



Exploring the Effect of Digital Brand Engagement in Self-Concept (BESC) on
the Continued Usage of Branded Digital Possessions

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Samantha Marie Read

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Abstract

Digital technology is rapidly changing consumer behaviour and continues to have significant implications on the formation of the extended self. Yet, self-extension through digital possessions is significantly under-researched. This research focused specifically on consumer brand engagement with branded Smartphone Applications to study the effect of users' self-concept on the continued usage of digital possessions. The exploratory research approach involved two studies, taking a multi-phase mixed methods approach, involving quantitative data collection, connective ethnographic research and qualitative data analysis. The first study applied Aaker's brand personality inventory (1997) and Sprott, Czellar and Spangenberg's (2009) Brand Engagement in Self-Concept (BESC) scale to the extended Expectation Confirmation Model (ECM) (Bhattacharjee, 2001) as part of a quantitative self-report questionnaire. The results from hierarchical regression confirmed that BESC and self-brand congruence had a significant effect on branded app usage continuance intention. Situated within a constructivist paradigm, the second study involved connective ethnographic research and semi-structured interviews, enhanced by projective techniques, to take an abductive approach to understanding how technology is used by Smartphone users to extend the self. Triangulation of all data sets resulted in the original contribution of five anticipated outcomes of branded app usage. The implications of this include substantial contribution to the academic literature in the area of digital brand engagement and disengagement with branded digital possessions. Managerial recommendations are additionally provided which highlight the

importance of hedonic and functional self-congruity with digital possessions to extend the self.

Keywords: Brand Engagement; Extended Self; Digital Self; Self-Concept; Branded Smartphone Applications; Brand Disengagement

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Chapter 1 Introduction

1.1 Overview of the chapter

The aim of this chapter is to provide the reader with a context of the area under study. The chapter begins with the background behind the growth in digital branded possessions, fuelled by a surge in Smartphone adoption. The purpose of this research is then made clear via an overview of the current gaps in the academic literature which this thesis addresses through its contributions. This is followed by positioning the study within its research objectives and theoretical scope. The chapter is concluded by setting out the structure of this thesis which is made up of six chapters.

1.2 Research background

The theory of self-concept has been identified as an appropriate underpinning theory from which to conceptualise digital brand relationships in accordance with the constructive paradigm. Originating from the field of psychology, the term 'self-concept' can be traced back to the nineteenth century and was first defined as an individual's thoughts and feelings about themselves as a means of 'ownership' over their identity (James, 1890). The term is frequently interchanged with the expressions 'self', 'self-hood' and 'self-identity' (Leary and Tangney, 2003) and has been studied from various perspectives, particularly within the fields of psychology and sociology.

Humanistic psychologists such as the influential Maslow (1943), explicitly rejected psychoanalytical and behaviourist perspectives of the study of personality. Maslow argued that Freudian psychology placed too much emphasis on negative human eventualities, subsequently ignoring positive human qualities. Personality development was thus studied through the lens of motivation theory, rather than reflecting on past experience. In this way, attention shifted to how individuals work towards so-called 'self-actualisation' – a goal which Maslow described as an individual striving to reach their 'fullest potential and capabilities' (ibid, p.394).

Nearly eight decades later, this term continues to influence theory development across multiple disciplines. The overall aim of reaching one's potential has been fully embedded within society, as can be seen by the continued growth of self-help books claiming to guide readers towards achieving their relationship, career, health, and well-being goals. Significantly, self-actualisation has had a fundamental influence within the marketing literature, particularly in regard to consumer behaviour (e.g., Cundiff, 1969; Brooker, 1975; 1976; Leelanuithanit *et al.*, 1991; Wang *et al.*, 2011; Park *et al.*, 2019). As highlighted by Wolfe and Sisodia (2003), 'marketers would do well to learn what self-actualization is about. People on a self-actualization track do not think, feel and act like others and their needs are often quite different' (p.558). With marketing by its very definition being concentrated with anticipating and satisfying consumer needs (CIM, 2015), instrumental research which underpins the 'self' must be given consideration.

