Effect of Social Media Brand Engagement on Psychological Wellbeing of Consumers

Author: Alina Katiliute
University of Twente
P.O. Box 217, 7500AE Enschede
The Netherlands

ABSTRACT

The development of social media allowed people from all over the world to communicate and exchange information. As social media use is growing, a lot of attention has been brought to the effect it is having on consumer wellbeing. This research looks at how social media brand engagement (SMBE) influences psychological wellbeing, a topic that is currently limited. A novel conceptual model was developed to explore the topic with four mediating variables: body dissatisfaction, envy, inspiration, and a sense of community. To test the model, a scale was developed from existing literature, and data was collected via a self-administered survey which gathered 171 responses. Linear regression analysis was conducted to evaluate the hypotheses of the conceptual model, with envy divided into two separate factors as a result of an Exploratory Factor Analysis (EFA). The findings indicate that SMBE significantly and positively influences benign envy, inspiration, and a sense of community. Furthermore, body dissatisfaction and malicious envy showed a significant negative influence on psychological wellbeing. The outcomes of this study can be useful for brands and marketers developing social media strategies by focusing on the positive sides, like increasing body image awareness, and addressing negative sides, like malicious envy, to enhance the psychological wellbeing of consumers. Further research is recommended to expand on these findings and explore additional factors that may influence psychological wellbeing in the context of SMBE.

Graduation Committee members:

Dr. Hatice Kizgin

Keywords

Social media brand engagement, body dissatisfaction, envy, inspiration, community, psychological wellbeing



1. INTRODUCTION

In today's world, the use of technology is growing rapidly and the internet is becoming a part of everyday life for more and more people (McCain, 2023). McCain (2023) states that over 60% of the world's population has a mobile phone, of which 80% are smartphones with access to the internet. In 2022 the average time spent online per person was almost 7 hours per day (Kemp, 2022). The use of technology and specifically the internet significantly increased during the COVID-19 pandemic due to the governmental regulations to stay at home (Jahan et al., 2021). O'Brien (2022b) states that the pandemic expanded the role of digital marketing, and social media trends keep growing. For example, TikTok which was previously seen as a purely entertaining platform for children and adolescents is now used by many older influencers, like Gordon Ramsay, who manage to reach a wide range of audiences on the platform (O'Brien, 2022b). Seeing how many of their customers as well as potential buyers use social media daily, brands are attracted by the possibility to interact with them directly (Gutierrez et al., 2023).

The increased use of social media as a marketing space raises the question of how it affects consumers' psychological wellbeing. Current research mostly focuses on such effects of social media brand engagement (SMBE) as purchasing intentions, brand loyalty, and brand trustworthiness (Alboqami, H. 2023, Osei-Frimpong et al., 2022, Ramaswamy & Ozcan, 2016). Additionally, a lot of research has been done on the effects of social media on the psychological wellbeing of consumers (Bano et al., 2019, Kalpidou et al., 2011, Keutler & McHugh, 2021, Young et al., 2020). However, still not a lot of research has been done to examine the effects of SMBE on the wellbeing of users. Some research shows negative aspects of social media consumerbrand interaction. For example, Feng et al. (2023) state that using influencers for advertising products can lead to loss of trust in the brand and promote the feeling of malicious envy in consumers. Whether that is the case and the extent of this effect depends on how the influencer behaves on his/her account and whether consumers view him/her as similar to themselves. Furthermore, traditional advertising on mass media channels includes choosing skinny and "perfect-looking" models to advertise a product (Grabe et al., 2008). Spending a lot of time on social media and constantly seeing these "perfect" pictures can lead to upward comparison and reduced body satisfaction (Dutt, 2023, Grabe et al., 2008). On the other hand, some social media campaigns of companies can have a positive impact on consumers. Fletcher-Brown et al. (2021) discuss the beneficial effects of a particular social media campaign on the wellbeing of women with cancer who suffer hair loss due to chemotherapy. The study examines how engaging with brands via social media allows users to feel connected to a network that makes them feel supported and promotes de-stigmatisation of problems they are facing. Moreover, the literature states that SMBE can lead to consumers feeling inspired which leads to customer-brand co-creation and improving brand equity (Cao et al., 2022).

Lack of research on consumer psychological wellbeing in the context of SMBE presents a research gap that will be covered in this study. The four constructs described above will be used to create a conceptual model for this research. Those constructs are body dissatisfaction, envy, inspiration, and a sense of community. The following research question was formulated to complete this study:

What are the effects, positive vs. negative, of social media brand engagement on psychological wellbeing of consumers?

The remainder of this paper is organised in seven sections. First, a literature review is completed on the topics of SMBE and

psychological wellbeing. Next, a conceptual model is presented and hypotheses are formulated based on the available literature. After that, an explanation of the research methodology is provided. The outcomes of applying the conceptual model are then stated followed by a discussion of those findings. Lastly, the conclusion, suggestions for future research, and acknowledgments are discussed.

2. LITERATURE REVIEW

The framework of this research is based on the review of literature on wellbeing, social media platforms, and brand engagement via social media. Next, this section identifies the possible negative and positive effects that the brand engagement via social media has on consumer wellbeing. The conceptual model is then presented together with the discussion of the hypotheses of this research.

2.1 Social Media Brand Engagement

In 2004 Web 2.0 was introduced and it changed the way developers and users use the internet. Instead of individuals creating and publishing applications and content, the World Wide Web is now a platform where everyone can collaborate and continuously update information published online (Kaplan & Haenlein, 2010). They state that the development of Web 2.0 allowed for the creation of social networking sites, or as they are also called, social media platforms by allowing end-user to generate their content and post it online. This term was called User Generated Content. Social media platforms have been growing rapidly over the last decade, in 2008 Facebook announced that it has 67 million active users and by 2009 this number rose to 175 million users (Park et al., 2009, Kaplan & Haenlein, 2010). Today more than 4.5 billion people use social media and it is expected that the number of users will rise to almost six billion by 2027 (Statista, 2023b). To put this into perspective, around eight billion people are living on Earth (Gaigbe-Togbe et al., 2022), which means that more than half of the population actively uses social networking sites. There are five different types of social media platforms. They include Blogs, for example, Boing Boing, Buzzsprout, Social Networks such as Facebook, and LinkedIn, Content Communities like YouTube, and Wikipedia, Forums like Epinions, Ebay, and Content aggregators such as Google Maps (Constantinides, 2009). In this research, the focus will be on Social Networking platforms and Content Communities (YouTube) since these types of social media allow immediate two-way communication between parties.

Initially, social media was developed to connect people from all over the globe in a virtual environment, but over time it developed further and became a major source of information that allows consumers to exchange knowledge and opinions about products and services and influence the process of decisionmaking (Maghrebi et al., 2016, Palacios-Marqués et al., 2015). Many social media users who post the events of their everyday lives in a relatable and trustworthy way have become influencers within the chosen platforms (McCorquodale, 2020). According to Chee et al. (2023), social media influencers (SMIs) are those individuals who share almost real-time content that allows instant communication with the audience and a strong presence in their daily life which leads to a sense of intimacy between an influencer and his/her followers. This allows SMIs to create an impact on the emotions, thoughts, and behaviours of his/her followers. Due to their large influence on the audience, SMIs can initiate trends and persuade others to buy products they endorse. Hence, many brands partner with them as part of SMBE strategies (Cartwright et al., 2022, Geyser, 2023b).

There are also other ways in which companies interact with their customers via social media. For example, they have their own

social media accounts on several platforms (e.g., YouTube, Instagram, TikTok) where they post selling but also engaging content. An example of engagement content can be developing a new product together with the customers. In 2012 Lay's, the famous brand of potato chips, started a campaign on Facebook that was called "Do Us a Flavor" where people could submit flavour ideas to Lay's Facebook page and the winning flavour would be produced and sold at the stores (Brittany, 2018). In addition, sponsored advertisement is gaining popularity among brands. Sponsored posts on social media are integrated into the feeds of the target audience where engagement is the greatest. This increases sharing of the content which in turn increases purchasing intentions (Plume & Slade, 2018). The aim of such posts is to be seen as less intrusive than regular, standalone advertisements which have flooded the social media space and caused consumers to question their credibility (Cunningham & Bright, 2012).

2.2 Psychological Wellbeing

Multiple definitions of wellbeing can be found in the literature. In the Cambridge dictionary, the term wellbeing is defined as "the state of feeling healthy and happy" (well-being, 2023). There are two ways in which positive psychology defines wellbeing. The wellbeing theory was developed by Seligman (2011) who conceptualises dimensions that define and measure wellbeing. The theory states that not one single dimension such as happiness or life satisfaction describes wellbeing but rather several elements contribute to it. Seligman (2011) defined the PERMA framework that has five elements. These elements are Positive emotions, Engagement, Relationships, Meaning, and Accomplishments.

Another perspective suggests two dimensions of wellbeing that are different from each other but are closely related. Hedonic or subjective wellbeing (SWB) refers to an individual assessment of positive and negative effects as well as satisfaction with life, while eudaimonic or psychological wellbeing (PWB) focuses on how an individual perceives and tries to overcome challenges to function positively (Sorgente et al., 2016, Hepper & Dennis, 2022b). In other words, SBS looks at the bigger picture of one's life and PBS considers more specific elements that contribute to an individual's wellbeing. Interestingly, according to Rayn and Deci (2001), not all desired results will necessarily lead to happiness. Certain outcomes are harmful to people and their wellbeing, despite being highly enjoyable. Therefore, from a eudaimonic viewpoint, subjective happiness does not equal wellbeing (Rayn and Deci, 2001). Ryff (1989) identifies six dimensions of psychological wellbeing that include Personal growth, Environmental mastery, Autonomy, Positive relations with others, Self-acceptance, and Life purpose. In addition to the traditional model which states that wellbeing consists of physical and social experiences (Hepper and Dennis, 2022b), Cohn et al. (2009b) state that internal emotions also play a role.

