached people show a preference for them, indicating substantiation for the correspondence hypothesis as they seek confirmation of their self-reliant attachment style in these brands (note, social-working model with abstract-working model). Equally, given that anxious or avoidant attached people have difficulty obtaining warmth from relationships, we might ask whether they seek comfort/pleasure in buying or wearing clothes, watches, or shoes. Thus, since the correspondence model and compensatory model perspective are both plausible explanations we do not make a strong hypothesis on whether the secure attached consumer would be the only one to experience pleasure in products, but opt instead for the compensation hypothesis. Thus,

Hypothesis 4: The higher person's secure attachment score, the more they seek pleasure and joy from different luxury goods (embodied correspondence). The higher a person's insecure attachment (avoidant or anxious) score, the more they seek pleasure and joy from luxury goods (compensation and correspondence hypothesis).

5.2 Method

5.2.1 Participants, Materials and Procedure

Using a group students ($n=120$), we tested people's attachment style with a revised version of the Collins and Read (1990) attachment scale and the Perval (perceived value) scale by Sweeney and Soutar (2001). The anxious attachment scale had an alpha of .67; avoidant attachment scale an alpha of .86, and secure attachment scale an alpha of .73. The Perval scale was used on watches with alpha = .82; shoes with alpha = .90, and a jacket with an alpha = .91. An example of an item is "This watch is one that I would enjoy."

5.3 Results

Multiple regression results showed that secure attachment relates positively with the pleasure/joy dimensions for watches, shoes, and jackets respectively: $b=.20^*$, $b=.24^*$ and $b=.28^*$, all p -values $<.01$ (Table 1). The anxious and avoidant attachment styles did not relate significantly with pleasure for the three mentioned luxury products.

5.4 Conclusion

Secure attached people enjoy and have pleasure derived from luxury products, whereas avoidant and anxious attached people are unable to do that. Confirming the embodied perspective on attachment, we argue that, given that secure attached consumers experience warmth from interacting with attachment figures, they feel the world is less threatening, which allows them to explore the world more fully and feel enjoyment and pleasures that come with it (akin to the embodied correspondence hypothesis). Evidently, insecure consumers do not seek pleasure strongly from luxury products, probably because they are busy either being alert to negative signals in the case of anxious attachment, or in the case of avoidant attachment, because seeing themselves as highly self-reliant, they consumer so much energy that they cannot enjoy the beauty in luxury goods. This occurs despite the fact that merely seeing luxury goods helps the avoidant attached consumer, for example, feel distinctive compared to others, which in turn affects him or her in emotionally positive ways. Note also that this finding is partially consistent with Study 1: the higher a person's score on secure attachment, the higher the customer satisfaction in a professional domain, and the more they seek pleasure from commercial products. A tentative explanation for this might be that consumers' social relations and the pleasure they experience from these relationships spill over to the enjoyment they find in their relationships with luxury goods.

6. Study 3: The Relationship between Attachment Styles and Attachment to a Brand

6.1 Objectives and Hypothesis

While Study 2 looked at the emotions experienced with luxury goods, now we ask whether people also develop attachment with branded products they have bought (Thomson et al., 2005). Attachment to brands here means whether they feel affection for or connected with that branded product. Consistent with the embodied correspondence theory (and study 2), we expect that secure attached consumers develop an attachment with a branded product similar as they do with people (see earlier explanation). According to correspondence theory, anxious attached people should not develop a strong connection with brands or branded products; that is, anxious attached consumers actually seek relationships but become uncertain when encountering negative signals and thus doubt the sincerity of relationships. But how can a branded product they have just bought produce negative signals which cause them to be concerned about the branded product? It is still possible that anxious attached consumers cannot develop relationships with their branded products because no matter what they buy, they will remain critical of the product (e.g., “When I wear these clothes, other people might not like it” or “When I bought this suit I paid too much for it”) which affects their attachment even to branded products. Equally, as in compensation theory, social attachment figures might provoke negative signals, hence debilitating the anxious attached consumers. On the other hand, abstract attachment figures might compensate for potential threats in the social environment as branded products do not signal threats per se. For avoidant attached consumers, the relationship can go both ways. A purchased branded product could express their self-reliant identity (abstract correspondence). But then, to the extent that they are self-reliant and not wanting to develop relationships functions poorly and reaches to affect the abstract realm (this is similar to an argument also made by Mende & Bolton, 2012). According to the embodied correspondence theory perspective, anxious or avoidant attached consumers are less likely to develop strong relationships with brands. Based on this reasoning we do not make strong hypotheses except for secure attached consumers. Therefore,

Hypothesis 5: The higher person’s secure attachment score, the more they seek attachment with the branded product they bought.