Alongside Maslow, Rogers (1951; 1959; 1961; 1980) is considered fundamental to the wave of humanistic psychological views of the development of the self. Like Maslow, Rogers rejected the emphasis that psychoanalytical psychologists Freud (1900; 1917; 1920) and Jung (1921; 1923; 1928; 1957) placed on the unconscious mind. Conversely, it was asserted that individuals are rational beings who are ruled by a conscious perception of themselves in relation to their own experiential world. In line with Maslow's perspective (1943), Rogers (1959) argued that 'the organism has one basic tendency and striving – to actualise, maintain and enhance the experiencing organism' (p.484). Echoing aspects of the sociological perspective to personality development (e.g., Cooley (1902) and the looking glass self), rather than taking a psychoanalytical view of the self being rooted in past experience, research emphasis evolved to focus on the importance of an individual's 'continually changing world of experience' (Rogers, 1959, p.483) and those within it. Perceptions of the self thus became the core nucleus for understanding personality (Epstein, 1973) and prevailed as an important predictor of behaviour as well as regulating behaviour (Markus and Wurf, 1986).

The timeliness of this research arises as a result of digital technology rapidly changing consumer behaviour and continuing to have significant implications on the formation of the self. As digital consumption becomes a normal part of everyday life, understanding the way in which consumers use their digital possessions to extend their sense of self is paramount for marketers (Belk, 2013; Denegri-Knott *et al.*, 2020). However, despite a growing amount of research into consumers' use of branded social network pages to form self-

brand connections (e.g., Hollenbeck and Kaikati 2012; Ozann *et al.*, 2017; Wallace and de Chernatony 2017; Palazon *et al.*, 2019), research into branded digital possessions is significantly lacking (Koles and Nagy, 2020). This is in stark contrast to the deep understanding of consumers' use of physical branded goods to extend the self through extensive empirical research over the past thirty years (e.g., Belk 1988; Fournier 1998; Vigneron and Johnson, 2004; Ahuvia, 2005; Norton *et al.*, 2012; Richins and Chaplin 2015; Ruvio and Belk, 2018), with Belk's seminal paper into possessions and the extended self (1988) receiving over 12,000 citations at the time of writing. This foregrounds a clear gap in research, acknowledging the work of Rogers (1959), Sirgy (1982) and Aaker (1997; 1999) that attachment to branded possessions is influenced by self-congruence between the consumer's sense of self and perceived brand personality. A further complexity is added in relation to the so-called 'digital self' which is characterised by increased opportunities for self-construction in an online environment (Chen, 2014). This has implications for the extension of the self through digital branded possessions, as well as subsequent brand engagement in both a digital and offline context as the two environments continue to merge and interact.

Smartphone applications ('apps' hereafter) offer brands unparalleled access into the everyday lives of consumers who are spending an increasing amount of time on their Smartphones (Ofcom, 2020a) and brands are, therefore, investing heavily in them. Research into understanding consumer engagement with these branded apps is, however, very much in its infancy with relatively few studies having branded apps as their research setting (Li

and Fang, 2019). The importance of this research comes from the acknowledgement that despite UK-based adults spending more time accessing apps in general (Ofcom, 2020b), the average time an app is used is less than 90 days, with the majority of apps not exceeding a 50% customer retention rate across that period (AppAnnie, 2020).

Branded apps can be classified into five broad categories – tool-centric apps, game-centric apps, social-centric apps, m-commerce centric apps and design-centric apps (Zhao and Balagué, 2015). Of particular interest is the m-commerce app which is defined as being predominately used for accessing a brand's products or services via a mobile device to stimulate purchase intention and brand loyalty (Tang, 2019). Downloads of m-commerce apps have seen a global increase of 20% from 2018 to 2019 (ibid). What is more, advances in technology enable a much richer in-app experience, through the use of such features as augmented reality and location technology (Dacko, 2017; McLean and Wilson, 2019; Rauschnabel *et al.*, 2019). However, brands are faced with extensive competition within the app market, competing with multiple categories of apps from finance tracking to entertainment and video streaming, to fitness and education. In 2008, Apple's iOS App Store launched with 500 apps (Digital Trends, 2018). In 2020, there were an estimated 1.96 million apps available for Apple users to download and 2.87 million apps available for Android users in the Google Play app store (Statistica, 2020).

Adding to these challenges for an m-commerce app to be seen, downloaded and continuously accessed, is that in the UK, 58% of daily time spent on a Smartphone is via social or communication apps (Intel, 2020), such as

Facebook, Twitter, Snapchat and WhatsApp. This is particularly the case with Generation Z (Gen Z) app users who are found to be the most attached to their Smartphone. Concerningly, Gen Z have also been found to be more likely to suffer from increased anxiety as a result of being apart from their device (Coskun and Karayagiz, 2019). Reasons for this so-called 'attachment' is currently lacking, particularly from the perspective of digital brand engagement.

