Anticipated and anticipatory happiness in product decision-making process

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1. Introduction

The first moment a consumer is confronted with a product has been acknowledged as a strong determinant of product success by both academicians and practitioners (Hui et al. 2013). A positive consumer experience is fundamental in such encounter (Kumar and Garg 2010), as consumers cannot realistically evaluate product performances, but only imagining how using that product would be (Palmer and Koenig-lewis 2014). If literature asserts that pure cognitive evaluations only partially explain consumer purchasing patterns (Moons and De Pelsmacker 2012) the need for considering emotions alongside rationality is even stronger when it comes to consumers approaching products for the first time (Palmer and Koenig-lewis 2014).

Two typologies of future-oriented emotions, namely anticipated and anticipatory emotions, have been proposed in literature. Anticipated emotions represent the forecasts of future emotional states that arise when consumers imagine or simulate product consumption (Chang 2016). Anticipatory emotions, instead, are emotions currently experienced due to the prospect of a future event that could have desirable or undesirable outcome (Baumgartner, Pieters, and Bagozzi 2008). Thus, they constitute real affective responses to possible future scenarios.

Despite their conceptualization, the same distinction between the two constructs and their impact on purchasing process are largely unexplored. With respect to the first issue, a still fuzzy distinction exists between anticipatory and anticipated emotions, with emotions that have not been precisely classified into one of the two categories (Carrera, Caballero, and Munoz 2012; Baumgartner, Pieters, and Bagozzi 2008). About the second issue, very few studies investigated their effect on consumer purchasing process (Bettiga and Lamberti 2017), most of them concentrating on contexts of uncertainty or risk, such as anticipated emotions of gambling or regret (Coricelli, Dolan, and Sirigu 2007) or personal goals, such as losing weight or obtaining a tenure position (Perugini and Bagozzi 2001). A third shortage of extant research refers to the kind of future-oriented emotions explored. Most researchers focused their attention on negative emotions such as regret, guilt or embarrassment (Londono, Davies, and Elms 2017; Turel 2016; Onwezen, Bartels, and Antonides 2014; Kim, Y. J., Njite, D., & Hancer 2013), probably due to the evaluation of negative emotions as stronger predictors of behavioural intentions than positive emotions (Baumgartner, Pieters, and Bagozzi 2008).

However, recent studies recognise positive emotions, particularly happiness, as relevant drivers of decision-making process (Mogilner, Aaker, and Kamvar 2012; Nicolao, Irwin, and Goodman 2009; Bhattacharjee and Mogilner 2014) leaving space for further investigations on this category for which boundaries as well as effects on the purchase process are still unclear

(Ayadi, Paraschiv, and Vernette 2017; De Keyser and Lariviere 2014). In light of these considerations, this work aims at deepening the understanding of the nature and the influence of anticipated and anticipatory happiness in the first encounter with a new product.

2. Literature review

Academic research proves a raising interest towards irrational and affective dimensions of consumer decision making, with many attempts to improve most diffused cognitive-model of behaviours by taking into consideration emotional constructs. Emotions spontaneously affect the decision-making process (Moons & De Pelsmacker, 2012) and may constitute pivotal mediating variables in behavioural responses (Schoefer & Diamantopoulos, 2008) or directly influencing pirchase decisions (Di Muro & Murray, 2012). This is particularly true when it comes to consumers approaching products or services for the first time (Koenig-Lewis & Palmer, 2014). In fact, when a customer is presented with a new stimulus, he or she tends to evaluate it through the feelings this stimulus is able to elicit (Koenig-Lewis & Palmer, 2014). This is due to the fact that, in encounter with new products, the consumer cannot realistically evaluate product performances and imagine how using that product would be. For this reason, he mostly relies on emotions during the decision-making process (Koenig-Lewis & Palmer, 2014).

Among cognitive theories adopted to analyse the decision-making process, the Theory of Planned Behaviour (TPB) is probably the most recognized and adopted model (Ajzen,1991). According to the TPB, behavioural intention, a predictor of behaviour, is influenced by attitude - the overall evaluation one performs of a certain behaviour and its possible consequences -, subjective norms - the perceived social pressure - and perceived behavioural control - the perceived ease or difficulty associated with a specific behaviour -. The TPB is a widely applied theory to understand and predict human behaviour (Pavlou & Fygenson, 2016; Hassan , et al., 2016; Chen & Tung, 2014). However, many authors argue that its efficacy could be improved by overcoming present limitations. The first limitation regards the intention-behaviour gap: theoretically, “behavioral intentions are motivational factors that capture how hard people are willing to try to perform a behavior” (Pavlou & Fygenson 2016, p. 117). However, in some cases, Intention may not be a good predictor of the final behaviour. In fact, people may fail to act on their stated Intentions. The causes of this gap can sometimes be found in the methodology adopted to measure both Intention and behaviour (Hassan, et al., 2016). The second limitation of the TPB concerns the inability of the model to predict certain types of behaviours which are not driven by behavioural Intentions such as habits and

impulsive buying (Wood & Neal (2009). In a similar way, impulsive buying it hard to be modelled using the TPB, since impulsive purchases behaviours are unplanned by definition (Verplanken & Sato, 2011). However, even for those behaviours which are guided by Intentions, the TPB may fail in capturing all determinants of behavioural Intentions. In fact, the TPB is highly cognitive and relies on the assumption that most behaviours people engage in are rational and under their control. Thus, it tends to perform less efficiently with respect to behaviours which have strong irrational and affective elements (Kim, et al., 2013). For these reasons, various studies tried to improve the predictive power of TPB by including emotional constructs (Londono, et al., 2017; Kim, et al., 2013; Onwezen, et al., 2014; Turel, 2016).

Emotions are the result of the appraisal of a specific situation, they are highly subjective and they depend on the person that performs this evaluation. They "have a specific referent", meaning that they arise only as a response of an "appraisals one makes for something of relevance to one's well-being" (Bagozzi, et al., 1999, p. 185). So, emotions do not arise because of a situation or a context themselves but they originate from the psychological appraisal of the situation or the context one makes. Furthermore, emotions may arise when the individual confront with a situation but also by thinking about and imagining future outcomes of a behaviour, what has been defined as anticipated and/or anticipatory emotions. In a similar way, when consumers imagine or simulate product consumption, they generate affective expectations about how using that product could make them feel (Chang, 2016). Baumgartner, et al. (2008) proposed a distinction between Anticipatory and Anticipated Emotions. Anticipatory Emotions (A_YEs) are affective reactions which are experienced in the present "due to the prospect of a desirable or undesirable future event" (Baumgartner, et al., 2008, p. 685). They consist of current and real affective responses to future events that could have pleasant or unpleasant implications for the self. Anticipated Emotions (A_DEs), instead, arise when a person forecast to experience certain emotions in the future after some events have occurred (e.g. anticipated joy or regret). Even though they could be accompanied by vivid visualizations, they are predictions of future emotional states. Nevertheless, these forecasted emotions can shape present consumer behaviour through a self-regulatory function. Both Anticipated and Anticipatory Emotions have an impact on behavioural Intentions, where A_DEs have stronger motivational effects than A_YEs (Baumgartner, et al., 2008). Moreover, negative emotions are stronger predictors of behavioural Intentions than positive emotions (Baumgartner, et al., 2008). Anticipated Negative Emotions (ANEs), which include regret, shame, sadness, embarrassment, have been proved to influence cognitive evaluation, being