6.2 Method

6.2.1 Participants, Materials and Procedure

Using a sample of 227 students, we tested people’s attachment styles with a revised version of the Collins and Read (1990) attachment scale and also tested the effect attachment has on a bought product. Anxious attachment had an alpha of .67; avoidant attachment an alpha of .78, and secure attachment an alpha of .71. The scale gauging attachment to a particular branded product was based on Thomson et al. (2005) and comprised three dimensions: affection items, passion items, and connection items, with an alpha of .93. An example of an item is “To what extent do you feel connected to this product?”.

6.3 Results

The findings show that secure attached consumers develop attachment with branded products while the insecure do not (Table 1). All this speaks for the embodied correspondence model: secure attached consumers develop a relationship with others which provides them with comfort from which they explore the social environment. This carries over to abstract branded products with which they develop an attachment. For insecure attached people, developing attachment relationships with brands is difficult to achieve which, as indicated, reflects their embodied attachment style (inability to find comfortable relations with others), which spills over to attachment with branded products. Yet this finding may be difficult to comprehend; why would anxious and avoidant attached people not develop strong relationships with branded product that they have actually bought? We explore this question more deeply when we study their feelings of happiness in general (happiness and pro-activeness) in Study 3, because it is possible that anxious and avoidant consumers are less satisfied with their lives.

7. Study 4: Exploring Attachment and Happiness

Economists and psychologists alike emphasize that people place great value on happiness or well-being and think about it quite frequently even though definitions differ across cultures and might attribute well-being to different domains such as health or income (Frey & Stutzer, 2002). In general, happiness is conceived in three relatively overlapping dimensions: hedonic, eudemonic, and engagement (Kringelbach & Berridge, 2009). Here we focus on hedonic and engagement happiness. The hedonic view conceives happiness or well-being as the experience of pleasure and focuses on sensation and impressions of pleasure versus displeasure related to different good/bad elements of life (Kringelbach & Berridge, 2009). Ultimately, hedonic enjoyment entails being

relaxed, free of problems, and feeling happy. Here we follow Lyubomirsky and Lepper's (1999) conception of subjective well-being as overall subjective happiness: "a global, subjective assessment of whether one is a happy or an unhappy person." The engagement view focuses on the degree to which people proactively undertake actions (Waterman, 1993; Seligman, 2012). Ultimately engagement in well-being entails being challenged and putting forth effort to attain happiness.

Many researchers study antecedents of happiness which range from health (Okun et al., 1984), personality traits (DeNeve & Cooper, 1998), genetics (DeNeve, 2011), economic factors (Diener et al., 1995), and attachment to other people in general (Ryan & Deci, 2001, p. 154). Only two papers were found on the relationship between attachment styles and well-being, especially in relation to immigrants and ethnic groups in the Netherlands. Polek et al. (2008) found that the secure attachment style is positively correlated with life satisfaction, anxious attachment style negatively correlated with life satisfaction, and dismissive (avoidant) attachment style correlated slightly negatively with life satisfaction. Merz and Consedine (2012) found that secure and dismissive (avoidant) attachment styles of people belonging to different ethnic groups in the Netherlands were higher in well-being compared to people with fearful/avoidant styles.