3. RESEARCH MODEL DEVELOPMENT AND HYPOTHESES FORMULATION

The present research will investigate both the positive and negative effects of brand engagement on the psychological wellbeing of consumers. The conceptual model for this research is presented in Figure 1. It proposes that social media consumerbrand engagement is positively related to body dissatisfaction, envy, inspiration, and a sense of community. Additionally, the model suggests that body dissatisfaction and envy have a negative influence on psychological wellbeing, while inspiration and a sense of community have a positive impact on the psychological wellbeing of consumers. The following section will discuss the proposed relationships and hypotheses in detail.

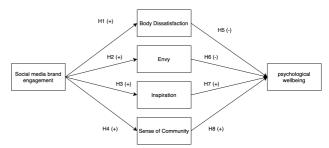


Figure 1. Conceptual model

3.1 SMBE and Body Dissatisfaction

Several previous studies identified that social media use triggers self-comparison among users (Vogel et al., 2014, Dutt, 2023). Although this relates to any kind of content on social media, for example, personal pages of one's friends and extended family members, brands have a large influence on shaping the trends in terms of appearances. Generally, advertisers choose thin and beautiful models to represent their products on different platforms, such as television and social media (Grabe et al., 2008). Research has shown that exposure to looks-focused content leads to an increase in body dissatisfaction (Vandenbosch, Fardouly & Tiggemann, 2021, Saiphoo & Vahedi, 2019). Two main looks-based trends are thinspiration and fitspiration. Thinspiration idealises overly body thinness and demonising body fat. It promotes weight loss, excessive exercise, and even eating disorders (Dignard & Jarry, 2021). In advent to thinspiration, a fitspiration trend started several years ago. Fitspiration focuses on overly fit bodies that are skinny and have visible muscles. Although the initial idea of fitspiration was to promote health and body positivity, the research shows that it decreases body satisfaction and, similarly to thinspiration, triggers eating disorder symptoms (Griffiths & Stefanovski, 2019). Additionally, by sending the same messages of inducing guilt over one's body, whether it is being too fat or not muscular enough, fitspiration represents a more socially acceptable way to pursue thinness by covering it with being healthy (Dignard & Jarry, 2021).

On the other hand, body positivity is a recent trend in social media space. Such hashtags as "#bodypositivity" and "#plussizefashion" have been increasingly popular among consumers and SMIs with less thin bodies intending to normalise different body sizes and other non-standard attributes of appearance (Cohen et al., 2019). The research of Hendrickse et al. (2021) suggests that seeing plus-sized models in the advertisement posts of brands leads to consumers feeling more content with their bodies. The effect of body satisfaction also depends on the participant's idea of a perfect body. Furthermore, the fast growth of the body positivity trend resulted in commercialising and SMIs monetising their accounts based on this topic. This results in deviating from the original bodypositive ideas changing their accounts to fit better with the dominant appearance-focused space (Cohen et al., 2019). Currently there is not enough research done to state that exposure to body-positive content leads to positive effects and what are the practical implications. Therefore, based on the literature above, the first hypothesis is formulated:

H1: Social media brand engagement is positively associated with body dissatisfaction.

3.2 SMBE and Envy

Since SMIs have a close connection with their followers and a strong influence on their opinions and behaviours, brands nowadays often partner with SMIs to increase awareness and promote their products (Chee et al., 2023, Cartwright et al.,

2022). Consumers like following SMIs' lives and form parasocial interactions with their followers (Jin & Ryu, 2020). The term para-social interaction is defined by Horton and Wohl (1956) as an "illusion of a face-to-face relationship with a media personality" (p. 215). Regarding social media, this means that consumers follow closely the life of SMIs and form a close connection with them, But the relationship is one-sided, where followers know everything about the SMI, but SMI doesn't know their followers. Following SMIs who strategically advertise on social media sites may lead to the feeling of envy in consumers which can in turn lead to an increase in purchasing intention (Jin & Ryu, 2020).

The research of Feng et al. (2023) also shows that the behaviour of SMIs advertising luxury brands may lead to envy from the followers. The level of envy depends on the extent to which consumers view an influencer to be similar to them. Compared to straightforward bragging, humblebragging, showcasing the luxuriousness of the brand through indirect complaining, evokes a stronger sense of malicious envy (Feng et al., 2023). Moreover, according to the research of Lee et al. (2021), there are several reasons why consumers follow SMIs. Those include authenticity, consumerism, creative inspiration, and envy. Thus, the following hypothesis was formulated:

H2: Social media brand engagement is positively associated with envy.

3.3 SMBE and Inspiration

Thrash and Eliot (2003) developed the initial model of inspiration that consists of three factors: transcendence, evocation, and approach motivation. Transcendence refers to developing an understanding of greater opportunities. Evocation describes the fact that inspiration is being evoked. In other words, inspiration is a construct that comes to the person without one's direct responsibility. Inspiration also involves approach motivation, meaning that one wants to put their new vision into action. Continuing their research Thrash and Eliot (2004) divided these three characteristics into two groups. First is inspired by that includes transcendence and evocation and refers to a feeling of admiration or appreciation towards the perceived intrinsic value of an object. Second, inspired to include approach motivation and describes the drive to actualise or imitate characteristics of the evocative object.

Previously, studies revealed that consumer inspiration can be boosted by brand experience, interactions with other consumers, and hedonic content on social media (Cao et al., 2022, Liu et al., 2017). Inspiration in turn influences consumer behaviour and increases brand equity (Cao et al., 2021). Since inspiration has to be evoked (Thresh & Eliot, 2003), brands try to provide space in their online brand communities with a friendly environment that allows communicating, sharing their experiences, and cocreating brand value (Cao et al., 2022). Based on the discussion above, the next hypothesis was formulated:

H3: Social media brand engagement is positively associated with inspiration.

3.4 SMBE and Sense of Community

Brand engagement refers to a process of facilitating a dialogue with existing and prospective customers to try to build a deep connection between them and the brand itself. It also promotes participants to share information and opinions about the brand (Coelho et al., 2018a). Such interactive engagement results in active socialisation, participation, and a brand community forming (Calder et al., 2009). The extent to which consumers engage with the online brand community depends on their motivation. For instance, one of the reasons can be feeling the need for social interaction, i.e., customers wishing to have a

conversation and share with others. Another reason can be the desire to relax, enjoy and have their personal values reinforced. The latter is common among customers who are already aware of the brand (Paramita et al., 2021). Online brand communities create value for consumers by allowing them to socialise and receive inputs from other people in the community as well as form recognition and friendships (Coelho et al., 2018, Paramita et al., 2021). Additionally, according to social identity theory, people tend to describe their social identity based on being a member of various social groups including being a part of a group using the same brands. Therefore, brands often offer purposeful social identities which in turn help consumers to fulfil their personal needs (Coelho et al., 2018b). Based on the discussed literature, the following hypothesis is proposed:

H4: Social media brand engagement is positively associated with a sense of community.

3.5 Body Dissatisfaction and Psychological Wellbeing

The term body image is defined by Tiwari & Kumar (2015) as "the extent to which individuals perceive the facts pertaining to their body" (p.1). The beauty of the human body has always been important to society. Standards and expectations that are placed at a time might not be aligned with one's perception of their own body. This discrepancy derives perceived satisfaction or dissatisfaction with one's body image and affects one's psychological wellbeing (Tiwari & Kumar, 2015). Some consequences of body dissatisfaction are low self-esteem and depression (Tiwari, 2014). It has been found that negative body image affects self-esteem and life satisfaction in both males and females with the relationship being stronger for females (Delfabbro et al., 2011). Thus, the next hypothesis was formulated:

H5: Body dissatisfaction is negatively associated with psychological wellbeing.

3.6 Envy and Psychological Wellbeing

In today's world, society consistently develops systems, including social media platforms, that promote inadequate comparison and envy among people (Mujcic & Oswald, 2018). There are two types of envy: malicious and benign (Feng et al., 2023). It is believed that malicious envy has a negative impact on one's behaviour. For example, feeling envy in a workplace can lead to reduced performance and increased employee turnover. Malicious envy also increases avoidance behaviour (Wu & Srite, 2021). In contrast, benign envy might encourage a person to act upon that feeling and, for instance, buy the same product or improve oneself (Lee & Eastin, 2021, Wu & Srite, 2020). However, according to the research of Mujcic and Oswald (2018), there is no evidence that envy, in general, acts as a motivator. Higher levels of envy show lower psychological health and wellbeing. The study also predicts lower growth of wellbeing in the future due to strong envy feeling at present. Furthermore, two studies were conducted to examine the feeling of envy on Facebook and its effect on wellbeing. Research by Lemay et al. (2019) found that happiness is negatively influenced by envy experienced on Facebook. The second study showed that although Facebook use by itself does not lead to depression, and sometimes it can even lessen its symptoms, the feeling of envy that arises from using Facebook extensively is related to developing depression symptoms (Tandoc et al., 2015). Since envy is related to (inadequate) self-comparison and can lead to willingness and desire to grow (Mujcic & Oswald, 2018, Lee & Eastin, 2021), it can be associated with self-acceptance and growth dimensions of Ryff's (1989) model on psychological wellbeing. Based on the discussion above, the following hypothesis was developed:

H6: Envy is negatively associated with psychological wellbeing.