direct predictors of behavioural Intention in the TPB framework (Londono, et al., 2017; Kim, et al., 2013) and suggesting that decision-making models such as the TPB could largely benefit from the incorporation of emotions which provide stimulus for the intentions' formation. Anticipated pride and guilt have shown to impact the TPB by partially mediating the impact of A and SNs on I (Onwezen, et al., 2014). Among Anticipated Positive Emotions (APEs), happiness and hope proved to lead to a more favourable attitude towards the product (Chang, 2016). Besides, the occurrence likelihood of the target future event influences the experience of A_YEs, but it is not related to A_DEs. Another relevant distinction between the two categories of emotions regards the extent to which they rely on "cognitive-evaluative dimensions" or "experiential-current reactions" (Carrera, et al., 2012, p.274). In fact, Anticipated Emotions are more related to the former aspect while Anticipatory Emotions focus more on the latter (Carrera, et al., 2012). However, Anticipatory and Anticipated emotions are not mutually exclusive concepts, meaning that there could be emotions that do not precisely fall into one of the two categories. For instance, the mental simulation of a future emotional state may conduct to actually experience that emotion in the present moment (Carrera, et al., 2012; Baumgartner, et al., 2008).

3. Study 1

3.1 Hypotheses development

Despite research acknowledges the importance of emotions in relation to consumer behaviour (Schoefer & Diamantopoulos, 2008; Soscia, 2007; Turel, 2016; Argo, et al., 2006; Di Muro & Murray, 2012; Bettiga, et al., 2017; Sun, et al., 2015; Mogilner, et al., 2012; Nicolao, et al., 2009; Bhattacharjee & Mogilner, 2014; Petersen , et al., 2017; Paraschiv & Vernette, 2017; Chang, 2016; Baumgartner, et al., 2008; Londono , et al., 2017; Kim, et al., 2013; Onwezen, et al., 2014), a lack of knowledge is evident on the impact of Positive Emotions (PEs) in the decision-making processes. In fact, researchers mainly focused their attention on Negative Emotions (NEs) such as regret, guilt, embarrassment (Londono et al., 2017; Turel, 2016; Onwezen, et al. 2014; Kim, et al., 2013), probably because NEs have been recognized as stronger predictors of behavioural intentions than PEs (Baumgartner, et al., 2008). Few studies focused on the positive emotions, even if they recognize PEs, particularly happiness, as a relevant driver of decision-making process (Mogilner, et al., 2012). Such studies focused maily on the experiential and indulgent sides side of purchase, studying happiness in relation to material versus experiential purchases (Nicolao, et al., 2009), trying to investigate whether happiness could vary across ordinary and extraordinary experiences (Bhattacharjee &

Mogilner, 2014) or analysing the relationship between indulgent purchases and happiness (Petersen, et al., 2017). Furthermore, such studies do not clearly distinguish between anticipated and anticipatory emotions and their respective impact on consumer decision-making (Baumgartner, et al., 2008; Carrera, et al., 2012). So, the first objective of this study is to is to investigate if Anticipated and Anticipatory Emotions are indeed two different constructs. In particular, the research focuses on happiness, defined as "a state of well-being and contentment; a pleasurable or satisfying experience" (Mogilner, et al., 2012, p. 430), that has been individuated as a powerful but still little explored emotion. More formally:

H1: *Anticipated and Anticipatory Happiness are two distinct emotional reactions.*

The second objective of the study is to investigate if Anticipatory and Anticipated happiness do have an impact on decision-making process. To do that, we will explore the impact of Anticipated and Anticipatory Happiness on the three acknowledged predictors of Intention (A, SNs, and PBC) in the Theory of Planned Behaviours. Thus:

H2: *Anticipated and Anticipatory Happiness have a relationship with Attitude, Subjective Norms and Perceived Behavioural Control.*

3.2 Methodology

The study employs two different methodologies to assess Anticipated and Anticipatory Happiness elicited by the same stimulus. The former is evaluated through self-reported methods, by utilising a questionnaire, while the latter is measured through autonomic physiological responses, by employing a microfacial expression reader. The choice of these two methodologies is due to the nature of Anticipated and Anticipatory Emotions. Anticipated Emotions require the subject to forecast a future emotional state, and thus to imagine a future consumption situation and to try to predict how they would feel in that context. So, since they require a cognitive elaboration, this effort could be better captured by means of a self-reported method like a questionnaire, or an interview. Anticipatory Emotions, instead, are emotional responses experienced in the present moment when one thinks about a future event, hence manifested through physiological reactions. Hence, autonomic methods, allowing researchers to access information related to the spontaneous and unconscious reactions to marketing stimuli, seem an appropriate method. In this regard, we use the Facial Action Coding System (FACS), firstly developed by Paul Ekman and Wallace V. Friesen in 1978 and largely used in marketing researches to assess emotional responses (Hernández-Fernández, et al., 2018; Teixeira, et al., 2012; Liu, et al., 2018) which can determine the emotional state of the

interviewed subject through the analysis of the micro expressions (fear, anger, surprise, disgust, happiness, and sadness), which are involuntary contractions of the facial muscle.

3.2.1 Stimuli selection

The chosen stimuli were two teaser videos advertising new products, which lasted approximately 30 seconds each. The use of two different videos guarantees the capability to accurately assess the emotion intensity. Moreover, their length is recognised to be appropriate to elicit emotional responses in the subjects (Hamdi & Daucè, 2015). The advertised products belonged to 2 different categories: a teeth whitening pen, a personal care product and a laser keyboard, an electronic good. When choosing the products, two main constraints were set: the product had to be relatively new to the respondent to avoid being influenced by previous experiences of use. In fact, when past experiences are available, people tend to rely more on those experiences and engage less in processing information (Koenig-Lewis & Palmer, 2014). This results in a weaker relationship between A, SN, PBC and Intention to purchase the product (Kidwell & Jewell, 2008). Similarly, also the brand name was left out on purpose since it works as a memory cue which pushes consumers to retrieve past information to guide their future decisions.