A striking assumption that is made within current research into the adoption and continued usage of branded app is that consumers want to be in a relationship with a brand. This gap in knowledge is further heightened by the prevalence in existing research to take a generalised, quantitative, cross-sectional approach. To address this deficit in understanding, the theory of Brand Engagement in Self-Concept (BESC) (Sprott *et al.*, 2009) was applied to acknowledge that consumers differ in their level of tendency to include brands as part of their self-concept.

1.3 Research aim and contributions

The overall aim of this research is to advance current knowledge into the use of digital branded possessions to extend the self under the theoretical lens of BESC. This is the first time to date that BESC has been applied in this context. Previous research has demonstrated the importance of branded possessions as part of the extended self in an offline context, yet despite the continued growth in m-commerce and research into digital identities (e.g., Jensen *et al.*, 2003, Yee *et al.*, 2009; Deandrea and Walther 2011; Michikyan *et al.*, 2014), few studies have concentrated on the role that branded digital possessions fulfil as part of consumers' self-concept.

Knowledge is furthermore advanced within the brand engagement literature by evidencing the impact of self-congruity and BESC on continued usage intention of branded Smartphone applications. Managerial contributions are made in recognition of adapting the design and marketing of digital branded possessions to coincide with whether a consumer is aiming for ideal self-congruence or actual self-congruence through digital self-extension.

An additional aim of this research is to provide much-needed qualitative data to a field dominated by quantitative, cross-sectional research. This is highly important with the theory of self-concept being rooted in psychological understanding of the human psyche which was retrospectively understood through psycho-analytical analysis (Jopling, 2011) over a period of time rather than solely through self-report data. Consequently, guided by recent methodological advances, a major contribution of this thesis is in the area of connective ethnography to provide a true depiction of branded app usage over a period of three months. With connective ethnography spanning the boundaries between online and offline environments (Hine, 2015), online and offline brand interactions could be examined, reflecting the reality of the integration between digital and non-digital environments in contemporary society (Fields and Kafai, 2009). This was particularly important under a constructivist paradigm which aimed to observe the relationship between consumers and branded digital possessions in their natural setting. The purpose of including projective techniques as part of the semi-structured interviews was to echo previous clinical approaches to understanding the

unconscious and deep-seated conscious reasoning behind individual consumptive behaviour.

1.4 Research objectives

Based on the purpose of the research aims outlined above, the following research objectives are addressed within this thesis:

Research Objective 1. To critically analyse existing academic literature to clarify the theoretical position of brand engagement in self-concept (BESC) within the context of digital consumer brand engagement theory

Research Objective 2. To examine whether there is a relationship between the digital extended self and brand engagement in self-concept (BESC)

Research Objective 3. To explore congruency between a consumer's ideal self and perceived brand personality as a form of digital self-extension

Research Objective 4. To explore congruency between a consumer's actual self and perceived brand personality as a form of digital self-extension

Research Objective 5. To investigate consumers' perceptions of their brand relationships in relation to digital BESC and digital self-extension

Research Objective 6. To advance knowledge within the area of elapsed brand relationships through the study of BESC and digital self-extension

1.5 Structure of this thesis

This thesis is separated into six chapters. Following an overview of the research background and the aims and contributions of the research in Chapter One, the remaining thesis is structured as follows:

Chapter Two provides an in-depth review of the existing literature within consumer brand engagement (CBE) to contextualise the major findings from self-concept research in the field of psychology to the marketing field. Following an understanding of the foundations of CBE, emerging research into BESC, the digital self and brand engagement with digital possessions is discussed in order to highlight the key gaps in knowledge that this thesis addresses. This is followed by a review of existing research into branded apps within the boundaries of the scope of the study concentrating on continued usage and non-usage of branded apps as a form of digital brand engagement.