3.7 Inspiration and Psychological Wellbeing

Currently, not a lot of research has been done to examine the role of inspiration on psychological wellbeing. However, similar constructs to inspiration have been linked to mental health and wellbeing (Thrash et al., 2010). For example, Peterson and Seligman (2004) link that self-transcendent emotions, like awe and elevation, can boost one's personal growth and wellbeing.

Thrash et al. (2010) conducted several studies to examine how being exposed to inspiring stimuli would affect life satisfaction, wellbeing, and self-actualisation. In all four studies an association between inspiration and wellbeing was found. Inspiration has been shown to have a positive effect on both hedonic (e.g., life satisfaction) and eudaimonic (e.g., self-actualisation) wellbeing dimensions. The outcomes study, however, proposes that inspiration is not relevant to mitigating stress. Moreover, self-actualisation is described as the highest level of one's growth in Maslow's (1962) research and it refers to fulfilling one's full potential through personal and creative self-growth. Ryff (1989) also defines growth as one of the six attributes of psychological wellbeing. Therefore, the next hypothesis was developed:

H7: Inspiration is positively associated with psychological wellbeing.

3.8 Sense of Community and Psychological Wellbeing

A sense of community can be defined as a feeling of belonging for the members of the group. It includes the belief that members matter to each other and can meet their needs through their internal commitment to each other (McMillan & Chavis, 1986). The theory of McMillan & Chavis (1986) divides the sense of community into four categories: membership, influence, integration, fulfilment of needs, and shared emotional connection. Studies have shown that higher involvement with the community is related to higher levels of life satisfaction (Branch-Allen & Jayachandran, 2016) which can explain why people are drawn to join communities around them and, in the modern world, online.

In previous studies it has been found that a strong sense of community in neighbourhoods results in higher wellbeing of its members (Guo et al., 2021), Additionally, the social support that can be achieved through communication with people going through a similar process, for example, immigrating to a different country, is beneficial for life satisfaction. The important characteristics include the extent of relationships, friendships, family presence, and the support their network can provide (Novara et al., 2023). Ryff's (1989) model of psychological wellbeing includes a positive relationship with others dimension that is associated with a sense of community. Social support and a sense of community can also be achieved through participation in online communities (Stehr, 2022). The advantages of online communities can include connecting people with very specific niche interests and giving and receiving anonymous support on stigmatised problems (Wright & Muhtaseb, 2011). The literature states that providing support to others through different online communication modes is beneficial not only for the person being supported but also for the supporter. It helped people to cope better with their problems (Stehr, 2022). Based on the discussed literature, the following hypothesis was formulated:

H8: A sense of community is positively associated with psychological wellbeing.

4. METHODOLOGY

4.1 Sampling

A self-administered online survey was created to collect data for this research. The main audience for the survey was young people between 20 and 29 years old as they are the biggest age group of social media users (Lin, 2023). However, data collection was not limited and participants of all ages were invited to fill out the survey. The survey consisted of 44 items and took about eight minutes to complete. The sampling strategies that were used for data collection are random. convenience, and snowball sampling. Convenience and snowball sampling are non-probability sampling techniques so might not be able to produce a good representation of the population. However, they are easy ways to gather initial input for the research. To gather more representative data, a random sampling technique will also be used which implies that every individual within the population had an equal chance of being selected (McCombes, 2023).

4.2 Survey Instruments and Measures

All items in the survey were drawn from exciting research. The survey was divided into eight sections, one per construct, introduction, and demographics. In the very beginning, participants were provided with information regarding the survey's confidentiality and anonymity as well as they were informed of their right to withdraw from the survey at any point. This section also filtered out those participants who do not use social media as those responses were not relevant for this research. The second section contained five questions about social media brand engagement. The items were taken from the research of Gutierrez et al. (2023) and were measured on a Likert scale of 1 (never) to 5 (always). To measure the construct of body dissatisfaction, items were adapted from the body image state scale (BISS) by Cash et al., (2002). Four items were scaled on a Likert scale of 1 (extremely dissatisfied) to 5 (extremely satisfied). Additionally, two more items, numbers four and six, were scaled on a Likert scale of 1 to 5 but with different inputs (see Appendix). The variable envy was measured by adapting items from Lange and Crusius's (2015) Benign and Malicious Envy Scale (BeMaS). The six items were measured on a Likert scale of 1 (strongly disagree) to 5 (strongly agree). Next, variable inspiration consisted of items drawn from the scale developed by Thrash & Elliot (2003). This section consisted of three items each followed by two questions measured on a Likert scale of 1 (strongly disagree) to 5 (strongly agree). Sense of community construct was measured with Blanchard's (2007) scale. Nine items were taken and were scaled from 1 (strongly disagree) to 5 (strongly agree) on a Likert scale. The last construct, psychological wellbeing, was measured with six items on a Likert scale of 1 (strongly disagree) to 5 (strongly agree). The items were drawn from Research Resource Sharing Hub (RADC) database. Lastly, there were four questions regarding participants' demographic information. The full set of questions for the survey can be found in the Appendix.

4.3 Data Collection and Analysis

Two main approaches were used for collecting data. First, the link to the survey was distributed to group chats in WhatsApp and other messengers by me but also by other participants of the survey. Additionally, some students were invited to fill out the survey via a test subject pool of the BMS faculty of the university. After approximately one week of gathering data, 171 responses were suitable for the data analysis. It was completed with the use of the SPSS statistical software. First, to assess which constructs are measured by which items an Exploratory Factor Analysis (EFA) was conducted which is used to identify

a scale's factor structure and examine its internal consistency (Arteaga, 2023). Next, reliability and validity tests were performed using Cronbach's alpha and Average Variance Extracted (AVE) respectively (see Table 2). Then, the proposed model and the hypotheses were tested with the use of correlation analysis (see Table 3) and linear regression (see Table 4). Regression analysis is commonly used to investigate the strength of the relationship between variables and to check which variables are significant predictors of the dependent variable (Shin, 2022). Furthermore, the descriptive statistics of the constructs can be found in Table 3.

5. RESULTS

5.1 Demographic Profiles

Out of 171 respondents, 90 were female (52.6%), 73 were male (42.7%), 5 chose non-binary (2.9%), 1 chose "other" (.07%) and 2 preferred not to say (1.1%). The full information regarding the demographic profiles of the respondents can be found in Table 1.

Table 1. Demographic Distribution of the Participants

Variable	Value	Count	%
Gender	Male	73	42.7
	Female	90	52.6
	Non-binary / third gender	5	2.9
	Prefer not to say	2	1.1
	Other	1	0.7
Occupation	Student	128	74.8
-	Working full-time	37	21.6
	Working part-time	2	1.2
	Unemployed	1	0.6
	Retired	1	0.6
	Unable to work	0	0
	Other	2	1.2
	Prefer not to say	0	0
Continent	Europe	150	87.7
	Asia	11	6.4
	North America	4	2.3
	South America	3 2	1.8
	Africa	2	1.2
	Australia and Oceania	0	0
	Other	1	0.6
Age	< 20	30	17.5
=	20 - 25	98	57.3
	26 - 30	17	9.9
	31 - 35	7	4.1
	36 - 40	6	3.5
	> 40	13	7.7
How often do you	Once every few weeks	1	0.6
use social media	Few days a week	20	11.7
on average?	1-3 hours per day	104	60.8
-	More than 3 hours per day	46	26.9

5.2 Exploratory Factor Analysis (EFA)

Before conducting an Exploratory Factor Analysis, the data was tested with Kaiser-Meyer-Olkin (KMO) and Bartlett tests to see whether it is suitable for the EFA. The KMO results range from 0.618 to 0.867 which are considered mediocre to meritorious and, therefore, are acceptable (Kaiser, 1974). Bartlett's sphericity test shows significant results with the alpha level being smaller than 0.05, stating that data is suitable for the EFA (Sabra, 2023). According to Awang (2012), the items that have factor loadings lower than 0.6 should be removed from the measure. Therefore, several items had to be removed from the scale used in this research. Two items, numbers 1 and 2, had to be deleted from the measure of Social Media Brand Engagement as their factor loadings were 0.244 and 0.542 respectively. Additionally, items 2, 3, and 5 of Psychological Wellbeing had to also be suppressed due to their low factor loadings. Item 2 scored 0.021, item 3 scored -0.083 and item 5 had a factor loading of 0.463. Furthermore, the analysis showed that items for the construct of Envy load strongly on two separate factors. Items 1,2 and 5 loads in one factor with factor loadings from 0.811 to 0.881, while items 3,4, and 6 combine with factor loadings from 0.783 to 0.841. Hence, it was decided to split Envy into two factors. This can be explained by the fact that there are two types of envy: benign and malicious (Feng et al., 2023). Items 1,2,5 correspond to benign envy and items 3,4,6 to malicious envy (Lange & Crusius, 2015). Following the EFA's procedure, the reliability was explored by calculating Cronbach's alpha. According to Raharjanti et al. (2022), alpha values higher than 0.6 are considered reliable. The results for the tested variables range from 0.628 to 0.905 and thus are reliable. Validity was also tested with the use of Average Variance Extracted (AVE). All scores lie between 0.579 and 0.702 which is considered acceptable as they are higher than 0.5 (Hair et al, 2009). Therefore, no more items had to be removed and further analysis could be conducted. The results of the EFA can be found in Table 2.