7.1 Objectives and Hypothesis

Hedonic happiness is the ability to experience overall well-being. Based on our reasoning above, we posit that consumers high on secure attachment style seek comfort with other people, and this activates OT, inducing trust in others, and opioids, eliciting enjoyment of these moments, both of which help to scale down stress and threat in the social environment, and thus promote exploration of the social environment, alone and with others (confirming the broaden and build theory of positive emotions) and so capture moments of enjoyment. In addition, this experience of positive emotions fosters an optimistic outlook on the world, and hence contributes to hedonic happiness. Anxious attached consumers find themselves constantly worrying about their relationship with others, which taxes their energy resources. Hence they have difficulty toning down their worries. Stress induced in the HPA axis, in turn, affects cognition and feelings (people overly "Focus on what is bad rather than pleasant") and accrue low levels of hedonic happiness. We also expect that avoidant consumers will feel less happiness because they do not find great enjoyment in being with others, and this inhibits joint co-exploration of the social environment, which further depletes their limited energy and reduces possibilities to feel enjoyment, one of the sources of hedonic happiness (Ryan & Deci, 2001). Note, however, that avoidant consumers are also known to be relatively immune to social rejection (due to lower activation of the anterior cingulate cortex) and prefer to explore the world on their own, which likely accompanies lower HPA axis activation. In addition, Merz and Consedine (2012) show that people high on avoidant attachment style experience some degree of happiness albeit lower than secure attachment; in general, however, we expect people high on avoidant attachment style to find it difficult to attain happiness because hedonic happiness is rooted in the sheltered social environment which the avoidant attached people seek to avoid. Therefore,

Hypothesis 6: The higher a person's secure attachment score, the higher their hedonic happiness will be; the higher a person's anxious or avoidant attachment score, the lower their hedonic happiness will be.

7.2 Method

7.2.1 Participants, Materials and Procedure

Using a group of students ($n=91$), we measured people's attachment styles with a revised scale of attachment styles by Collins and Read, (1990) and the happiness scale from Lyubomirsky and Lepper (1999). Anxious attachment had an alpha of .81; avoidant attachment an alpha of .84, and secure attachment an alpha of .79. The happiness scale had an alpha of .71. An example of happiness item is: "In general, I consider myself not a very happy person (1) to a very happy person (7)."

7.3 Results

Using multiple regression analysis, we found that high scores on avoidant attachment style relates negatively ($b=-.27, p<.01$) with happiness, but we found no significant relationships between anxious or secure attachment styles and happiness (Table 2).

Table 2. Results of linear regressions for studies from 4 to 8

	Study 4 (N=91)	Study 4 Replication (N=120)	Study 5 (N=91)	Study 6 (N=164)	Study 7 (N=227)	Study 8 (N=227)		
	Happiness $\alpha=.71$	Happiness $\alpha=.71$	Pro-activity $\alpha=.89$	Envy $\alpha=.56$	Generosity $\alpha=.65$	Sleep Quality $\alpha=.62$	BIS $\alpha=.84$	BAS $\alpha=.78$
R2	.14	.19	.07	.13	.12	.10	.20	.02
Anxious	-.12	-.24**	-.04	.38**	-.19*	.27**	.41**	.02
Avoid	-.27**	-.26**	.05	-.04	-.03	.08	.07	-.13
Secure	.12	.14	.27*	-.04	.28**	.06	.10	.07

8. Study 4: Replication

Study 4 was replicated with another sample of students using the happiness scale from Lyubomirsky and Lepper (1999) and a revised version of the Collins and Read (1990) attachment scale. Anxious attachment scale had an alpha of .70; avoidant attachment scale an alpha of .56, and secure attachment scale an alpha of .64. The happiness scale had an alpha of .71.

8.1 Results

Using multiple regression analysis, we found that avoidant attachment ($b=-.26$, $p<.01$) and anxious attachment ($b=-.24$, $p<.01$) negatively impact happiness but secure attachment style did not significantly affect happiness (Table 2).

8.2 Conclusion

The hypotheses are partially supported. The higher the avoidant and anxious attachment score, the lower the happiness score. People's secure attachment style did not influence happiness (a positive relationship was expected). Why would people's score on secure attachment not influence happiness? The sample in this study consisted of students, and at this age people are known to experience lower degrees of happiness due to the peer pressure, being away from home, facing exam pressure as well as job loss, etc. (Diener et al., 2012). Thus although secure attached people might feel more insulated from these negative feelings, they do not necessarily become more happy. This is not the case with anxious and avoidant attached people. Anxious and avoidant people are less able to scale down threats from their environment and are hyper-vigilant even for the smallest threats. Also, because avoidant attached people are known to be self-reliant, they most likely face depletion of energy resources, which should lower their feelings of hedonic happiness.