Chapter Three presents the research methodology. The first section includes justification for the research being positioned with a constructivist paradigm in line with an interpretivist epistemological position. The second section provides in-depth rationale for an explorative mixed-methods approach to addressing the research objectives. This includes a discussion of the quantitative data collection within Study One, which took a questionnaire design involving the integration of three established scales - firstly, Aaker's brand personality scale (1997) to measure self-congruity between the ideal self, the actual self, and brand personality; secondly, the BESC scale (Spratt *et al.* 2009) to measure the extent to which participants view brands as part of their self-concept; and lastly, the Expectancy Confirmation Model (ECM)

(Bhattacharjee, 2001) to measure branded app usage continuance intention. The third section concentrates on the rationale behind Study Two which took a connective ethnographic approach to studying branded app usage, followed by semi-structured interviews. This includes observing a sample of 18 iPhone users across a three-month period who submitted a weekly screenshot of their app usage data via the iOS ScreenTime feature, installed on their own Smartphone device. This is followed by a focus on the interview stage at the end of the research period, including justification for the use of projective techniques to delve into the participants' reasoning behind their branded app usage and digital brand relationships. The final part of this chapter focuses on the data analysis methods and the triangulation of the results to provide a holistic understanding of digital brand engagement with branded apps.

Chapter Four reports the data analysis from Study One and Study Two, followed by the amalgamation of data as a result of triangulation. Firstly, the questionnaire data from 162 responses from Study One were analysed via SPSS. In line with the research objectives, these quantitative results were then compared to the quantitative and qualitative findings from Study Two, obtained from the app usage data and semi-structured interviews. Pich and Dean's (2015) approach to analysing data collected from the use of projective techniques is adapted within this stage of the research, resulting in 18 participant profiles. Triangulation of data resulted in the core finding of five predicated outcomes of branded app usage.

Chapter Five discusses the research findings in accordance with the existing literature and gaps in knowledge identified within the literature review. The

conceptual framework is presented within this chapter to position the main research outcomes.

Chapter Six draws together the main conclusions of this thesis, including the key theoretical and managerial contributions. This is followed by a reflection on the limitations of the study and recommendations for future research to support the continued advancement of knowledge in the area of BESC and digital brand engagement.

1.6 Chapter summary

This chapter provided a contextualisation of the research by positioning the research aims and objectives within the research background. The main contributions of the research are two-fold. Firstly, the research widens current knowledge into the use of branded possessions to extend the self by Belk's seminal theory (1988) into a digital context, moderated by level of BESC. Secondly, the methodological contributions of this research are highlighted as a result of taking a mixed-methods, connective ethnographic approach within a field which is predominately comprised of quantitative, cross-section research methods. The chapter was concluded by providing an overview of the structure of the thesis. The following chapter presents a review of the existing literature which informs the direction of the research, highlighting the gaps in current knowledge which this thesis addresses.

Chapter 2 Literature Review

2.1 Overview of the chapter

This chapter provides a literature review within the areas of self-concept and CBE (Consumer Brand Engagement) to gain an understanding of brand engagement in a digital context. The chapter is divided into four sections in order to synthesise and critically examine academic arguments within this field as a route to identifying the theoretical gaps and limitations. Each section provides direction towards gaining a theoretical understanding of the area of research addressed within this thesis, in accordance with the research objectives.

The aim of the first section is to apply the theory of self-concept to the consumer behaviour literature as a central field of enquiry in order to assess the relevance of this perspective to a digital context. This includes a discussion on the development of self-image congruence, leading to Belk's (1988) seminal theory of possessions and the extended self. Building on this, attention is paid to the subsequent literature surrounding brand personality and the work of Aaker (1995; 1997) to conceptualise self-image congruence between a consumer and the personality characteristics that they attribute to a brand.

Section 2.3 connects this understanding of the role of the self-concept within consumptive behaviour to the wider marketing literature as a pre-requisite for CBE. How brand relationships are classified within the literature are considered in relation to the short-term and longer-term value exchanges between consumers and brands. This leads to an in-depth systematic review of the emergent area of Brand Engagement in Self-Concept (BESC) (Sprott

et al., 2009). This is important to discuss in order to ascertain the key learnings and foreground the gaps in knowledge from a digital brand engagement context.

Section 2.4 provides a critical discussion of how the 'digital self' is defined within the existing literature to focus this wide area of research within a consumer behaviour context. This includes a critique of research distinguishing between the digital self and offline identities; drawing upon assertions that the line between the offline and the online environment is becoming increasingly blurred (Epps, 2013). This is followed by an examination of research into the impact of the digital self on brand engagement in a digital environment, acknowledging that the internet offers a plethora of opportunities for consumers to create a digital representation of themselves. Reflecting on previous discussions, an argument aligning Belk's theory of possessions and the extended self (1988) to a digital context is presented. Research focusing on consumers' relationships with digital possessions is compared and contrasted in order to identify fundamental gaps in this area.