5.3 Correlation Analysis

The correlation analysis (see Table 3) shows a significant negative correlation between *Social Media Brand Engagement* and *Psychological Wellbeing* (r=-0.205). *Inspiration* (r=0.276) and *Sense of Community* (r=0.238) show a significant positive correlation to *Social Media Brand Engagement*. Moreover, *Body Dissatisfaction* and *Psychological Wellbeing* are significantly negatively correlated (r=-0.536). Lastly, *Malicious Envy* shows a significant negative correlation to *Psychological Wellbeing* (r=-0.408). The results indicate that there is a correlation between some constructs, but the values are relatively low. Additionally, the correlation analysis indicates that not all constructs are correlated as expected.

5.4 Hypotheses Testing

Linear Regression Analysis was conducted to assess the hypotheses of the conceptual model (see Table 4). Since Envy was divided into two separate factors, regression analysis was done separately for these two constructs. For that, hypotheses 2 and 6 had to be divided into H2(a) and H2(b), and H6(a) and H6(b). The analysis found that only five hypotheses were supported, while five other ones were not. Social Media Brand Engagement has a significant positive influence on Benign Envy $(\beta=0.407, p=0.0208)$, Inspiration $(\beta=0.488, p=<0.001)$, and Sense of Community (B=0.289, p=0.001). The Adjusted R Square equals 0.016, 0.071, and 0.051 respectively. This means that Social Media Brand Engagement explains 1.6% of the variance in Benign Envy, 7.1% of the variance in Inspiration, and 5.1% variance in Sense of Community. These results support H2(a), H3, and H4 respectively. The analysis also showed that Body Dissatisfaction has a significant negative influence on Psychological Wellbeing (B=0.623, p=<0.001). The Adjusted R Square equals 0.283 indicates that 28.3% of the variance in Psychological Wellbeing is explained by Body Dissatisfaction. This supports H5. Furthermore, Malicious Envy has a significant negative influence on Psychological Wellbeing (B=-0.393, p=<0.001). The Adjusted R Square equals 0.161 indicating that 16.1% of the variance in Psychological Wellbeing is explained by Malicious Envy. Therefore, H6(b) is supported. Regression analysis revealed that H1, H2(b), H6(a), H7, and H8 have to be rejected as p-values for each of them are higher than 0.05.

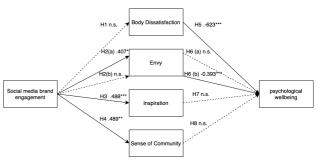


Figure 2. A conceptual model with regression results

Table 2. Factor Loadings, Cronbach's alpha, and AVE

Construct	Items	Factor Loading	α	AVE
Social Media Brand Engagement	SMBE.3	0.748	0.629	0.579
	SMBE.4	0.792		
	SMBE.5	0.741		
Body Dissatisfaction	BI.1	0.820	0.876	0.623
•	BI.2	0.853		
	BI.3	0.858		
	BI.4	0.814		
	BI.5	0.698		
	BI.6	0.672		
Envy (benign)	EV.1	0.811	0.790	0.702
, , ,	EV.2	0.881		
	EV.5	0.820		
Envy (malicious)	EV.3	0.841	0.738	0.656
,	EV.4	0.783		
	EV.6	0.804		
Inspiration	IN.1.1	0.815	0.905	0.682
Ī	IN.1.2	0.776		
	IN.2.1	0.860		
	IN.2.2	0.855		
	IN.3.1	0.823		
	IN.3.2	0.824		
Sense of Community	SoC.1	0.774	0.875	0.508
•	SoC.2	0.655		
	SoC.3	0.732		
	SoC.4	0.709		
	SoC.5	0.655		
	SoC.6	0.781		
	SoC.7	0.639		
	SoC.8	0.714		
	SoC.9	0.739		
Psychological wellbeing	PWB.1	0.717	0.628	0.620
· · · ·	PWB.4	0.820		
	PWB.6	0.731		

Table 3. Descriptive Statistics and Pearson Correlation (n=171)

			,	,					
	M	SD	1	2	3	4	5	6	7
1. Social Media Brand Engagement	1.23	0.38	1.000						
2. Body Dissatisfaction	2.94	0.74	0.002	1.000					
3. Envy (benign)	2.73	1.05	0.146	-0.004	1.000				
4. Envy (malicious)	2.03	0.89	0.100	0.353**	-0.030	1.000			
5. Inspiration	2.12	0.66	0.276**	0.059	0.430**	-0.045	1.000		
6. Sense of Community	3.19	0.77	0.238**	0.035	0.236**	-0.002	0.241**	1.000	
7. Psychological wellbeing	3.68	0.86	-0.205**	-0.536**	-0.066	-0.408**	-0.084	-0.059	1.000

^{**.} Correlation is significant at the 0.01 level (2-tailed)

Table 4. Linear Regression Analysis Results

		Coefficient	t	p	Result
H1	Social Media Brand Engagement → Body Dissatisfaction	0.005	0.030	0.488	Not Supported
H2(a)	Social Media Brand Engagement → Envy (benign)	0.407*	1.921	0.028	Supported
H2(b)	Social Media Brand Engagement → Envy (malicious)	0.238	1.307	0.097	Not Supported
H3	Social Media Brand Engagement → Inspiration	0.488***	3.729	< 0.001	Supported
H4	Social Media Brand Engagement → Sense of Community	0.489**	3.189	0.001	Supported
Н5	Body Dissatisfaction → Psychological Wellbeing	-0.623***	-8.243	< 0.001	Supported
H6(a)	Envy (benign) → Psychological Wellbeing	-0.054	-0.856	0.197	Not Supported
H6(b)	Envy (malicious) → Psychological Wellbeing	-0.393***	-5.805	< 0.001	Supported
H7	Inspiration → Psychological Wellbeing	-0.109	-1.101	0.137	Not Supported
H8	Sense of Community → Psychological Wellbeing	-0.065	-0.763	0.223	Not Supported

^{*} p<0.05, ** p<0.01, *** p<0.001

6. DISCUSSION

The study formulated a particular research question "What are the effects, positive vs. negative, of social media brand engagement on psychological wellbeing of consumers?" The results revealed support for five hypotheses of the model and showed that five others, counter to what was expected, had to be rejected.

6.1 Impact of Social Media Brand Engagement

The first five hypotheses proposed that SMBE has a significant effect on body dissatisfaction, inspiration, both benign and malicious envy, and a sense of community. The analysis revealed a non-significant positive impact on body dissatisfaction. This means that, in contrast with the assumptions, SMBE does not increase body dissatisfaction. This can be due to the fact that new trends on social media such as body positivity are gaining popularity. These trends, although not perfect, try to normalise bodies of different sizes and other characteristics (Cohen et al., 2019). The research on body image concerning social media, and therefore, brand activities on social media as they follow the most popular trends, show conflicting results regarding the effect it has on body dissatisfaction. Exposure to look-focused content like thinspiration and fitspiration leads to a decrease in one's willingness to accept their body (Vandenbosch, Fardouly & Tiggemann, 2021), however, this willingness might be increased when seeing content with plus-sized models and content (Hendrickse et al., 2021).

Since it was decided to divide the construct of envy into benign envy and malicious envy following the conducted EFA, the hypotheses were tested separately during linear regression. The research of Feng et al. (2023) states that influencer bragging while advertising luxurious products leads to the feeling of malicious envy in consumers. Additionally, it has been found previously that envy is one of the reasons why people tend to follow different influencers (Lee et al., 2021). Thus, the hypotheses in this research suggested a positive effect on both benign and malicious envy. However, only one of those hypotheses has been supported, hence it cannot be said that SMBE affects envy. Linear regression has shown that there is a significant positive effect of SMBE on benign envy, so hypothesis H2(a) was supported. Nevertheless, H2(b) was rejected as the result was not significant. This hypothesis was based on the research of Feng et al. (2023) which conducted was conducted in China. However, participants in this study were predominantly European. Studies have shown that collectivistic cultures, like Chinese, tend to feel more envious of superior targets who are not part of their social group than individualistic cultures, like European (Tan et al., 2016). This cultural difference might explain the outcome of the regression analysis of this research.

Prior research established that SMBE is positively related to inspiration (Cao et al., 2022, Liu et al., 2017). In accordance with these expectations, SMBE was found to have a significant positive influence on inspiration. This means that the more consumers interact with brands via social media, the more likely they are to feel inspired.

Lastly, consistent with expectations, this research found that SMBE is significantly positively associated with a sense of community in social media users. This is in line with existing literature which states that SMBE promotes interaction and engagement between consumers. This, in turn, allows consumers to socialise, share their experiences, and form communities and friendships (Calder et al., 2009, Paramita et al., 2021). This research supports this conclusion showing that consumers who

interact with brands and/ or influencers via social media tend to become a part of a community.

6.2 Impact on Psychological Wellbeing

The last five hypotheses proposed that the constructs of body dissatisfaction, inspirations, benign and malicious envy, and a sense of community have a significant effect on psychological wellbeing. H5 stated that body dissatisfaction has a significant negative effect on psychological wellbeing. Consistent with prior literature, this hypothesis was supported. Tiwari and Kumar (2015) stated in their research that body image affects one's psychological wellbeing. Moreover, a negative self-image leads to lower self-esteem and life satisfaction (Delfabbro et al., 2011).