9. Study 5: The Relationship between Attachment Styles and Pro-activeness

9.1 Objectives and Hypothesis

Pro-activeness entails seeking challenges, which ultimately promotes the achievement of a well-functioning life (Seligman, 2012). Here we conceive of pro-activeness as an indication of engagement happiness (e.g., Bateman & Crant, 1993). Secure attached people experience their relationships from a secure base which diminishes the effects of threats in the social environment and conserves psychic and physical energy. As a result, secure attached consumers are able to better explore the social environment, discover more options in their life, and invest in their future. Although secure attached people eagerly undertake actions, avoidant people might also do the same and thus exhibit a high degree of pro-activeness as well (also called engagement happiness; Seligman, 2012). Indeed Shiota et al. (2006) showed that avoidant attached people experience pride and contentment to a certain degree. Our interpretation is as follows: when stressed, avoidant people become resilient and persistently undertake actions on their own. For instance, in some professions (sales) or sports (tennis) people with avoidant attachment styles remain resilient despite being away from home for long periods of time (Ein-Dor et al., 2010). When young, the avoidant attached person's self-reliant behavior might inoculate them against stress, which motivates them to achieve more of their personal goals and hence create an upward positive spiral, which, in turn motivates them to undertake more exploratory action. Note that this self-reliant behavior might not come with a sense of relaxation derived from being with others because of the relative isolation practiced by avoidant attached individuals. Hence, for avoidant attached people, self-reliance takes large amounts of energy, which might become depleted over time. Therefore, while secure attached people attain higher engagement happiness, avoidant attached people might also attain a certain degree of happiness. However we expect the level of happiness attained to be lower than for secure attached people yet higher for anxious attached people. That is, we expect that anxious attached people focus more on what might go wrong in their life and thus be less able to scale down threats, despite having social proximity. Such a condition taxes energy such that anxious attached

people explore relatively less of their social environment than secure or avoidant attached persons.

Hypothesis 7: The higher person's secure attachment score, the higher their engagement happiness will be. The higher a person's anxious or avoidant attachment score, the lower their engagement happiness will be. Avoidant attachment engagement happiness will be higher than anxious attachment engagement happiness.

9.2 Method

9.2.1 Participants, Materials and Procedure

Using a group of students ($n=91$), we tested attachment style using a revised version of the Collins and Read (1990) attachment scale and also the pro-activeness scale from Bateman and Crant (1992). Anxious attachment items had an alpha of .72; avoidant attachment had an alpha of .66, and secure attachment had an alpha of .89. The pro-activeness scale had an alpha of .89. Example of a pro-activeness scale items are "I excel at identifying opportunities" and "No matter what the odds, if I believe in something I will make it happen."

9.3 Results

The findings show that secure attachment style influences engagement happiness positively ($b=.27$, $p<.01$) but avoidant and anxious attachment styles do not have a significant impact on engagement happiness (Table 2).

9.4 Conclusion

The fact that secure attached people actually are more proactive supports our arguments that secure attached people shape their attachment system in ways that allow them to reduce experienced stress and find relaxation through seeking proximity with others. This in turn, helps them appraise the environment as less threatening and conserve energy, and thus be primed to explore their social environment. Perhaps, surprisingly, while known to be proactive, resilient, and self-reliant in challenging situations (Ein-Dor et al., 2010), avoidant attached consumers are not proactive in general. Researchers (e.g., Verbeke et al., 2014) have shown that avoidant attached sales people were entrepreneurial (i.e., customer-oriented), but only when they were carriers of the *DRD4 7+* gene variant, thus indicating a social environment-gene interaction. Note that the sales people studied by Verbeke et al. (2014) operated in a professional environment and here it is likely that the avoidant sales people did well in such an environment because role requirements create a need to maintain a professional distance from customers, thus conserving energy and to balance opposing pressure from customers to meet their needs and from the home organization to meet its needs, which frequently conflict. For anxious attached people, less pro-activeness is more evident and easier to understand: when the environment is perceived as threatening, proactive exploration is not desired, hence anxious attached people will engage less in proactive behavior.

10. Study 6: The Relationship between Attachment Styles and Materialism

10.1 Objectives and Hypothesis

Materialism in the sense of attachment to worldly possessions is important for many people. People high in materialism give possessions a central place in life and believe they provide a great source of satisfaction (and dissatisfaction) (Belk, 1985). Belk distinguishes between a) possessiveness which is the tendency to retain control of ownership of one's possessions; b) non-generosity which is an unwillingness to share one's possessions with others, and c) envy which is displeasure with the superiority of another person's happiness, success, and reputation. Here we focus on generosity and envy, because they relate to the social dimension, which thus far we have not investigated herein. Note that envy is also called a self-conscious emotion which is activated when people appraise themselves as ranked lower in the eye of the beholder (Smith & Kim, 2007). Being envious thus indicates that the envier values oneself less compared to another person, which evokes negative emotions. Being generous is known to be a positive emotion and entails a willingness to share ideas and goods with different people without necessarily expecting reciprocation in the short term (Snyder & McCullough, 2000).