Finally, in response to calls for further research into brand engagement with branded digital possessions, research into the adoption and continued usage of branded apps is analysed in section 2.5. Particular focus is given to non-usage of downloaded branded apps as research into brand disengagement has been identified as significantly lacking within the academic literature.

The chapter is summarised in section 2.6 by drawing conclusions to inform the researcher’s contributions to knowledge in line with the research objectives that have arisen from the cascading research themes of the literature review (figure 2.1).

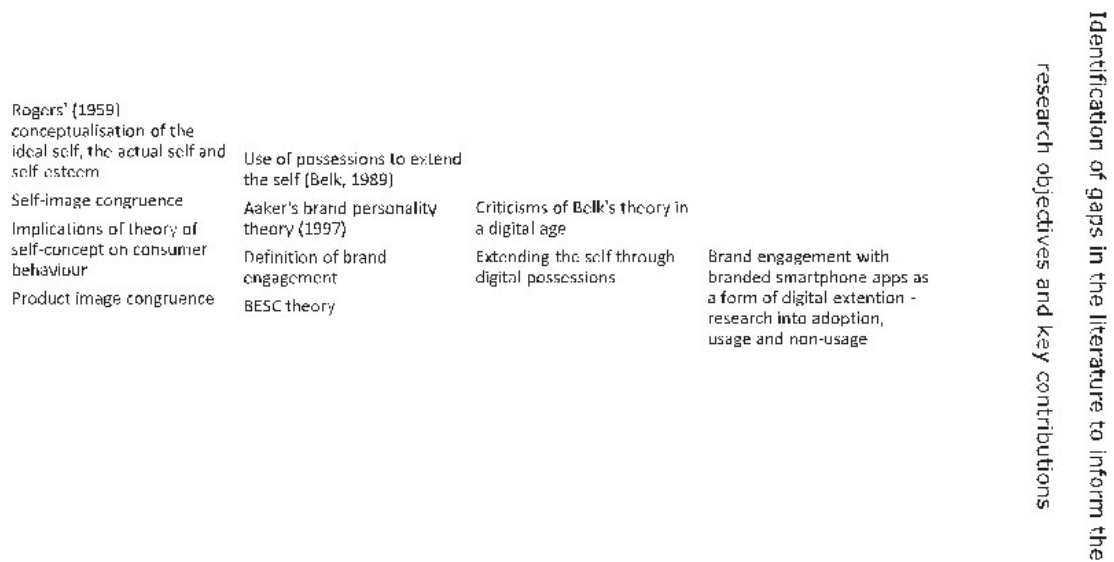


Figure 2.1 Overview of the cascading themes of the literature review according to the four sub-sections of Chapter Two

2.2 The theory of self-concept and consumer behaviour

This section begins by reviewing developments in the application of theory of self-concept to consumer behaviour. As inter-disciplinary research into the field of consumer behaviour continues to expand, a growing awareness has emerged into the importance of consumption to the organisation of one’s daily life, notably in relation to identity formation (Solomon *et al.*, 2013). Within the parameters of the scope of the research, two key lines of research are examined. Firstly, a review of the literature within the area of self-concept in consumer behaviour is undertaken to understand the theoretical basis of the formation of brand relationships from a consumer/brand congruence

perspective. Factors which have been evidenced to drive self-congruity are debated as precedents to brand engagement. Secondly, research into self-discrepancy effects on consumption is explored. This section provides a bridge between the application of perspectives of personality development to consumer behaviour and subsequent analysis of brand engagement and disengagement within the literature; the chosen line of enquiry identified within the research objectives and a key contribution to the expansion of the literature.