3.2.2 Experimental design and sample

A laboratory experiment was conducted, involving 50 participants. Such sample size is more than satisfactory for physiological studies, usually grounded on less than 20 subjects (e.g. Stoll, Baecke, & Kenning, 2008; Santos, Seixas, Brandão, & Moutinho, 2012; Hernández-Fernández, Mora , & Hernández, 2018; Teixeira, Wedel, & Pieters, 2012). The experiment lasted 10 minutes and it was carried inside a university laboratory. The participants choice considered some constraints to avoid interference with laboratory equipment. For instance, the subjects did not have to carry cardiac diseases, acute visual impairments and they were required not to have participated in neuromarketing experiments in the previous six months. Subjects had to sign an authorization module which informed them about the purpose of the experiment, the technical equipment used to perform the experiment, the possibility to interrupt the experiment whenever they wanted and the anonymity of their data. Then, they had to sit in front of a computer, where a webcam was installed in front of them to record their expressions while watching the two product advertising videos and answering to a questionnaire. The subjects were recommended to avoid touching or obscuring their face while watching the videos and to remove their hair from their face (a fringe, for example, could impede the software to clearly recognize the microfacial expression on the face in the

analysis phase). At the beginning of the first video (teeth whitening pen advertising video) a neutral image was showed for 20 seconds, to collect the basic expression of the subject (e.g. the expression the subject has when no external stimuli are provided).

3.2.3 Questionnaire development

The questionnaire was mainly developed using Ajzen (2006). It consisted of 3 main sections: the first aimed at gathering descriptive information about the respondents such as gender, age, level of education, type of job and nationality. The other two sections were needed to collect data about the traditional TPB factors (A, SN, PBC, and I) and the extended factor (A_DH) for two different products. At the beginning of each section, there was a brief description of the product, followed by the teaser advertising video for each product. Questions were introduced with a short instruction about how to answer them. The questions testing the Anticipated Happiness' construct were assessed using 7-points Likert scales ranging from "not at all" to "extremely", while the questions testing Attitude, Subjective Norms, Perceived Behavioural Control and Intentions were assessed using 7-points Likert scales ranging from "strongly disagree" to "strongly agree". Attitude toward the products was assessed through 5 items (Ajzen, 2006). Participants had to rate how much they thought the product could be "a good idea", "pleasant", "valuable", "enjoyable" and "beneficial" for them. Subjective Norms were assessed through 3 items (Ajzen, 2006): participants had to indicate whether their relevant others (family and friends) would agree with their purchase and then they had to rate their propensity to listen to the advice of their relevant others. Perceived Behavioural Control was measured with 5 items (Ajzen, 2006; Hsu, et al., 2017) able to capture the self-efficacy (the perceived ability to use a product) and the controllability of each respondent (the extent to which respondents had the resources needed to purchase it). Anticipated Happiness was assessed with 4 items (Chang, 2016; Laros & Steenkamp, 2005; Mogilner, et al., 2012): the first two items asked participants to rate the degree that thinking about having the advertised product would make them experience a specific positive feeling, like "pleasure". The last two items instead, measured the impact of the products on the subjects' lives, in particular how products could solve annoying problems and make everyday life better. The Intention to buy the product was measured using 3 items (Ajzen, 2006) that evaluated the willingness of the respondents to acquire the product (e.g. "I would buy this product").

A preliminary test of the questionnaire was carried out on 10 subjects to gather relevant feedbacks regarding distinct aspects like syntax, easiness of comprehension and overall clarity.

3.2.4 Microfacial expressions assessment

Participants were recorded while watching the teaser videos. Each video was then analysed using *Noldus Face Reader, version 7.* This software is able to automatically assess the intensity of a series of six emotional states of the subject: happiness, fear, anger, disgust, surprise, and sadness. The output of the software is a temporal track where all the changes in the subject' expressions are analysed and classified into emotions (changes in the subject's face are recorded every 66 milliseconds). The emotion intensity ranks from 0 to 1 and values below 0,05 are considered background noise.

3.3 Results

3.3.1 Preliminary analysis

Two subjects for the first stimulus and five subjects for the second stimulus were not considered for data analysis due to low quality of the facial expression recording (mainly subjects partially covering their faces with hands during the experiment). Once the cleaning session of the data had been performed, the emotional track of each participant was calibrated. The calibration phase is needed to remove some person-specific biases, for instance a facial expression naturally skewed toward anger. For each participant, it was necessary to choose 2 seconds of video recording to be used as an input for the calibration analysis. This time interval was taken while the subject was staring at the neutral image at the beginning of the first video. If for some reasons the expression of the subject was not considered neutral, the calibration was done considering another part of the track where the subject was as neutral as possible (e.g. when answering to the demographic questions in the questionnaire).

3.3.2 Descriptive analysis

The sample was composed of 40% men and 60% women. Age distribution was the following: 2% of the respondents aged between 19 and 25 years old, 20% between 26 and 35, 32% between 36 and 45 and the remaining 46% aged over 45 years old. Regarding the education level, 70% of the participants attended high school, 28% got a degree (bachelor or master degree) and 2% obtained a Ph.D. Analysing the type of job, the majority of the respondents (66%) worked as an employee, 20% were entrepreneurs, 2% declared to be retired and the remaining 12% was unemployed (no students were present in the sample). All the

respondents were Italian. Moreover, all the respondents (apart from one) never used before the advertised products and this is perfectly aligned with our purpose to avoid past experiences influences on the evaluation of the products. Table 1 shows the main descriptive statistics of the variables included in the TPB model divided by product. Table 2 instead provide an overview of the descriptive statistics of the 6 basic emotions that were detected using the face reader.

Table 1: Descriptive statistics of A, SN, PBC, and A_DH

	Teeth withening pen		Laser keyboard	
Construct	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**
A*	5,03	1,53	5,37	1,93
SN**	21,51	13,25	26,02	14,51
PBC*	6,18	0,78	6,14	0,90
ADH*	4,81	1,44	5,28	1,78

* max value 7; ** max value 49

Table 2: Descriptive statistics of Anticipatory Emotions

	Teeth whitening pen		Laser keyboard	
Anticipatory Emotions*	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**
Happy	0,029	0,047	0,043	0,078
Sad	0,083	0,108	0,105	0,134
Angry	0,044	0,063	0,053	0,070
Surprised	0,014	0,034	0,027	0,055
Scared	0,005	0,018	0,010	0,026
Disgusted	0,033	0,057	0,037	0,075