Secure attached people are open to exploring easily their social environment and striving to feel, connected with various people as they show trust in them and have a positive outlook on life and society. This makes them less prone to experience envy when other people have more possessions than themselves. At the same time, we might expect secure attached persons to be generous to other people, because they trust that reciprocation will likely take place, though not necessarily in the short term (i.e., they do not count on immediate returns). Anxious attached people are hyper sensitive to what might go wrong in a relationship, which tends to lessen self-esteem and might make them feel inferior, when they meet people better off than themselves (better-off people amplify their low self-esteem). As a result, they quickly experience envy if they perceive someone else should doing well. They also might become suspicious, and more so than others because they are hyper sensitive to small negative

signals. This should inhibit them from being generous (they are prone to think that others take advantage of them). Avoidant attached people, on the other hand, are known to feel little trust toward others and their self-reliance is tinged with egoism. Hence they might avoid being strongly generous (“Others take advantage of me” or “They will not reciprocate immediately if at all”). Equally, self-reliance and pride in their independence characteristic of avoidance attached people might hide their insecurity. When encountering other well off people, they might thus develop feelings of envy. Hence we make the following hypothesis:

Hypothesis 8: The higher person’s secure attachment score, the higher their generosity and the lower their envy. The higher a person’s avoidant or anxious attachment score, the lower their generosity and the higher their envy.

10.2 Method

10.2.1 Participants, Materials and Procedure

Using a group of students ($n=164$), we tested attachment style with a revised version of the Collins and Read (1990) attachment scale and the Belk (1985) materialism scale for envy and willingness to be generous. Anxious attachment items had an alpha of .77; avoidant attachment an alpha of .72, and secure attachment scale an alpha of .72. The envy sub-scale had an alpha of .56 and the generosity sub-scale an alpha of .65. An example of the envy sub-scale item is “I am bothered when I see people who buy anything they want” and for the generosity sub-scale item “I enjoy donating things for charity.”

10.3 Results

Findings show clearly that the greater the anxious attachment, the greater the envy ($b = .38, p < .01$), but neither avoidance attachment nor secure attachment influence envy. Likewise, the greater the anxious attachment, the less the generosity ($b = -.19, p < .05$); the greater the secure attachment, the greater the generosity ($b = .28, p < .01$). Avoidance attachment did not influence generosity significantly (Table 2).

10.4 Conclusion

Interestingly, people with a secure attachment style are more generous and less envious. Anxious attachment comes with less generosity and with more envy. Here, too, near constant worry by anxious attachment individuals about what people will do or think in their social relations makes them prone to focusing on negative aspects of people with whom they interact (less trust, low reciprocation, making people better off than themselves). Hence the embodied attachment system transforms into self-conscious emotions (envy) and less generosity toward others. Note that the results show that avoidant people remain relatively in different to others and do not experience much envy or perform generously to others.

11. Study 7: Attachment Styles and Sleep Quality

11.1 Objectives and Hypothesis

Our description of the embodied attachment system and attachment styles and the findings so far show that secure attached people rely on other people, and conserve resources, whereas insecure attached people rely less on others and experience a depletion of their resources. We explore further whether the quality of sleep relates to a person’s social life style. Cacioppo et al. (2000) show that loneliness affects sleep quality, and this suggests parallel processes with the effects of attachment styles, as developed below.

Sleep is an important asset that people need for replenishing resources. Cacioppo et al. (2000) suggest that lonely people suffer from poor sleep quality. We assume that secure attached people rely on friends or attachment figures to share both pain and stress as well as help people with high stress. In comparison to insecure attached people, they will have lower levels of cortisol but higher levels of OT and opioids. These last two neurotransmitters affect sleep patterns positively. Equally, activation of OT affects the vagus nerve which allows people to better relax and build positive emotions. Therefore the sleep quality of the secure attached people should be higher than insecure attached people. As far as insecure attached people are concerned, anxious attached people are worried about their social environment, which positively affects cortisol levels, and in turn, negatively affects sleep quality. Also note that stressed people have higher levels of epinephrine than less stressed people which is known to affect sleep adversely and even the emergence of bad dreams. Avoidant attached people can be considered lonely in the sense that they frequently overly seek self-reliance, which makes them consume resources and undergo the risk of being isolated from others. Despite that fact that they tend to be immune to rejection, avoidant attached persons build less OT and opioids from being with others, compared to secure attached persons, so that their stress system is relatively unsoothing and their sleep pattern affected negatively.