2.2.1 Towards an understanding of the self-concept

The theory of self-concept has emerged as fundamental to understanding the totality of consumer behaviour (Grubb and Grathwohl, 1986), with a body of evidence supporting the notion that many consumer purchases are influenced by an individual's perceived concept of themselves. An understanding of the dynamics of the self is deemed as essential in order to capitalise on the symbolic meaning of goods and the role of brands in relation to the consumer's self-concept (Elliott and Wattanasuwan, 1998). The application of the theory of self-concept within a branding context developed from the inference that consumers not only consume brands for their functional benefits, but also connect with brands symbolically. Providing new insights into what motivates consumer purchasing, Gardner and Levy (1955) observed that in addition to product features, it is important to consider the impact of the 'character' or 'image' of a product. This perceived 'image' may be realistic or exaggerated, but all 'contribute to the consumer deciding whether or not the brand is the one "for me"' (p.35). This is reflective of a

fundamental shift in understanding of personality development within the field of psychology at the time.

Rejecting the emphasis that psychoanalytical psychologists Freud (1920) and Jung (1957) placed on the unconscious mind, a humanistic perspective emerged which positioned human values and ideals as the central theme. Rogers' (1959) definition of the self-concept is widely accepted in the literature, centred on the notion that the self is made up of three different components – 'actual self', 'ideal self' and 'self-esteem'. The actual self refers to the way in which a person currently sees themselves, strengthened by a realistic outlook on the qualities that a person possesses. In contrast, the ideal self represents the person one would like to be – the cognitive, emotional and social traits that an individual aspires to elude. The distinction between the actual and ideal self provides a theoretical shift that goes beyond a one-dimensional view of personality development and incites the potential for multiple possible selves that the individual has control over (Rogers, 1959; Markus and Nurius, 1986; Markus and Wurf, 1987).

In contrast to Maslow's hierarchy of needs (1943) which emphasises stages of fulfilment prior to achieving self-actualisation, Rogers (1959) argued that self-actualisation can only be achieved when there is congruence between an individual's actual self and ideal self. In order to achieve this self-congruence, the individual needs to engage with a period of self-growth in order to move from an incongruent sense of self to a congruent sense of self (figure 2.2). Importantly, the 'self' that an individual believes to portray to the outside world is argued to be only an objective 'approximation' of the individual's true

personality (Coombs and Soper, 1957) and not a fixed entity that can be easily measured (Markus and Kunda, 1986). In contrast to previous theories which argued that individuals were motivated by unconscious desires (e.g., Freud, 1915; 1920; 1924), research shifted to concentrate on conscious motivation to protect and maintain a stable self-concept. This elevated the role of self-esteem within the self-concept (Rogers, 1959) as an emotional construct to explain 'how you feel when you are striving wholeheartedly for worthwhile things' (Dweck, 2000, p.129).

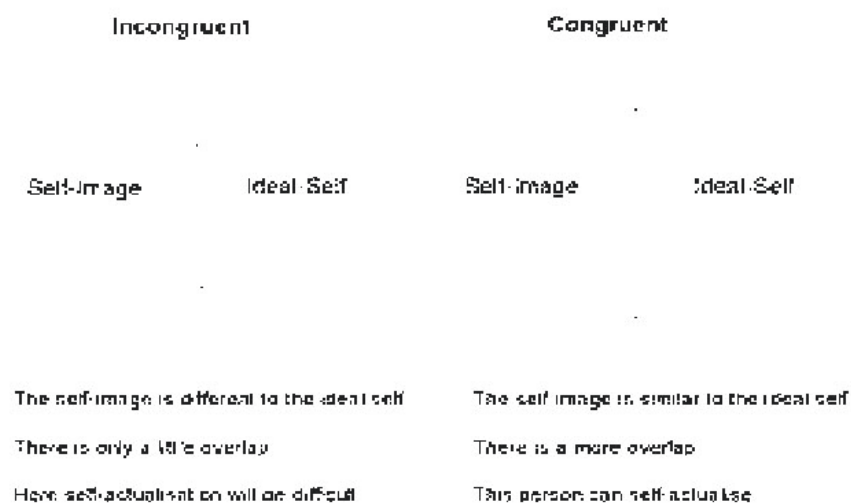


Figure 2.2 A visualisation of the concept of an incongruent self and a congruent self (Rogers, 1959)

Synonymous with the argument that an individual's concept of self changes over time (Maslow, 1943; Rogers, 1959; Wylie, 1974), Zigler *et al.* (1972) argue that the growth of an individual is accompanied by an increasing disparity between an individual's assessment of their self-image and their ideal self. Epstein (1973) expanded upon this view by proclaiming that the purpose of theories of the self is to 'optimise the pleasure/pain balance of the individual over the course of a lifetime' (p.407). This led to the development

of the theory of self-discrepancy which attempted to draw clearer conclusions in the psychological literature in relation to the relationship between different representations of the self. In line with Maslow and Rogers, Higgins (1987) asserted that individuals are fundamentally motivated to find congruence between their actual self and ideal self. Significantly however, he emphasised inconsistencies between notions of the self and negative effects on self-esteem. This placed greater importance on achieving self-congruence to avoid the emotional consequences and vulnerabilities of self-discrepancies.