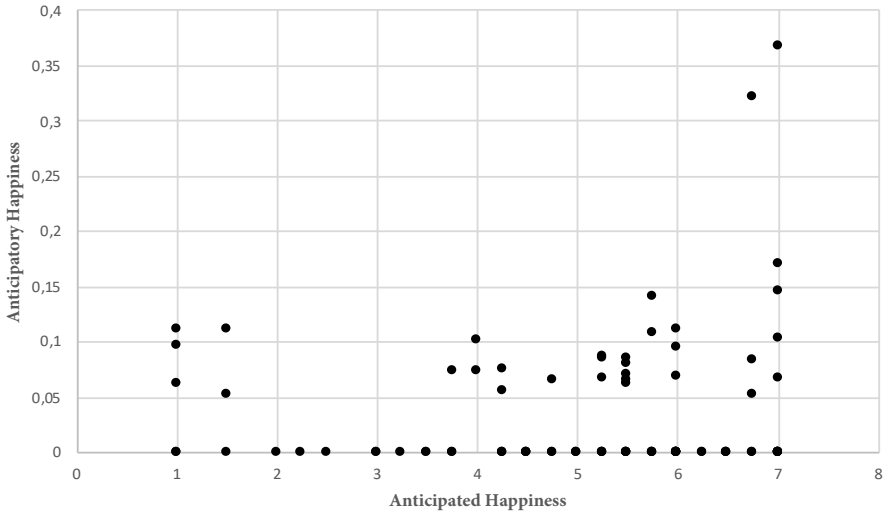
* values between 0 and 1

The intensity of the emotions detected in the laboratory environment was low as respondents mainly kept a neutral expression during the experiment session (mostly, the intensity of the emotions recorded by the software scored values lower than 0,05/1, not considered manifestations of an emotion but a background noise). Both in the first and in the second video more than half of the participants did not manifest any emotion.

3.3.3 H1 results

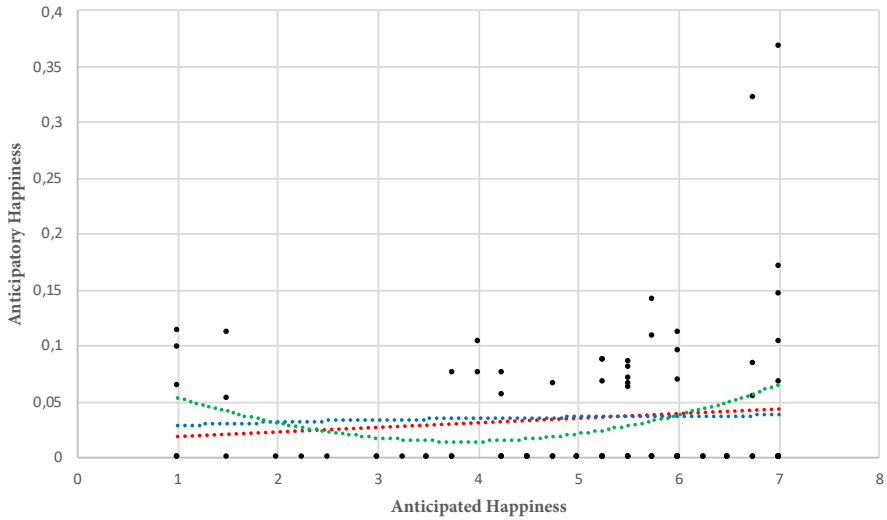
The first part of the analysis investigated whether there was a correlation between Anticipated and Anticipatory Happiness. Below, the values of the two variables are plotted in Figure 1.

Figure 1: Anticipated and Anticipatory Happiness plot



To the best of our knowledge, there is no previous evidence that supports a specific type of correlation between these two variables. Thus, three possible regression models were developed: linear, logarithmic and polynomial. The chart below (Figure 2) plots the regression lines for each tested correlation: the red dotted line represents the linear regression; the blue and the green represent the logarithmic and the polynomial regression lines respectively.

Figure 2: Regression lines of Anticipated and Anticipatory Happiness



Results confirms our expectations, demonstrating that the two variables are not correlated ($R_{lin}^2 = 0{,}011$; $R_{log}^2 = 0{,}002$; $R_{polinomial}^2 = 0{,}070$; number of observations 93).

3.3.4 H2 results

Respondents were divided in two clusters based on the fact that they manifested the emotions of Anticipatory Happiness through their facial expression ($Emotion_{yes}$) or not ($Emotion_{no}$)., at least in one video. Following, a one-way analyses of variance (Single Factor ANOVA) were run to understand if there was any difference in the Intention predictors among the two clusters. Results revealed that subjects with higher (lower) tendency to show A_YH through facial expressions declared different levels of PBC. In particular, lower (higher) levels of PBC were declared by the $Emotion_{yes}$ ($Emotion_{no}$) cluster ($F(1,91)=5,30$; p-value=0,024; Mean ($Emotion_{yes}$) = 5,93; Mean ($Emotion_{no}$) = 6,33). Thus, more "emotional" subjects perceived on average to have less control. Conversely, high-control individuals were those who did not express A_YH through facial expressions in any of the two teaser videos. Also Anticipated Happiness was analysed in relationship with Intention antecedents. Given that these variables (A, SNs, PBC, and A_DH) were assessed with the same measurement method (questionnaire), a correlation analysis seems appropriate to assess relationships between A_DH and each of the three predictors. Results show that A_DH could qualify as a predictor of all constructs of A, SNs, and PBC (Appendix A). However, looking at the R^2 values it can be noticed that the stronger relationship is between A_DH and A, with an explained variance of 89%. A_DH explains around 40% of the variance in SNs and 10% of the variance in PBC.

3.4 Discussion

This study aimed was to understand whether Anticipated and Anticipatory Happiness constituted two different emotional reactions. The choice to investigate consumer happiness is driven by two main reasons. First, the fact that this emotion has been proven to play a crucial role in shaping consumer behaviour (Petersen , et al., 2017; Nicolao, et al., 2009; Paraschiv & Vernette, 2017; Bhattacharjee & Mogilner, 2014; De Keyser & Lariviere, 2014). Second, the intent to expand prior literature on consumer emotions, which has traditionally focused on the role of negative emotional response (Londono et al., 2017; Turel, 2016; Onwezen, et al., 2014; Kim, et al., 2013). To test our first hypothesis, two methods were employed, each for one of the two categories of emotions, to account for previously proposed differences between the two (Baumgartner, et al., 2008). Correlation analysis results provide support for our H1, confirming that there is a distinction between Anticipated and Anticipatory Happiness, supporting Baumgartner et al.'s (2008) arguments of divergence between the constructs. Even more remarkably, we contribute methodologically by measuring anticipatory emotions (more consistently to their definition) through autonomic, objective measures, and demonstrating the

divergence between them and self-reported anticipated emotions scale. This is consistent to previous studies showing how biofeedback and self-reported scales tend to diverge as they tackle with different "mechanisms" of human brain (e.g., Bettiga et al. 2017). The implications of these outcomes open interesting developments in conceptual terms, like the study of the interaction between A_DEs and A_YEs, and also in methodological terms, suggesting how biofeedback may provide richer understanding of product adoption processes.

Furthermore, study 1 frames A_DEs and A_YEs in the Theory of Planned Behaviour. Our single factor ANOVA analysis suggests that whereas higher levels of anticipatory emotions are reached, decreasing levels of self-reported PBC are observed. We find this result intriguing and somehow controversial. We interpret this phenomenon contending that A_YEs are somehow expressions of individual's emotionality, where higher (lower) levels of perceived control may be associated with a weaker (stronger) tendency to show emotions, and vice versa. Another possible explanation could be that control perception may inhibit the emotional reactions one has in terms of facial expressions. These two explanations find support in literature (e.g., Anggrainin & Siswanto, 2016; Rhodes et al. 2005; Biehl et a. 1997), and are suggested to be further studied in the future.