Hypothesis 9: The higher a person's secure attachment score, the better their quality of sleep; the higher a person's on insecure (avoidant and anxious) attachment score, the lower the sleep quality.

11.2 Method

11.2.1 Participants, Materials and Procedure

Using a group of students ($n=227$), we tested attachment style with a revised version of the Collins and Read (1990) attachment scale. The students also responded to the Pittsburg sleep quality scale (Buysse et al., 1989). Anxious attachment had an alpha of .67; avoidant attachment an alpha of .78, and secure attachment an alpha of .71. The sleep quality scale had an alpha of .62, where low quality of sleep comes with higher scores on the scale. An example of a low quality of sleep item is: "The last month I had bad dreams".

11.3 Results

The findings show clearly that the higher the anxious attachment, the lower the sleep quality ($b = .27, p < .01$), whereas avoidant and secure attachment styles had no effect on sleep quality (Table 2). It appears that only anxious people seem to carry over their daily worries at home which are driven by neuroendocrine processes like cortisol and epinephrine levels, and which are known to affect sleep quality.

11.4 Conclusion

Interestingly, anxious attached people have low sleep quality but this is not the case for avoidant and secure people. People with the latter two attachment styles seem to be able to cope better with stress. Secure attached people seek contact with others, which produces OT and the opioids that reduce anxiety, and avoidant attached people focus on themselves and keep a social distance, insulating them from social stress to a certain degree.

12. Study 8: Relationship Attachment System and BIS-BAS Scale

12.1 Objectives and Hypothesis

Some researchers conceive attachment system function as an approach and avoidance system or push-pull system (e.g., Vrtička & Vuilleumier, 2012). An approach (BAS, behavioral activation system) and avoidance (BIS, behavioral inhibition system) reflect differences in the sensitivities of two neurobiological systems that guide emotions and behavior in response to signals of reward and threat (Gray, 1990). The approach system is assumed to be related to positive affect, while the avoidant system is assumed to be related to negative affect (see e.g., Updegraff et al., 2004). However this approach and avoidance system activation, and the emotions that come with it, do not reflect the essence of what the attachment system seeks to provoke or to motivate, which is being at rest and comfort when in social proximity with attachment figures such that neuro-ception of safety can be achieved is a key motivation in life. Recently McCall and Singer (2012) argued that, besides approach and avoidance as two basic motivations, another motivation should be introduced. This is the quiescent state which indicates feelings of warmth and calmness. It is here that opioids play a role and are activated such that people experience neuro-ception of safety or "being at rest," when in the presence of others (e.g., Depue & Morrone-Strupinsky, 2005). Given that high secure attachment style reflects the ability to experience relief of stress and relaxation such that people explore their social environment, secure attachment style should not relate to the BAS scales, which reflect such content as "if I see a chance to get something I want, I move on it right away", nor will it relate to the BIS scale which has such content as "I worry about making mistakes." In addition, as avoidant attachment entails deactivation of the attachment system, it should not relate to the BIS-BAS scale either. By contrast, people high on anxious attachment would be expected to relate with the BIS scale, because the BIS scale reflects people's anxiety. Yet, although anxious attached people worry about whether they are loved or accepted, here anxious attachment actually relates to how people approach others, a condition of over activation of the attachment system.

Hypothesis 10: Only anxious attachment should predict BIS-scale scores, and avoidant and anxious attachment should have no effect on the BIS-BAS scale scores.

12.2 Method

12.2.1 Participants, Materials and Procedure

Using a group of students ($n=227$), we tested the effects of attachment style using a revised version of the Collins and Read (1990) attachment scale. The University of Miami BIS-BAS scale based on Carver and White (1994) was used. Anxious attachment items had an alpha of .67; avoidant attachment an alpha of .78, and secure attachment an alpha of .71. The BIS-BAS scale had an alpha of .84 for BIS and an alpha of .78 for BAS. An example of the BIS item is "I worry about making mistakes" and an example of the BAS item is "It would excite me to win a contest".