Prior research concluded that, in general, envy leads to decreased wellbeing and psychological health (Mujcic & Oswald, 2018). Hence, this research expected a negative influence of envy on psychological wellbeing. This research concluded that malicious envy indeed has a significant negative impact on psychological wellbeing, thus supporting H6(b). Benign envy shows a negative effect on wellbeing but the result, however, was not significant. Similarly to this study, some authors also divide benign and malicious envy in their research. For example, Wu and Srite (2021) concluded that malicious envy reduces performance and increases avoidance behaviour. On the contrary, benign envy can act as a motivator to do or change something that the person envies (Lee & Eastin, 2021). Therefore, it can be said that the outcomes of this research and in line with the existing literature.

The research on the effect of inspiration on psychological wellbeing is currently very limited. The four studies of Thrash et al. (2010) found that being inspired positively affects both hedonic and eudaimonic wellbeing dimensions. Nevertheless, this study did not find support for the findings of Thrash et al. (2010). It was found that inspiration has a non-significant negative effect on psychological wellbeing. More research needs to be conducted to better understand the influence of inspiration on wellbeing as currently results are conflicting with each other.

The last hypothesis, H8, was not supported as the outcome of the linear regression analysis was not significant. Such a result can be explained by the fact that a lot of prior research focused on a sense of community within physical environments like neighbourhoods. Guo et al. (2021) found that wellbeing is higher for people who have a strong sense of community in their neighbourhood. Online communities were studied by Wright and Muhtaseb (2011), and they found that anonymity and the ability to connect very specific niche interests are beneficial sides of online groups. This study, on the other hand, focused on online brand communities on social media, which are usually not anonymous and, hence, less personal. This may explain discrepancies in findings.

6.3 Theoretical Contribution

Prior research on SMBE mostly focused on its effects on purchase intention and/ or brand attitude. This research, on the other hand, contributes to the literature by investigating how psychological wellbeing of social media consumers is affected by brand activities on the platforms. The study combined different aspects of prior literature and proposed a new conceptual model to explore this topic. The mediating factors including body dissatisfaction, envy, inspiration, and a sense of community provide a theoretical framework to understand how SMBE affects psychological wellbeing. While the findings challenge the model by revealing unexpected results and rejecting certain hypotheses, they can be used as a foundation for future research on the topic of consumer wellbeing. For example, this study did not find support for the hypotheses that SMBE leads to body dissatisfaction and malicious envy while providing

evidence that it increases the feeling of benign envy, inspiration, and a sense of community. These results provide a great starting opportunity for developing the model further and deepening the understanding of how psychological wellbeing is influenced by SMBE.

6.4 Practical Implications

This research confirms that many people use social media daily which makes it a very attractive space for brands to raise awareness and promote their products and services. It has been shown that SMBE affects consumer emotions such as inspiration, benign envy, and a sense of community. It was also found that malicious envy has a significant negative effect on psychological wellbeing as well as higher body dissatisfaction leads to lower wellbeing in consumers. Therefore, to build a close and healthy relationship with existing and potential customers, brands can use the outcomes of this study to develop social media strategies that will focus on increasing positive impacts and fostering consumer wellbeing. For instance, brands can foster their customers' wellbeing by promoting positive body image, stimulating socialisation and community bonding, and inspiring their customers to grow and improve themselves. Moreover, brands can find ways to mitigate the effect of negative emotions on consumer wellbeing or try preventing them completely. Since the research identified a negative effect of malicious envy, brands can stay aware of such an effect on consumers and address it within their social media strategies and campaigns.

7. LIMITATIONS AND FUTURE RESEARCH

7.1 Limitation

Although this study adds insights into psychological wellbeing, several limitations should be acknowledged. The data collection was mostly done using convenience and snowball methods which means that the sample may not be a well-diversified representation of the population. For example, 128 out of 171 participants are university students which is not a great representation of the biggest audience of social media, much less all social media users. Additionally, most respondents of the survey are from Europe, therefore, even though SMBE is a popular tool all over the world, the results of this research cannot be used to draw conclusions about other continents. In literature benign envy is closely related to inspiration to do something, thus the model may be improved by changing or combining those constructs. This leads to another limitation. The reliability of the proposed conceptual model might not be optimal as only half of the hypotheses were supported. It can be beneficial to remove some constructs or add new ones to get a better understanding of how social media brand engagement affects the psychological wellbeing of consumers.

7.2 Recommendations for Future Research

This study brings attention to several interesting possibilities for future research. The study investigated the influence of social media brand engagement on psychological wellbeing through several mediating variables. However, this research did not examine whether variables such as age, gender, and/or level of education are moderating the effect SMBE has on psychological wellbeing. Future research could consider doing a number of comparative studies to understand the differences in terms of psychological wellbeing effects. The studies could compare male and female consumers, different nationalities, and so on. This study did not confirm that inspiration has an effect on wellbeing which contradicts prior research. Since not a lot of research has been done on the effect of inspiration on wellbeing, it could be beneficial to explore this topic more in the future. Additionally,

as mentioned in the limitations, the proposed conceptual model might not be optimal as half of the hypotheses were rejected. Future research could investigate the model more in a longitudinal study to explore whether there are other mediating and moderating variables playing a role in affecting psychological wellbeing in terms of SMBE. For example, the model might be improved by adding an *Entertainment* variable as was done by Bazi et al. (2023) as well as Plume and Slade (2018).

8. CONCLUSION

This study aimed to examine the positive and negative effects of SMBE on the psychological wellbeing of consumers. The mediating effect of body dissatisfaction, envy, inspiration, and a sense of community constructs were explored. To complete this research, the following research question was formulated:

What are the effects, positive vs. negative, of social media brand engagement on psychological wellbeing of consumers?

To answer this research question, eight hypotheses were proposed. They were tested by conducting several quantitative analyses such as exploratory factor, correlation, and linear regression analyses. Although the model has not been confirmed, some interesting conclusions can be drawn. According to the EFA, the construct for envy had to be split up into two separate variables. This is in line with the literature available regarding envy which divides this emotion into benign, encourages selfimprovement, and malicious which reduces performance (Wu & Srite, 2020). Thus, the rest of the data analysis was done following that. Linear regression analysis has shown that, in accordance with the expectations, SMBE has a significant positive impact on benign envy, inspiration, and sense of community. That means that the more time consumers spend interacting with brands via social media, the more likely they are to bond with other consumers as well as feel inspired and motivated to become better. The research has also identified that there is a significant negative effect of malicious envy and body dissatisfaction on psychological wellbeing. Unfortunately, linear regression analysis suggests other hypotheses had to be rejected, therefore, it is not possible to conclude whether social media brand engagement has a significant effect on psychological wellbeing through the proposed mediating variables. Correlation analysis showed similar results to those of regression analysis but it also showed a significant negative correlation between SMBE and psychological wellbeing. This might indicate that SMBE negatively affects psychological wellbeing, although it appears that variables body dissatisfaction, envy, inspiration, and sense of community may not be the most suitable factors to explain this relationship. Therefore, it is recommended to look into more potential mediating variables such as entertainment to improve the model and understand the topic of SMBE and psychological wellbeing deeper.

9. ACKNOWLEDGMENTS

First of all, I would like to offer the most gratitude to my supervisor Dr. Hatice Kizgin. Without her support and insights during the many meetings we had, this research would not be possible. Her flexibility, enthusiasm, and willingness to help have helped me to keep my motivation during the last couple of months. I also want to thank my bachelor circle for their help throughout the process. Additionally, I want to say thank you to the participants of my survey and those who helped to spread it further to help me with the data collection. Lastly, many thanks to my dear friends and boyfriend who were a tremendous support and who helped to make this process a little bit easier on me.

10. REFERENCES

- Alboqami, H. (2023). Trust me, I'm an influencer! Causal recipes for customer trust in artificial intelligence influencers in the retail industry. Journal of Retailing and Consumer Services, 72, 103242. https://doi.org/10.1016/j.jretconser.2022.103242
- Arteaga, G. (2023, March 27). What is Exploratory Factor Analysis? | A Beginners Guide TestSiteForMe. TestSiteForMe. https://www.testsiteforme.com/en/what-is-exploratory-factor-analysis/
- Awang, Z. (2012). Research Methodology and Data Analysis Second Edition. UiTM Press.
- Bano, S., Cisheng, W., Khan, A. R., & Khan, N. M. (2019). WhatsApp use and student's psychological well-being: Role of social capital and social integration. Children and Youth Services Review, 103, 200–208.