As per Anticipated Happiness, our results show that A_DH is arguably a possible antecedent of all Intention antecedents (A, SNs, and PBC), even though the strongest correlation emerged with Attitude. Nonetheless, such outcome remains unclear and raises the opportunity and the relevance of deepening the relationship between anticipated emotions (and, namely A_YH) and the TPB constructs, that is the object of our Study 2. Finally, the results of Study 1 appear consistent to the idea that A_DH, inherently more cognitive in nature, is mostly linked with the cognitive construct of Attitude. In fact, they both require the subject a mental elaboration effort (Attitude requires to evaluate the product while Anticipated Happiness requires to imagine future consumption and understand one's feeling in that situation). Conversely, A_YH, which is less cognitive and more visceral is mostly linked to perception of control, which is a highly subjective construct, more related to subjects' perceptions than to rational assessments. To conclude, findings of Study 1 leave space for further developments on how A_DE, and more in detail A_DH, can be an important predictor in the decision-making process.

4. Study 2

4.1 Hypotheses development

Findings of Study 1 suggests to deeper investigate the role of A_DEs, and in particular A_DH in decision-making process, with the objective of improving the capability to explain the Intention to buy new products for the first time. Hence, we develop a second study to further explore the role of Anticipated Happiness in the TPB model of decision-making. Grounding on the evidence of the first study and on prior studies that propose both empirical and theoretical evidence for supposing that Anticipated Happiness could qualify as an important additional component in the original TPB framework, we formulated the following hypotheses:

H3: *Anticipated Happiness is a direct antecedent of Intention in the Theory of Planned Behaviour.*

H4: *Anticipated Happiness is a direct antecedent of Attitude (a), Subjective Norms (b), and Perceived Behavioural Control (c) in the Theory of Planned Behaviour.*

H5: *Anticipated Happiness partially mediates the impact of Attitude (a), Subjective Norms (b) and Perceived Behavioural Control (c) on Intention in the Theory of Planned Behaviour.*

4.2 Methodology

The method chosen to assess Anticipated Happiness in the first study is also employed in this second one. Thus, the previously stated hypotheses have been tested using a self-reported method, an online questionnaire, with the same scales employed in study 1. Moreover, this method allows to reach a larger sample size which is adequate for the objective of testing structural relationships among constructs by means of Structural Equation Modelling (Henseler, et al., 2009).

4.3 Results

4.3.1 Preliminary and descriptive analysis

The total amount of respondents was 316. Ten subjects were not considered in the analysis due to disengaged answers (e.g. some records scored the same in all items). The sample was composed of 40% of men and 60% of women. Most of the respondents (74%) were equally split between two age ranges: 19-25 and over 45. Regarding the education level, 3% of the population did a Ph.D program, 48% own a degree, 43% did the high school and 6% the middle school. Analysing the type of job, a great part of the population (50%) work as an employee, 29% declared to be students, 13% entrepreneurs, 3% retired and the remaining 5% unemployed. Most of the respondents (90%) were Italian. The majority of the respondents

didn't have previous experience with both the teeth whitening pen (only 6% of respondents already used this product) and the laser keyboard (2% of respondents already used this product). Table 3 shows the main descriptive statistics and the correlation coefficients of the variables postulated in the extended TPB model divided by product.

Table 3: Descriptive statistics of the enlarged TPB variables

Teeth withening pen							
Construct	**Mean**	**Standard Deviation**					
A*	3,48	1,61	1,00				
SN**	15,02	10,73	0,64	1,00			
PBC*	5,54	1,17	0,18	0,20	1,00		
ADH*	3,30	1,49	0,87	0,61	0,13	1,00	
I*	2,87	1,71	0,84	0,56	0,10	0,81	1,00

* max value 7; ** max value 49

Laser keyboard							
Construct	**Mean**	**Standard Deviation**					
A*	4,00	1,67	1,00				
SN**	18,20	12,28	0,66	1,00			
PBC*	5,36	1,30	0,39	0,33	1,00		
ADH*	3,65	1,64	0,86	0,62	0,28	1,00	
I*	2,90	1,66	0,77	0,61	0,27	0,74	1,00

* max value 7; ** max value 49

4.3.2. Inferential statistics

Data were analysed with a series of Single Factor ANOVA tests to assess whether different groups of respondents were statistically different with respect to a specific variable (A, SNs, PBC, A_DH and I). Two groups' discriminants were defined: sex (male/female) and age (the first group included all respondents less than 25 years old, the second between 26-45 years old and the third over 45 years old). When comparing the three age groups, ANOVA was supplemented by Tukey-Kramer post hoc test, in order to understand where the differences lied. With respect to the teeth-whitening pen, no variable mean was significantly different among sex groups. Attitude was found to be significantly different ($F(2,303) = 3,18$; p-value=0,043) between two age groups. In particular, post-hoc showed that in group 1 Attitude was higher than in group 3 (Mean (group 1) = 3,74; Mean (group 3) = 3,21). Similarly, SNs were significantly different ($F(2,303) = 3,19$; p-value=0,043) between the same age groups. In particular, SNs were higher in group 1 than in group 3 (Mean (group 1) = 16,56; Mean (group

3) = 13,07). Similarly, for the laser keyboard, ANOVA tests found that there was no significant difference among male and female. However, A_DH (F(2,303) = 3,82; p-value=0,023), A (F(2,303) = 3,06; p-value=0,048) and SNs (F(2,303) = 6,09; p-value=0,003) were found to be significantly different among age groups. In particular, A_DH, A and SNs were greater in group 1 (Mean $_{ADH}$ =3,97; Mean $_A$ = 4,30; Mean $_{SN}$ =20,94) than in group 3 (Mean $_{ADH}$ =3,42; Mean $_A$ = 3,81; Mean $_{SN}$ =15,42). Moreover, as for the teeth whitening pen, SNs are stronger in group 1 than in group 3.