12.3 Results

The findings show that anxious attachment influences the BIS scale ($b = .41, p < .01$). But no other attachment styles affect the BIS scale. Also no any attachment style affect the BAS scale (Table 2).

12.4 Conclusion

Our last study suggests that the attachment system functions differently than the approach/avoidance system. Under attachment theory, the prediction is that when experiencing stress, people seek rest or comfort through activation of their attachment system, and either achieve proximity or else de-active the system. That is secure attached people achieve high activation, anxious over activation, and avoidant under activation. But approach and avoidance are not the key drivers of these effects.

13. General Discussion

The literature reveals that attachment styles are pervasive in affecting people's relationship with attachment figures in various domains, especially commercial domains where it affects customer satisfaction and the motivation to build relationships with the firm. Insecure attachment styles are associated with lower customer satisfaction and lower motivation to develop relationships with firms (e.g., Mende et al., 2013). Managers may find these results difficult to comprehend. Therefore, we sought to replicate the Mende et al. (2013) study to explore the why behind the prevalence of correlations between attachment style and commercial and non-commercial domains with a view to helping managers customize their marketing practices to specific target segments.

In order to do so, we first developed in lay terms an embodied approach to attachment systems based on research by Beckes et al. (2014), which ultimately shows that attachment system activation depends on proximal (neuroendocrine) processes in the brain. Then we introduced the three attachment styles. In a nutshell, secure attached people are capable of seeking proximity to attachment figures in the case of stress, experiencing the neuroception of safety when in proximity with others who are attachment figures, and preserving and building resources. All this fosters co-exploration of the shared social environment with others and enjoyment of rewards that come with it. Our perspective mimics in a sense the resources and demand theory from Bakker et al. (2004), which emphasizes the role of means and tools: here secure attached people enjoy smooth interaction which comes with quiescence as a resource. Being in the world this way with others and building resources also mimics Heidegger's (1927) idea, "Dasein", which refers to how people habitually encounter and cope with threats and stress in their daily social environment by interacting with significant others. Here proximity seeking functions almost as a default coping strategy or routine practice. Note that this "style of being in the social world" is different from the approach and avoidance (BIS-BAS) system perspective (Carver & White, 1994) that fails to include quiescence (McCall & Singer, 2012). However, being in the social world is demanding for people with an anxious attachment style. Being with others (attachment figures) comes with worries about the sincerity of the support they get from them for people with an anxious attachment style. The high association we found with the BIS scale indicates that anxious attached people constantly seek to avoid stress in psychological uneasy situations. Such default behavior makes it difficult for people with an anxious attachment style to feel embedded in a safe environment, and thus makes it difficult to co-explore the environment, let alone enjoy that exploration or their fruits (see also Verbeke et al., 2014). Similarly, avoidant attached people deactivate their attachment system and thus do not rely on others much but seek to explore their social environment independently. Given that they must rely on their own limited resources, exploring the environment is in the end demanding and draining of energy, plus potentially stressful.

We sought to test these ideas by first exploring a commercial domain, namely professional customers operating with a financial service provider (bank), seeking to replicate findings in Mende et al. (2013). Apparently, secure attached people attain customer satisfaction and build relationships with the bank well. However, anxious attached financial professionals showed the opposite pattern (little satisfaction and even a defensive relationship), while the avoidant attached people were largely indifferent on these dimensions. Note that we did not replicate the findings of Mende et al. (2013), as they found a negative relation for both anxious and avoidant attached consumers between scores on anxious and avoidant attachment styles and loyalty/satisfaction with the firm. From this point onward, we explored amore philosophical grounded approach to uncover aspects of peoples style of operation in the social world and found that the higher a persons' score on secure attachment, the more they were capable of experiencing pleasure in luxury goods, forming attachments with the clothes they bought, showing generosity to people, and being more proactive in life. The higher a professional customer's anxious attachment style score, the lower their customer satisfaction and loyalty with the bank. In addition, the higher the anxious attachment style, the more it related to their inability to experience pleasure in luxury goods, become

attached to clothing bought, to avoid envy (which depletes energy), to express generosity towards others, and to feel happy and proactive. This also came with the experience of low sleep quality and with a high score on the BIS scale. All these symptoms indicate that being in the social world is demanding. The higher a person's avoidant attachment, the more indifferent they became to all the just-mentioned services, luxury goods, and other people. Yet in general avoidant attached people had the lowest degree of happiness. In a nutshell, these data show that anxious attached people are worse off in terms of gaining satisfaction and forming relationships both in the commercial and non-commercial domains. The avoidant attached people apparently behave in differently in many ways except they are happy.