https://doi.org/10.1016/j.childyouth.2019.06.002

- Barron, A. M., Krumrei-Mancuso, E. J., & Harriger, J. A. (2021). The effects of fitspiration and self-compassion Instagram posts on body image and self-compassion in men and women. Body Image, 37, 14–27. https://doi.org/10.1016/j.bodyim.2021.01.003
- Bazi, S., Filieri, R., & Gorton, M. (2023). Social media content aesthetic quality and customer engagement: The mediating role of entertainment and impacts on brand love and loyalty. Journal of Business Research, 160, 113778. https://doi.org/10.1016/j.jbusres.2023.113778
- Blanchard, A. L. (2007). Developing a Sense of Virtual Community Measure. Cyberpsychology & Behavior, 10(6), 827–830. https://doi.org/10.1089/cpb.2007.9946
- Branch-Allen, R., & Jayachandran, J. (2016). Determinants of life satisfaction in Canada: A causal modeling approach. SHS Web of Conferences, 26, 01073. https://doi.org/10.1051/shsconf/20162601073
- Brittany, W. (2018, March 24). Crowdsourcing Your Next Chip Flavor: Lay's "Do Us A Flavor" Campaign Digital Innovation and Transformation. Digital Innovation and Transformation. https://d3.harvard.edu/platform-
- digit/submission/crowdsourcing-your-next-chip-flavor-lays-do-us-a-flavor-campaign/
- Calder, B. J., Malthouse, E. C., & Schaedel, U. (2009). An Experimental Study of the Relationship between Online Engagement and Advertising Effectiveness. Journal of Interactive Marketing, 23(4), 321–331. https://doi.org/10.1016/j.intmar.2009.07.002
- Cao, Y., Lin, J., & Zhou, Z. (2022). Promoting customer value co-creation through social capital in online brand communities: The mediating role of member inspiration. Computers in Human Behavior, 137, 107440. https://doi.org/10.1016/j.chb.2022.107440
- Cao, Y., Zhou, Z., & Majeed, S. (2021). Stimulating Customer Inspiration Through Online Brand Community Climates: The Mediating Role of Customer Interaction. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.706889
- Cartwright, S., Liu, H., & Davies, I. A. (2022). Influencer marketing within business-to-business organisations. Industrial Marketing Management, 106, 338–350. https://doi.org/10.1016/j.indmarman.2022.09.007
- Cash, T. F., Fleming, E. J., Alindogan, J. L., Steadman, L., & Whitehead, A. (2002). Beyond Body Image as a Trait: The Development and Validation of the Body Image States Scale. Eating Disorders, 10(2), 103–113. https://doi.org/10.1080/10640260290081678
- Chee, R. M., Capper, T. S., & Muurlink, O. T. (2023). The impact of social media influencers on pregnancy, birth, and early

- parenting experiences: A systematic review. Midwifery, 120, 103623. https://doi.org/10.1016/j.midw.2023.103623
- Coelho, P. J., Rita, P., & De Sousa Araújo Santos, Z. M. (2018a). On the relationship between consumer-brand identification, brand community, and brand loyalty. Journal of Retailing and Consumer Services, 43, 101–110. https://doi.org/10.1016/j.jretconser.2018.03.011
- Coelho, P. J., Rita, P., & De Sousa Araújo Santos, Z. M. (2018b). On the relationship between consumer-brand identification, brand community, and brand loyalty. Journal of Retailing and Consumer Services, 43, 101–110. https://doi.org/10.1016/j.jretconser.2018.03.011
- Cohen, R., Irwin, L., Newton-John, T., & Slater, A. (2019). #bodypositivity: A content analysis of body positive accounts on Instagram. Body Image, 29, 47–57. https://doi.org/10.1016/j.bodyim.2019.02.007
- Cohn, M., Fredrickson, B. L., Brown, S., Mikels, J. A., & Conway, A. (2009). Happiness unpacked: Positive emotions increase life satisfaction by building resilience. Emotion, 9(3), 361–368. https://doi.org/10.1037/a0015952
- Constantinides, E. (2009). Social Media / Web 2.0 as Marketing Parameter: An Introduction. 8th International Congress Marketing Trends, Paris, France: Proceedings of the 8th International Congress Marketing Trends.
- Cunningham, N., & Bright, L. (2012). The Tweet Is in Your Court: Measuring Attitude Towards Athlete Endorsements in Social Media. International Journal of Integrated Marketing Communications. 4. 73-106.
- Delfabbro, P., Winefield, A. H., Anderson, S. E., Hammarström, A., & Winefield, H. R. (2011). Body Image and Psychological Well-Being in Adolescents: The Relationship Between Gender and School Type. Journal of Genetic Psychology, 172(1), 67–83. https://doi.org/10.1080/00221325.2010.517812
- Dignard, N. A., & Jarry, J. L. (2021). The "Little Red Riding Hood effect:" Fitspiration is just as bad as thinspiration for women's body satisfaction. Body Image, 36, 201–213. https://doi.org/10.1016/j.bodyim.2020.11.012
- Dutt, B. (2023). Social media wellbeing: Perceived wellbeing amidst social media use in Norway. Social Sciences & Humanities Open, 7(1), 100436. https://doi.org/10.1016/j.ssaho.2023.100436
- Feng, W., Chang, D., & Sun, H. (2023). The impact of social media influencers' bragging language styles on consumers' attitudes toward luxury brands: The dual mediation of envy and trustworthiness. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.1113655
- Fletcher-Brown, J., Turnbull, S., Viglia, G., Chen, T. M., & Pereira, V. (2021). Vulnerable consumer engagement: How corporate social media can facilitate the replenishment of depleted resources. International Journal of Research in Marketing, 38(2), 518–529. https://doi.org/10.1016/j.ijresmar.2020.06.002
- Franchina, V., & Lo Coco, G. (2018). The influence of social media use on body image concerns. International Journal of Psychoanalysis and Education, 10(1), 5–14. https://doaj.org/article/d015c7ad7b234986a16d27f9b51274c8
- Gaigbe-Togbe, V., Bassarsky, L., Gu, D., Spoorenberg, T., & Zeifman, L. (2022). World Population Prospects 2022. Summary of Results. United Nations. https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022 summary of results.pdf

- Geyser, W. (2023). What is an Influencer? Social Media Influencers Defined [Updated 2023]. Influencer Marketing Hub. https://influencermarketinghub.com/what-is-an-influencer/
- Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. Psychological Bulletin, 134(3), 460–476. https://doi.org/10.1037/0033-2909.134.3.460
- Griffiths, S., & Stefanovski, A. (2019). Thinspiration and fitspiration in everyday life: An experience sampling study. Body Image, 30, 135–144. https://doi.org/10.1016/j.bodyim.2019.07.002
- Guo, Y., Liu, Y., Lu, S., Chan, O. F., Chui, C. H., & Lum, T. (2021). Objective and perceived built environment, sense of community, and mental wellbeing in older adults in Hong Kong: A multilevel structural equation study. Landscape and Urban Planning, 209, 104058. https://doi.org/10.1016/j.landurbplan.2021.104058
- Gutierrez, A., Punjaisri, K., Desai, B., Alwi, S. F. S., O'Leary, S., Chaiyasoonthorn, W., & Chaveesuk, S. (2023). Retailers, don't ignore me on social media! The importance of consumerbrand interactions in raising purchase intention Privacy the Achilles heel. Journal of Retailing and Consumer Services, 72, 103272. https://doi.org/10.1016/j.jretconser.2023.103272
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). Multivariate
- Data Analysis (7th ed.). Upper Saddle River, New Jersey: Pearson Education Limited.
- Hendrickse, J., Clayton, R. B., Ray, E., Ridgway, J. P., & Secharan, R. K. (2021). Experimental Effects of Viewing Thin and Plus-Size Models in Objectifying and Empowering Contexts on Instagram. Health Communication, 36(11), 1417–1425. https://doi.org/10.1080/10410236.2020.1761077
- Hepper, E. G., & Dennis, A. (2022). From rosy past to happy and flourishing present: Nostalgia as a resource for hedonic and eudaimonic wellbeing. Current Opinion in Psychology, 49, 101547. https://doi.org/10.1016/j.copsyc.2022.101547
- Horton, D. C., & Wohl, R. R. (1956). Mass Communication and Para-Social Interaction. Psychiatry MMC, 19(3), 215–229. https://doi.org/10.1080/00332747.1956.11023049
- Jahan, I., Hosen, I., Mamun, F. A., Kaggwa, M. M., Griffiths, M. D., & Mamun, M. A. (2021). How Has the COVID-19 Pandemic Impacted Internet Use Behaviors and Facilitated Problematic Internet Use? A Bangladeshi Study. Psychology Research and Behavior Management, Volume 14, 1127–1138. https://doi.org/10.2147/prbm.s323570
- Jin, S. A., & Ryu, E. (2020). "I'll buy what she's #wearing": The roles of envy toward and parasocial interaction with influencers in Instagram celebrity-based brand endorsement and social commerce. Journal of Retailing and Consumer Services, 55, 102121. https://doi.org/10.1016/j.jretconser.2020.102121
- Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39(1), 31–36. https://doi.org/10.1007/bf02291575
- Kalpidou, M., Costin, D., & Morris, J. L. (2011). The Relationship Between Facebook and the Well-Being of Undergraduate College Students. Cyberpsychology, Behavior, and Social Networking, 14(4), 183–189. https://doi.org/10.1089/cyber.2010.0061
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. Business Horizons, 53(1), 59–68. https://doi.org/10.1016/j.bushor.2009.093