4.3.3. Measurement model

The data were analysed with PLS SEM analysis carried out using *SmartPLS 3.2.7.* Henseler, et al. (2009, p.292) suggest that "for robust PLS path modelling estimations […] sample size" should "be equal to […] ten times the largest number of structural paths directed at a particular construct in the inner path model". Thus, given that the largest number of structural paths pointing at a specific variable in the inner model is equal to 4, we can conclude that sample size is adequate. Before assessing the causal relationships among the constructs of the proposed framework, the data were analysed through a CFA (Confirmatory Factor Analysis) to ensure both reliability and validity of the reflective measurement model. Indicators' reliability was tested by looking at the outer loadings: acceptable values have to be above 0,6-0,7 for each measurement item. After this check, only one indicator was dropped since its value was found to be below 0,6. This result supports the theoretical assignment of the indicators to each construct, hypothesised during the questionnaire development. Internal consistency reliability was evaluated through CR (Composite Reliability) measures, instead of Cronbach's alphas (Henseler, et al., 2009). All CR values exceed 0,7 for each latent variable, so they are considered acceptable (Henseler, et al., 2009). Convergent validity was assessed by looking at the AVE (Average Variance Extracted), which had to be greater or equal to 0,5 for each latent variable, meaning that each latent is able to explain on average more than half of the variance of its own block indicators. All constructs had an AVE value greater than the threshold. Discriminant validity, instead, was tested with both the Fornell-Larcker criterion and the cross-loadings. In accordance with Fornell-Larcker, the AVE of each latent variable must be higher than the squared correlations with all other latent variables. Thus, each latent variable has to share more variance with its own set of indicators than with another latent variable representing a different set of indicators. Another check for discriminant validity is offered by cross-loadings: each indicator must have a higher correlation with its own latent variable than with any other. Table 4 presents a summary of the results of constructs

reliability and validity, showing satisfactory values for CR and AVE, and thus proving the effectiveness of the selected items in measuring latent variables

Table 4: Internal consistency reliability and convergent validity results

Construct	CR	AVE
Attitude	0,953	0,801
Subjective Norms	0,952	0,869
Perceived Behavioral Control	0,851	0,592
Anticipated Happiness	0,938	0,790
Intention	0,961	0,891

4.3.4 Structural model

Once the suitability of the outer model was tested, it was necessary to assess the quality of the inner model and to check whether the hypothesized relationships among the variables were supported by the data. A PLS algorithm with 300 iterations was run to obtain the coefficients of the structural path and the variance of the dependent variable(s) explained by the independent variables (R^2 and $R^2_{adjusted}$). Then the significance of the path coefficients was tested using the bootstrap approach with 5000 re-samples (Londono , et al., 2017).

Table 5 and Table 6 show that all the hypotheses are supported. Therefore, A_DH can play a role in the TPB both as a direct antecedent of all the traditional constructs (A, SNs, PBC, and I) and as a partial mediator of the existing relationships among the constructs. These results highlight the pervasive role of this APE in the Intention formation context, suggesting that A_DH does not just constitute a first emotional reaction to the perception of stimuli, but also that it can partially explain the traditional relationships among TPB constructs. These results further confirm that A_DH plays a crucial role in all aspects and stages of the Intention formation process by influencing all the TPB constructs. Moreover, Table 5 shows that Attitude and Anticipated Happiness are the strongest predictors of the Intention in this context and that they both have a positive impact on it. Same reasoning for Subjective Norms, which are significant as well, but with a secondary relevance. Perceived Behavioural Control, instead, is the weakest predictor of the Intention to buy the products and it has a significant path coefficient only in H5c, H4a, H4b, H4c, while in the other hypotheses it is not significant.

Table 5: Path coefficients

	TPB Model	H3 Model	H4a Model	H4b Model	H4c Model	H5a Model	H5b Model	H5c Model
Relationship	*Traditional TPB model*	*TPB with ADH as a direct antecedent of I*	*TPB with ADH as a direct antecedent of A*	*TPB with ADH as a direct antecedent of SN*	*TPB with ADH as a direct antecedent of PBC*	*TPB with ADH as partial mediator of the relationship between A and I*	*TPB with ADH as partial mediator of the relationship between SN and I*	*TPB with ADH as partial mediator of the relationship between PBC and I*
A → I	0,753***	0,544***	0,753***	0,753***	0,755***	0,547***	0,546***	0,549***
SN → I	0,108***	0,083**	0,108***	0,108***	0,110***	0,084**	0,083**	0,085**
PBC → I	-0,058**	-0,047*	-0,058**	-0,058**	-0,066***	-0,047*	-0,047*	-0,055**
ADH → I		0,255***				0,250***	0,252***	0,251***
ADH → A			0,871***					
ADH → SN				0,623***				
ADH → PBC					0,253***			
A → ADH						0,870***		
SN → ADH							0,622***	
PBC → ADH								0,238***

Note: *** p< 0.01 **p <0.05 * p <0.1.

Table 6: Indirect effects coefficients

	TPB Model	H3 Model	H4a Model	H4b Model	H4c Model	H5a Model	H5b Model	H5c Model
Relationship	*Traditional TPB model*	*TPB with ADH as a direct antecedent of I*	*TPB with ADH as a direct antecedent of A*	*TPB with ADH as a direct antecedent of SN*	*TPB with ADH as a direct antecedent of PBC*	*TPB with ADH as partial mediator of the relationship between A and I*	*TPB with ADH as partial mediator of the relationship between SN and I*	*TPB with ADH as partial mediator of the relationship between PBC and I*
A → I						0,217***		
SN → I							0,157***	
PBC → I								0,060**
ADH → I			0,655***	0,067***	-0,017**			

Note: *** p< 0.01 **p <0.05 * p <0.1.

Potential collinearity among exogenous latent variables has been assessed using SPSS Statistic which provided VIF values. To avoid multicollinearity problem, we considered as acceptable VIF values below or equal to 5 (Vercellis, 2009). Results show that there are no multicollinearity problems as all VIF values were lower than the above-mentioned threshold.

Then, the model fit was assessed using a set of indicators, which include both relative and absolute indexes: χ^2/degree of freedom (df), NFI, SRMR. The reason behind the use of χ^2/df instead of χ^2 relies on the fact that χ^2 is not a reliable indicator when dealing with large samples (more than 200 observation), as it tends to suggest misfit, regardless of the true situation (Coughlan, et al., 2008). χ^2/df, instead, is more reliable with large samples. Hereafter, Table 7 presents the fit indexes for all the models: each model was built by incorporating each of the stated hypothesis in the traditional TPB framework. SRMR (Standardize Root Mean Square Residual) scores below 0,08 indicate an acceptable fit and NFI (Normed-Fit Index) is deemed to be acceptable when it is higher or equal to 0,95 (Coughlan, et al., 2008). Even though there is no consensus about threshold values for χ^2/df

(Coughlan, et al., 2008), we considered as acceptable values those lower or equal to 3 (Iacobucci , 2010). So, results shown in Table 7 indicate that H3, H4a, H4b, H4c and H5a Models perform slightly better in terms of model fit, compared to H5b and H5c Models. Moreover, H3, H4a, H5a, H5b and H5c Models are aligned with the previous studies that try to include emotional constructs within the TPB. In fact, there is evidence that supports the inclusion of emotions as direct antecedents of Intention (Kim, et al., 2013; Londono , et al., 2017), as direct antecedents of Attitude (Chang, 2016; Ding, et al., 2014) and as partial mediators of Attitude, Subjective Norms, Perceived Behavioural Control on Intention (Onwezen, et al., 2014; Turel, 2016). H4b and H4c Models, instead, enlarge previous findings by showing that Anticipated Happiness could be integrated into the TPB even as a direct antecedent of both SNs and PBC.