This consistent pattern is interesting for marketers (the main target audience of our paper) because it helps managers to better understand why attachment styles matter in customer relationships with firms and products. Consistent with the embodied perspective, we concluded that the insight emerging across studies is that attachment styles relate to how people connect with others, allowing them to explore and enjoy the social environment they inhabit. When people are unable to connect well with others, they cannot easily build resources that are needed to explore and subsequently enjoy the world, which is especially the case for anxious people. Avoidant people tend to be indifferent in such cases. Humans are indeed essentially social beings (Beckes & Coan, 2011; Lieberman, 2013) and the quality of our interactions with others determines life satisfaction and happiness to a great extent (e.g., Hostinar et al., 2014; Kringelbach & Berridge 2009; Baumeister & Leary, 1995). Specifically, Kringelbach and Berridge (2009) note: "Progress in understanding the hedonics of social bonds could be useful in understanding happiness" (p. 481). People's social bond formation is shaped in early interactions with caretakers. This is a fundamental finding of attachment theory (Mikulincer & Shaver, 2007). Strikingly, in our studies customer satisfaction, pleasure, attachment, engagement, and pro-activeness were all affected by attachment styles in somewhat similar ways. This "style of being in the social world", as we call it, reflects a pre-reflective habitual practice to reach out to attachment figures when experiencing stress that is imprinted at an early stage in life and actually affects people's experience in different domains throughout life.

This raises the question of what marketing managers can do about this? First, marketing managers in professional environments (business-to-business contexts) should understand that a large segment of their population cannot be made very satisfied with the services or products they provide. As we discovered in this paper, this is because attachment styles reflect a default modus in how people stand in their social world: people high in secure attachment styles experience their social world as enjoyable and positive emotions spill over to other domains. But the opposite is the case for anxious people as their energy gets depleted, while avoidant people are mired with indifference, even unhappiness.

In many firms marketing managers are not merely interested in measuring customer satisfaction. Managers are evaluated on the basis of the satisfaction they generate in customers. Here an important lesson: some people (anxious, as well as avoidant, attached people) never will be satisfied well, and therefore firms should endeavor to discover one's personal attachment style as they seek to gauge personal preferences or how well customers appraise their services. In addition, if firms evaluate managers on this dimension, they should control for the attachment styles of consumers in their market. Different segments of customers with different attachment styles can be targeted with different marketing tools.

Another question, although not directly related to marketing, stems from the finding that insecure attached people are unable to gain satisfaction well across different domains. Could it be that this fact is a sign of anhedonia which in turn is a precursor for depression? Depression changes the reward system due to the continuous interaction with physical and/or social stress (Russo & Nestler, 2013). Insecure attached people are known to have several social and health risks. Avoidant people are known to cope with the problem by denial by self-medication such as alcohol use (Rothbard & Shaver, 1994; Brennan et al., 1991); peers judge them as hostile and prone to infidelity (Brennan, Shaver, & Tobey, 1991). Anxious attached people have low self-esteem (Collins & Read, 1990); they feel unappreciated at work (Hazan & Shaver, 1990), tend to be intrusive and overly controlling and remain jealous in relationships (Feeney et al., 1994; Noller, 1990). Insecure people in general are more prone to develop loneliness (Mikulincer & Shaver, 2010) or depression (Carmelley et al., 1984). We do not want to suggest that insecure attached people always or even often develop these symptoms. Rather, here we found that they do not attain as much happiness as desired, and material goods/or appraisals of services seem not to compensate for such anhedonia-like outcomes. Therapies for these people might not always work, again because their brain is already wired in a specific manner. That does not mean that they will develop depression from stress much as from loneliness. Note that insecure attachment styles also have benefits: indeed, as Ein-Dor et al. (2013) note, in the case of danger, attachment styles play a key role in dealing with stress. For instance, anxious attached people are quicker to spot danger, and avoidant people undertake action well to avoid it. Put

differently, on the group level insecure attachment styles have an important function but as the data indicate here people with them tend to be unhappy.

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