- Kemp, S. (2022). Digital 2022: Time Spent Using Connected Tech Continues to Rise DataReportal Global Digital Insights. DataReportal Global Digital Insights. https://datareportal.com/reports/digital-2022-time-spent-with-connected-tech
- Keutler, M., & McHugh, L. (2021). Self-compassion buffers the effects of perfectionistic self-presentation on social media on wellbeing. Journal of Contextual Behavioral Science, 23, 53–58. https://doi.org/10.1016/j.jcbs.2021.11.006
- Lange, J., & Crusius, J. (2015). Dispositional Envy Revisited. Personality and Social Psychology Bulletin, 41(2), 284–294. https://doi.org/10.1177/0146167214564959
- Lay's Increases Sales by Asking Customers to "Do Us a Flavor" Digital Innovation and Transformation. (2018, March 26). Digital Innovation and Transformation. https://d3.harvard.edu/platform-digit/submission/lays-increases-sales-by-asking-customers-to-do-us-a-flavor/
- Lee, J. P., & Eastin, M. S. (2020). I Like What She's #Endorsing: The Impact of Female Social Media Influencers' Perceived Sincerity, Consumer Envy, and Product Type. Journal of Interactive Advertising, 20(1), 76–91. https://doi.org/10.1080/15252019.2020.1737849
- Lee, J. P., Sudarshan, S., Sussman, K., Bright, L. F., & Eastin, M. S. (2021). Why are consumers following social media influencers on Instagram? Exploration of consumers' motives for following influencers and the role of materialism. International Journal of Advertising, 41(1), 78–100. https://doi.org/10.1080/02650487.2021.1964226
- Lemay, D. J., Doleck, T., & Bazelais, P. (2019). Do instrumental goal pursuits mediate feelings of envy on Facebook and Happiness or subjective well-being? Computers in Human Behavior, 91, 186–191. https://doi.org/10.1016/j.chb.2018.09.043
- Leone, J. E., Mullin, E. M., Maurer-Starks, S., & Rovito, M. J. (2014). The Adolescent Body Image Satisfaction Scale for Males. Journal of Strength and Conditioning Research, 28(9), 2657–2668. https://doi.org/10.1519/jsc.000000000000000439
- Lin, Y. (n.d.). What Age Group Uses Social Media the Most? [Mar 2023 Update]. Oberlo. https://www.oberlo.com/statistics/what-age-group-uses-social-media-the-most
- Lin, Y. (2023, March). What Age Group Uses Social Media the Most? [Mar 2023 Update]. Oberlo. https://www.oberlo.com/statistics/what-age-group-uses-social-media-the-most
- Liu, W., Sparks, B., & Coghlan, A. (2017). Fun, inspiration and discovery: from momentary experiences to overall evaluations. International Journal of Contemporary Hospitality Management, 29(7), 1937–1955. https://doi.org/10.1108/ijchm-12-2015-0735
- Ma, L., Ou, W., & Lee, C. S. (2022). Investigating consumers' cognitive, emotional, and behavioral engagement in social media brand pages: A natural language processing approach. Electronic Commerce Research and Applications, 54, 101179. https://doi.org/10.1016/j.elerap.2022.101179
- Maghrebi, M., Abbasi, A., & Waller, S. T. (2016). Transportation application of social media: Travel mode extraction. International Conference on Intelligent Transportation Systems. https://doi.org/10.1109/itsc.2016.7795779
- Maslow, A. H. (1962). Toward a Psychology of Being: An Insigth Book.
- McCain, A. (2023). How Fast Is Technology Advancing? [2023]: Growing, Evolving, And Accelerating At Exponential Rates.

- Zippia. https://www.zippia.com/advice/how-fast-is-technology-advancing/
- McCombes, S. (2023). Sampling Methods | Types, Techniques & Examples. Scribbr.

https://www.scribbr.com/methodology/sampling-methods/

McCorquodale, S. (2020). Influence: How social media influencers are shaping our digital

future. Bloomsbury Publishing

- McMillan, D. G., & Chavis, D. M. (1986). Sense of community: A definition and theory. Journal of Community Psychology, 14(1), 6–23. https://doi.org/10.1002/1520-6629(198601)14:1
- Mujcic, R., & Oswald, A. J. (2018). Is envy harmful to a society's psychological health and wellbeing? A longitudinal study of 18,000 adults. Social Science & Medicine, 198, 103–111. https://doi.org/10.1016/j.socscimed.2017.12.030
- Novara, C., Martos-Méndez, M., Gómez-Jacinto, L., Hombrados-Mendieta, I., Varveri, L., & Polizzi, C. (2023). The influence of social support on the wellbeing of immigrants residing in Italy: Sources and functions as predictive factors for life satisfaction levels, sense of community and resilience. International Journal of Intercultural Relations, 92, 101743. https://doi.org/10.1016/j.ijintrel.2022.101743
- Number of worldwide social network users 2027 | Statista. (2023, February 13). Statista. https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/
- O'Brien, C. (2022, December 5). The Next Big Digital Marketing Trends in 2022. Digital Marketing Institute. https://digitalmarketinginstitute.com/blog/the-next-big-digitalmarketing-trends
- Osei-Frimpong, K., McLean, G., Islam, N., & Otoo, B. A. A. (2022). What drives me there? The interplay of sociopsychological gratification and consumer values in social media brand engagement. Journal of Business Research, 146, 288–307. https://doi.org/10.1016/j.jbusres.2022.03.057
- Palacios-Marqués, D., Soto-Acosta, P., & Merigó, J. M. (2015). Analyzing the effects of technological, organizational and competition factors on Web knowledge exchange in SMEs. Telematics and Informatics, 32(1), 23–32. https://doi.org/10.1016/j.tele.2014.08.003
- Paramita, W., Mai, H. N., Ngo, L. V., Tran, Q. H., & Gregory, G. (2021). Brand experience and consumers' social interactive engagement with brand page: An integrated-marketing perspective. Journal of Retailing and Consumer Services, 62, 102611. https://doi.org/10.1016/j.jretconser.2021.102611
- Park, N., Kee, K. F., & Valenzuela, S. (2009). Being Immersed in Social Networking Environment: Facebook Groups, Uses and Gratifications, and Social Outcomes. Cyberpsychology & Behavior, 12(6), 729–733. https://doi.org/10.1089/cpb.2009.0003
- Perkins, D. J., Florin, P., Rich, R. C., Wandersman, A., & Chavis, D. M. (1990). Participation and the social and physical environment of residential blocks: Crime and community context. American Journal of Community Psychology, 18(1), 83–115. https://doi.org/10.1007/bf00922690
- Peterson, C., & Seligman, M. E. P. (2004). Character strengths and virtues: a handbook and classification. Choice Reviews Online, 42(01), 42–0624. https://doi.org/10.5860/choice.42-0624
- Plume, C. J., & Slade, E. L. (2018). Sharing of Sponsored Advertisements on Social Media: A Uses and Gratifications Perspective. Information Systems Frontiers, 20(3), 471–483. https://doi.org/10.1007/s10796-017-9821-8

Raharjanti, N. W., Wiguna, T., Purwadianto, A., Soemantri, D., Indriatmi, W., Poerwandari, E. K., Mahajudin, M. S., Nugrahadi, N. R., Roekman, A. E., Saroso, O. J., Ramadianto, A. S., & Levania, M. K. (2022). Translation, validity and reliability of decision style scale in forensic psychiatric setting in Indonesia. Heliyon, 8(7), e09810.

https://doi.org/10.1016/j.heliyon.2022.e09810

- Ramaswamy, V., & Ozcan, K. (2016). Brand value co-creation in a digitalized world: An integrative framework and research implications. International Journal of Research in Marketing, 33(1), 93–106. https://doi.org/10.1016/j.ijresmar.2015.07.001
- Ryan, R. M., & Deci, E. L. (2001). On Happiness and Human Potentials: A Review of Research on Hedonic and Eudaimonic Well-Being. Annual Review of Psychology, 52(1), 141–166. https://doi.org/10.1146/annurev.psych.52.1.141
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. Journal of Personality and Social Psychology, 57(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069
- Sabra, M. a. A. (2023). An adapted management of early warning signs of relapse questionnaire: Validity and reliability. Archives of Psychiatric Nursing.

https://doi.org/10.1016/j.apnu.2023.04.015

- Saiphoo, A., & Vahedi, Z. (2019). A meta-analytic review of the relationship between social media use and body image disturbance. Computers in Human Behavior, 101, 259–275. https://doi.org/10.1016/j.chb.2019.07.028
- Schivinski, B., Christodoulides, G., & Dabrowski, D. (2016). Measuring Consumers' Engagement With Brand-Related Social-Media Content. Journal of Advertising Research, 56(1), 64–80. https://doi.org/10.2501/jar-2016-004
- Seligman, M. E. P. (2011). Flourish: a visionary new understanding of happiness and well-being. Choice Reviews Online, 48(12), 48–7217. https://doi.org/10.5860/choice.48-7217
- Shin, T. (2022, January 5). 3 Reasons Why You Should Use Linear Regression Models Instead of Neural Networks. Medium. https://towardsdatascience.com/3-reasons-why-you-should-use-linear-regression-models-instead-of-neural-networks-16820319d644
- Sorgente, A., Lanz, M., Tagliabue, S., & Utano, S. (2016). Psychological and subjective well-being during emerging adulthood: their relationship with identity's. . . ResearchGate. https://doi.org/10.13140/RG.2.1.4756.8881
- Stehr, P. (2022). The benefits of supporting others online How online communication shapes the provision of support and its relationship with wellbeing. Computers in Human Behavior, 140, 107568. https://doi.org/10.1016/j.chb.2022.107568
- Stephanie. (2021). Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequacy Statistics How To. Statistics How To. https://www.statisticshowto.com/kaiser-meyer-olkin/
- Stevens, A., & Griffiths, S. (2020). Body Positivity (#BoPo) in everyday life: An ecological momentary assessment study showing potential benefits to individuals' body image and emotional wellbeing. Body Image, 35, 181–191. https://doi.org/10.1016/j.bodyim.2020.09.003
- Tajfel, H., & Turner, J. A. (2004). The Social Identity Theory of Intergroup Behavior. Psychology Press eBooks, 276–293. https://doi.org/10.4324/9780203505984-16
- Tan, Y., Tai, K., & Wang, C. (2016). Culture and the Elicitation, Experience, and Expression of Envy. In Oxford University Press eBooks (pp. 243–266).