Table 7: Model fit indicators and R square

	TPB Model	**H3 Model**	**H4a Model**	**H4b Model**	**H4c Model**	**H5a Model**	**H5b Model**	**H5c Model**
	Traditional TPB model	*TPB with AᴅH as a direct antecedent of I*	*TPB with AᴅH as a direct antecedent of A*	*TPB with AᴅH as a direct antecedent of SN*	*TPB with AᴅH as a direct antecedent of PBC*	*TPB with AᴅH as partial mediator of the relationship between A and I*	*TPB with AᴅH as partial mediator of the relationship between SN and I*	*TPB with AᴅH as partial mediator of the relationship between PBC and I*
R^2 on Intention	0,659	0,673	0,658	0,659	0,659	0,672	0,672	0,673
R^2 adj on Intention	0,657	0,671	0,657	0,657	0,658	0,670	0,670	0,671
R^2 on A			0,758					
R^2 adj on A			0,758					
R^2 on SN				0,389				
R^2 adj on SN				0,388				
R^2 on PBC					0,064			
R^2 adj on PBC					0,063			
R^2 on AᴅH						*0,756*	*0,387*	*0,057*
R^2 adj on AᴅH						*0,756*	*0,386*	*0,055*
SRMR	**0,072**	**0,066**	**0,077**	**0,077**	**0,072**	**0,067**	0,148	0,269
Chi Quadro/df	**2,374**	**3,030**	**3,084**	**3,068**	**3,037**	**3,029**	3,955	4,613
NFI	**0,834**	**0,841**	**0,838**	**0,839**	**0,840**	**0,841**	0,792	0,757

Since results confirmed a pervasive role of A_DH within the TPB, we also assessed the goodness of two models in which A_DH was simultaneously positioned as predictor of A, SN, PBC, and I and as partial mediator of A, SN, and PBC on I. SEM analysis was then conducted on these two models. All path coefficients of the hypothesized relationships were significant, and each model was able to explain 67% of the variance in intention ($R^2_{model\ a}$=0,672, $R^2_{model\ b}$= 0,673).

4.3.5 Structural model by product

We finally explored if there are any differences in the relationships between the constructs of the enlarged TPB (A, SNs, PBC, A_DH, and I) caused by the type of product. The significance of the path coefficients of the inner model was slightly different when considering the two products separately. By modelling the enlarged TPB for the teeth whitening pen, SNs and PBC were found not to be relevant predictors of intention. An analogous result is achieved for

the laser keyboard, where PBC did not represent a predictor of the Intention to buy the product. Shifting the attention of the role of A_DH in the enlarged TPB, all the hypotheses are supported even considering the two products separately. This means that A_DH was not strictly related to the product type, but it has a pervasive and strong role regardless of it.

4.4 Discussion

All the hypothesised relationships between A_DH and the TPB constructs were confirmed, suggesting the possibility to position A_DH both as a direct antecedent of the four traditional TPB constructs and as a mediator of the relationships between Intention's predictors and Intention itself. More in detail, A_DH can be a direct predictor of Attitude, meaning that A_DH could be considered as a first signal that derives from an "emotional assessment" of the stimulus, feeding the subsequent creation of a positive attitude (Baumbartner et al. 2008). A_DH also plays a role as direct antecedent of SNs; a possible explanation for the underlying mechanism could be related to the projection bias (Lowenstein et al. 2003). Indeed, people that experience positive feelings about a product tend to think that their relevant others will also be pleased about it and consider purchasing a good idea.

Moreover, A_DH is also proved to be a predictor of PBC: this result can be better interpreted in light of the Construal Level Theory (CLT). In fact, CLT states that when Psychological Distance (PD) is high (in our case the focal product is new, the context trial is virtual and the purchase is not happening in the near future, thus PD can be considered high), people tend to focus on the desirability aspects of the behaviour and to overlook more concrete ones such as the availability of resources and capabilities needed to use the product (Goodman & Malkoc, 2012). Thus, the desirability focus may help in triggering a feeling of A_DH and this feeling could lead the subject to perceive more control over the behaviour, since feasibility considerations are not really performed. Finally, A_DH is not just pervasive in the TPB, but it also has a tremendous impact on purchase Intention, demonstrated by the fact that a model with A_DH as the only predictor of Intention has an R^2 of 0,587. Thus, on the one hand, in the process of Intention formation, A_DH can be a first, immediate emotional response to the marketing stimulus, impacting in turn on the more cognitive constructs of A, SN, PBC, and I. On the other hand, A_DH can, at least in part, explain the relationships between intention predictors and behavioural Intention. Indirectly, the confirmation on another sample of the positive impact of A_DH on TPB confirms the idea of A_DE_s and A_YE_s as distinct constructs.

5. General discussion

This research shed some light onto the ambiguous and fuzzy distinction between Anticipated and Anticipatory Emotions. According to our results and interpretation, such distinction mostly lies on the idea that while Anticipatory Emotions are experienced in the present in relation to future events, Anticipated Emotions are forecasts of future emotional states, thus they occur when a person imagines a future situation and reasons about how he or she would feel in that context. This outcome contributes to literature not only providing further evidence to Baumgartner et al.'s (2008) theories, but also providing a richer interpretation grounded onto objective autonomic measures, and providing a strong methodological implication, suggesting a possible approach to use microfacial expressions analysis to study A_YE_S.

We hence focused on the relationship between future-oriented emotions and intention to buy a new product, studying its relationship with the contented TPB's Intention predictors (Attitude, Subjective Norms, and Perceived Behavioural Control). Indeed, results suggested that Anticipated Happiness could qualify as relevant antecedent of Attitude (Anticipated Happiness was found to account for 89% of variation in A), while Anticipatory Happiness seems to be more linked to perceptions of control (PBC). In particular, results show that higher levels of Anticipatory Emotions are expressed by subjects who declare lower levels of PBC. This suggests that either control may somehow inhibit the emotional reactions one has in terms of facial expressions, or that emotional reactions are overwhelming, so they trigger feelings of loss of control.

It seems reasonable that the cognitive construct of Attitude, related to rational assessments of a behaviour, is mostly linked with Anticipated Happiness, which requires a cognitive effort of imagining future events and reasoning about one's feelings in that hypothetical scenarios. Similarly, since anticipatory emotional responses are experienced in the present, they are more overwhelming, and they are mostly related to a less cognitive construct, PBC, which is mostly based on subjective perception than on rational evaluations. Indeed, the real control one has can be experienced only when the behaviour is being performed, and it is better known as Actual Behavioural Control (Hassan , et al., 2016).