https://doi.org/10.1093/acprof:oso/9780190228057.003.0011

- Tandoc, E. C., Ferrucci, P., & Duffy, M. (2015). Facebook use, envy, and depression among college students: Is facebooking depressing? Computers in Human Behavior, 43, 139–146. https://doi.org/10.1016/j.chb.2014.10.053
- Tiwari, G. K. (2014). Body image satisfaction enhances self-esteem. Vaichariki IV(4), 7-11
- Tiwari, G. K., & Kumar, S. (2015). Psychology and body image: A review. Shodh Prerak, 5(1), 1-9
- Thrash, T. M., & Elliot, A. J. (2003). Inspiration as a psychological construct. Journal of Personality and Social Psychology, 84(4), 871–889. https://doi.org/10.1037/0022-3514.84.4.871
- Thrash, T. M., & Elliot, A. J. (2004). Inspiration: Core Characteristics, Component Processes, Antecedents, and Function. Journal of Personality and Social Psychology, 87(6), 957–973. https://doi.org/10.1037/0022-3514.87.6.957
- Thrash, T. M., Elliot, A. J., Maruskin, L. A., & Cassidy, S. L. (2010). Inspiration and the promotion of well-being: Tests of causality and mediation. Journal of Personality and Social Psychology, 98(3), 488–506. https://doi.org/10.1037/a0017906

- Variable Details | RADC. (n.d.). https://www.radc.rush.edu/docs/var/detail.htm?category=Wellbeing&subcategory=Well-being+scale&variable=wellbeing
- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eccles, K. (1998). Social comparison, social media, and self-esteem. Psychology of Popular Media Culture, 3(4), 206–222.
- well-being. (2023).
- https://dictionary.cambridge.org/dictionary/english/well-being
- Wright, K. B., & Muhtaseb, A. (2011). Personal relationships and computer-mediated support groups. Computer-mediated communication in personal relationships, 137-155.
- Wu, J., & Srite, M. (2021). Envy on social media: The good, the bad and the ugly. International Journal of Information Management, 56, 102255. https://doi.org/10.1016/j.ijinfomgt.2020.102255
- Young, L. E., Kolubinski, D. C., & Frings, D. (2020). Attachment style moderates the relationship between social media use and user mental health and wellbeing. Heliyon, 6(6), e04056. https://doi.org/10.1016/j.heliyon.2020.e04056

11. APPENDICES

11.1 Survey

Dear participant,

You're invited to participate in a research study about the effects of social media brand engagement on psychological wellbeing of consumers. The research is conducted by Alina Katiliute from the Faculty of Behavioural, Management, and Societal Sciences at the University of Twente.

The core of this research is to examine what are the positive and negative effects of social media brand engagement on wellbeing. This questionnaire consists of seven different components and should take approximately 5 minutes of your time.

Taking part in this research is entirely voluntary and you can withdraw at any moment. Withdrawing will not have negative consequences for you. Your data will be anonymised and cannot be traced back to you. Your data will not be shared with third parties. You can navigate this survey by clicking the arrows at the bottom of the page. To proceed, please state whether you consent to participate in this research by clicking on the arrow on the bottom right.

Thank you for participating in this research!

If you have any remarks or questions, please don't hesitate to contact me:

Alina Katiliute: a.katiliute@student.utwente.nl

Do you use social media platforms (e.g., Instagram, TikTok, YouTube, Facebook etc)?

- Yes (1)
- No (2)

How often do you use social media on average?

- Once every few weeks (2)
- Few days a week (3)
- 1 3 hours per day (4)
- More than 3 hours per day (5)

SMBE Section 1: Social media brand engagement

Social media brand engagement comes in different forms. For example, sponsored advertisements, partnering with influencers, and/ or creating brands' accounts to post engaging content. Please choose an option that best describes your opinion.

	Never	Sometimes	About half the tim	Most of the time	Always
SMBE.1 I encounter brand engagement activities on social media (e.g., sponsored ads, influencer advertising, following brands accounts).	1	2	3	4	5
SMBE.2 I follow influencer(s) and/or brand page(s) on social media.	1	2	3	4	5
SMBE.3 I write reviews on social media.	1	2	3	4	5
SMBE.4 I post videos/ posts that show my brand consumption on social media.	1	2	3	4	5
SMBE.5 I comment on posts/ videos/ photos on brand social media accounts (e.g., Zara, Dior).	1	2	3	4	5

BI Section 2: Body image

Body image refers to the extent to which individuals perceive the facts pertaining to their bodies. Those facts can often not be aligned with societal standards. This results in a person feeling satisfied or dissatisfied with their own body. Please choose an option that best describes your opinion.

		Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
BI.1 BI.2	I feel with my physical appearance when seeing brand activities on social media.	1	2	3	4	5
BI.3	I feel with my body size and shape when seeing brand activities on social media.	1	2	3	4	5
	I feel with my weight when seeing brand activities on social media.	1	2	3	4	5
BI.5	Right now I feel about my looks compared to how I usually feel.	1	2	3	4	5
BI.4		Extremely physically unattractive		Nerther physically unattractive nor attractive	Somewhat physically attractive	Extremely physically attractive
B1.4	I feel when seeing brand activities on social media.	1	2	3	4	5
BI.6		. Much worse	Somewhat worse	About the same	Somewhat better	, Much better
D 1.0	I feel that I look than an average person looks.	1	2	3	4	5

EV Section 3: Envy

Upward social comparison can give rise to the emotion of envy. Envy can act as a motivator to improve oneself and achieve what the person envies. However, it can also increase avoidance behaviour and feel inferior. Please choose an option that best describes your opinion.

EV.1	Envying others (e.g., influencers, brand ambassadors) motivates me to accomplish my	U Strongly disagree	Somewhat disagree	ω Neither agree nor disagree	Somewhat agree	Strongly agree
	goals.					
EV.2	If someone (e.g., influencer, brand ambassador) has superior qualities, achievements, or possessions, I try to attain them for myself.	1	2	3	4	5
EV.3	Seeing other people's (e.g., influencers, brand ambassadors) achievements makes me dislike them.	1	2	3	4	5
EV.4	I wish superior people (e.g., influencers, brand ambassadors) lose their advantage.	1	2	3	4	5
EV.5	When I envy others (e.g., influencers, brand ambassadors), I focus on how I can become equally successful in the future.	1	2	3	4	5
EV.6	I feel ill towards influencers/ brand ambassadors I envy.	1	2	3	4	5

IN Section 4: Inspiration

Inspiration is the process of being mentally stimulated to do or feel something, especially to do something creative. Please choose an option that best describes your opinion.

- IN.1 Something I encounter or experience when seeing brand activities on social media inspires me.
- IN.2 When seeing brand activities on social media I am inspired to do something.
- IN.3 When seeing brand activities on social media I feel inspired.

		Never	Sometimes	About half the time	Most of the time	Always
IN.1.1	How often does that happen?	1	2	3	4	5
IN.2.1	How often does that happen?	1	2	3	4	5
IN.3.1	How often does that happen?	1	2	3	4	5
		None at all	None at all	A moderate amount	A lot	A great deal
IN.1.2	How deeply or strongly (in general)?	1	2	3	4	5
IN.2.2	How deeply or strongly (in general)?	1	2	3	4	5
IN.3.2	How deeply or strongly (in general)?	1	2	3	4	5

SoC Section 5: Sense of Community

A sense of community can be defined as a feeling of belonging for the members of the group. For the next set of questions please think of a group or a page (of a brand or an influencer) you follow which you feel most involved in/ attached to. Please choose an option that best describes your opinion.

		Strongly disagree	nat dis	Neither agree nor disagree	Somewhat agree	Strongly agree
SoC.1	I think this group is a good place for me to be a member.	1	2	3	4	5
SoC.2	Other members and I want the same thing from this group.	1	2	3	4	5
SoC.3	I feel at home in this group.	1	2	3	4	5
SoC.4	I care about what other group members think of my actions.	1	2	3	4	5
SoC.5	It is very important to me to be a member of this group.	1	2	3	4	5
SoC.6	I expect to stay in this group for a long time.	1	2	3	4	5
SoC.7	I've had questions that have been answered by this group.	1	2	3	4	5
SoC.8	Some members of this group have friendships with each other.	1	2	3	4	5
SoC.9	I want to help others in this group.	1	2	3	4	5

PWB Section 6: Wellbeing

Overall, wellbeing is defined as the state of feeling healthy and happy. Psychological wellbeing focuses on how a person perceived and tries to overcome challenges to function positively. Please choose an option that best describes your opinion.

		Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
PWB.1	When I encounter social media brand/ influencer activities, I like most parts of my own appearance and personality.	1	2	3	4	5
PWB.2	Social media brand/ influencer activities helped my life to become a continuous process of learning, changing, and growing.	1	2	3	4	5
PWB.3	People in social media brand/ influencer communities would describe me as a giving person, willing to share my time with others.	1	2	3	4	5
PWB.4	When I see brands/ influencers on social media, I feel disappointed about my own achievements in life in many way.	1	2	3	4	5
PWB.5	I have not experienced many warm and trusting relationships with others in social media brand/ influencer communities.	1	2	3	4	5
PWB.6	As a consequence of seeing social media brand/ influencer activities, I gave up trying to make big improvements or changes in my life a long time ago.	1	2	3	4	5

DM Section 7: Demographics

This is the final section of this questionnaire.

DM.1 What is your gender?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)
- Other (5)

DM.2 What is your occupation?

- Student (1)
- Working full-time (2)
- Working part-time (3)
- Unemployed (4) Retired (5)
- Unable to work (6)
- Other (7)
- Prefer not to say (8)

DM.3 Which continent are you from?

- Europe (1)
- Asia (2)
- North America (3)
- South America (4)
- Africa (5)
- Australia and Oceania (6)
- Other (7)

DM.4 How old are you?

- < 20 (1)

- 20 25 (2) 26 30 (3) 31 35 (4) 36 40 (5)
- > 40 (6)