Furthermore, this study enlarges previous findings in two main ways. First, previously tested relationships between Anticipated Emotions and the TPB variables have been tested and confirmed with a new construct, A_DH, which belongs to the broader category of APEs, that have traditionally received less attention than ANEs. A_DH was found to be conceptually separated from Attitude. Indeed, while Attitude is more focused on one's thoughts and evaluations towards a specific product, A_DH captures the extent to which the product has a

positive impact on the subject's life, eliciting feelings of pleasure, and a sense of "feeling better" when the respondent imagines using it. Secondly, previous literature has been expanded by finding support for a new possible role of A_DH as a direct antecedent of SNs and PBC. These results suggest that emotional responses may have an impact also on one's perception of control over a behaviour and over the perceived pressure to perform the behaviour exerted by relevant others.

To conclude, Anticipated Happiness was found to have a pervasive role in all stages of the Intention formation process, by qualifying at the same time as direct antecedents of the traditional constructs and as partial mediator of the existing relationships among the TPB variables. These findings underline the importance of considering emotional reactions to marketing stimuli to improve the capability to explain intention formation generated by the encounter with the stimulus.

6. Managerial implications

These findings could have relevant implications for marketers involved in the design process of teaser videos for new products or services, or in the design of advertisements and campaigns for such products. In fact, in these contexts, the emotional identity of the viewer is likely to play a much prominent role with respect to the rational one, thus becoming a strong predictor of the buying intention. Moreover, marketers are increasingly seeking to connect with customers on a more simple and essential way by promising happiness and by creating brands that cultivate happiness. So, teaser videos should be designed in a way to elicit feelings of Anticipated and Anticipatory Positive Emotions (e.g. happiness) in the viewer. Of much less relevance are considerations about the opinions of important others or about the perceived control over the behaviour, thus these aspects should receive less attention. The main objective should be then to design stimuli that evoke A_DH and A_YH in the subject. This purpose may not be as easy as it seems since happiness is demonstrated to be a complex emotion whose meaning often shifts among individuals.

Nevertheless, previous studies on the role of happiness in consumer research can offer interesting cues for finding ways to elicit it. For instance, it has been demonstrated that framing consumption as an experience instead of a mere purchase could create deeper connections with customers by evoking feelings of happiness (Nicolao, et al., 2009; Bhattacharjee & Mogilner, 2014). Furthermore, the extent to which the experience is presented as "ordinary" or "extraordinary" has an impact on individuals' happiness level and this effect is proved to be different for younger vs. older subjects. Thus, age can be an

important factor to take in consideration when presenting marketing contents that frame consumption as an experience. Petersen , et al., (2017) provide interesting suggestions for luxury brands marketer on how to elicit happiness in high vs. low self-control consumers when it comes to indulgent purchases. For instance, messages which provide customers with a reason to indulge (e.g. "luxury feels better earned") resonate better with high self-control consumers, making them happier and more satisfied with the purchase. Conversely, for low self-control consumers, happiness is more likely to arise when the brand promotes spontaneous indulgence - e.g. "you don't need a reason to indulge"- (Petersen , et al., 2017, p.180). These findings have important implications for marketers which could increase the effectiveness of one-to-one communication, especially online, based on consumer personality variables, inferred from their online behaviour data. For example, marketers can use social networks likes or language to infer personality traits of agreeableness and conscientiousness, which are correlated to the self-control trait.

7. Limitations and future research

The study is obviously subject to some limitations. The first limitation stems from the fact that, for time and resource constraints, the TPB model was just partially tested as the actual behaviour of the participants was not measured. Although behavioural Intention is considered to be a good predictor of behaviour (Ajzen, 1991), there is no guarantee that intention will actually translate into actual behaviours. Therefore, further research could address this issue and also test the relationship between actual behaviour and the declared intention.

The second limitation regards the type of products used in the experiments: this research was limited to very new and innovative products presented through teaser videos. So, future research should replicate this study by using different kinds of products, to assess whether Anticipated and Anticipatory Happiness play the same role. This test could help in understanding whether Anticipated and Anticipatory Happiness are a function of the type of product and/or the purchase type. For instance, complex purchases could be characterized by a different decision-making process where emotional reactions could be offset by more rational and cognitive thoughts.

The third limitation is linked with the emotional construct under investigation. On the one hand, this study only investigates one Positive Emotion, Happiness. Thus, further investigations could be aimed at assessing the role of other PEs like love, contentment, pleasure, and excitement in relation to consumer behaviour using the TPB model. On the other hand, the present study focuses only on Anticipated and Anticipatory Happiness.

However, to further clarify the distinction between Anticipatory and Anticipated Emotions, other types of emotions (both positive and negative) should be considered.

The last limitation concerns the methods used to measure Happiness. In fact, the construct was assessed using both self-reported and autonomic methods (microfacial expressions). However, it is reasonable to presume that A_YH does not only manifest through facial expressions, like changes in the lip corners and in the muscles near cheeks and eyes. In fact, some studies like Kaklauskas, et al. (2011) and Levenson, et al. (1990) investigated other possible biometrical manifestations of this emotional construct, as the heart rate acceleration or the skin temperature and blood pressure growth and the skin conductance change. So, results should be replicated with other types of autonomic measures.

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Appendix A

Regression between Attitude ands AdH

Regression Statistics	
Multiple R	0,945773275
R Square	0,894487087
Adjusted R Square	0,893327605
Standard Error	0,326607402
Observations	93

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	82,29281204	82,29281204	771,4536822	3,20107E-46
Residual	91	9,70718796	0,106672395		
Total	92	92			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	4,84476E-16	0,03386761	1,4305E-14	1	-0,067273847	0,067273847	-0,067273847	0,067273847
ADH	0,945773275	0,034051176	27,77505504	3,20107E-46	0,878134798	1,013411752	0,878134798	1,013411752

Regression between Subjective Norms ands AdH

Regression Statistics	
Multiple R	0,658554567
R Square	0,433694117
Adjusted R Square	0,427470976
Standard Error	0,756656477
Observations	93

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	39,89985878	39,89985878	69,69054333	7,25365E-13
Residual	91	52,10014122	0,572529024		
Total	92	92			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-2,52675E-16	0,078461622	-3,22036E-15	1	-0,155854373	0,155854373	-0,155854373	0,155854373
ADH	0,658554567	0,078886891	8,348086207	7,25365E-13	0,501855449	0,815253685	0,501855449	0,815253685

Regression between Perceived Behavioural Control and A_{DH}

Regression Statistics	
Multiple R	0,318773871
R Square	0,101616781
Adjusted R Square	0,091744437
Standard Error	0,953024429
Observations	93

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	9,34874381	9,34874381	10,29307631	0,001844209
Residual	91	82,65125619	0,908255563		
Total	92	92			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-1,06396E-15	0,09882403	-1,07662E-14	1	-0,196301795	0,196301795	-0,196301795	0,196301795
ADH	0,318773871	0,099359665	3,208282454	0,001844209	0,121408101	0,51613964	0,121408101	0,51613964