In this way, self-concept can be defined to functionally provide and maintain 'a cognitive anchor' (Osyerman *et al.*, 2011, p.70) as a way of making sense of who we are. Self-concept is therefore seen as a changeable process of thinking and behaviour rather than something that one has as a part of themselves. Pelham and Swann (1989) highlight however that there are certain framing factors impacting on an individual's level of self-esteem. In a study examining global self-esteem predictors, the researchers found that those with a negative self-concept saw holding a positive view of themselves as less important than those who were found to have a positive self-concept. This positions the concept of self-congruence as highly important to some individuals but not to others, highlighting the importance of examining human behaviour within the context of individual choices. From a marketing perspective, applying the theory of self-concept resulted in significant advancement to understanding the totality of consumption. This is discussed in the following section to position the theory of self-concept as a precedent to CBE and the resulting myriad of research in this area which this thesis extends from a digital brand engagement perspective.

2.2.2 The role of product image within a consumer's self-concept

Self-concept is an area which has historically received considerable attention across a range of disciplines as researchers seek to uncover the mechanisms by which individuals attempt to move towards self-congruence. Birdwell (1968) was the first researcher to measure the extent to which self-image is congruent with purchase behaviour. Birdwell rejected research which attempted to isolate individual personality characteristics as a way to understand purchase behaviour, denouncing this approach as 'too general' (p.77). Conversely, he determined to place the self-concept as the core focus of his research, acknowledging that a number of personality theories have 'either made some provision for the self in their systematic formulations of the concept of personality or have made direct use of the self as the foundation of their theories of personality' (ibid, p.76-77). By measuring congruence between a consumer's perception of their automobile and their own self-concept, Birdwell evidenced self-image/product-image congruity as a key moderator for purchase motivation and consumer attitude prediction.

This was supported by Grubb and Hupp (1968) who found that consumers who purchased a particular brand of car perceived themselves to have a similar self-concept to other owners who were motivated to buy the same car brand. The relevance of the cognitive link between consumers with similar perceived characteristics was embedded through the conceptualisation of 'possible selves' (Markus and Nurius, 1986). By framing self-concept research on studying the person a consumer aims to become or attempts to avoid,

causality behind consumer behaviour could be established. As argued by Markus and Nurius (1986):

An individual's repertoire of possible selves can be viewed as the cognitive manifestation of enduring goals, aspirations, motives, fears, and threats. Possible selves provide the specific self-relevant form, meaning, organization, and direction to these dynamics. As such, they provide the essential link between the self-concept and motivation.
(p. 954)

Highly significant to the research of this thesis, attention in the literature expanded to separate out the role of the actual self and the ideal self on purchase behaviour, with previous research being deemed limited in the way that the self-concept was dealt with as a single entity (Dolich, 1969). Significantly, Laird (1974) built on initial research conducted by Dolich (1969) and Ross (1971) by assimilating differences between the actual self and ideal self on purchase intention, making a distinction between 'actualisers' (those who are characterised by a higher actual self-image/purchase intention correlation than an ideal self-image/purchase intention correlation) and 'perfectionists' (those who are characterised by a higher ideal self-image/purchase intention correlation than an actual self-image/purchase intention correlation). Laird criticised the work of Birdwell (1968) and Grubb and Hupp (1968) for suggesting that the relationship found between a consumer's self-concept and consumption was due to post-purchase behaviour rather than pre-purchase behaviour. It was surmised that consumers are consciously aware of their self-concept purchase choices and

that overall purchase intention tends to be more correlated with the actual self rather than the ideal self. Laird (1974) further contended that it is the discrepancy between the actual self and the ideal self which can be considered 'a measure of psychological well-being' (p.47). Reflecting on previous research into self-esteem, in order to maintain a consistent self-concept and therefore a higher level of self-esteem (Rogers, 1959), theory development involved a move towards studying a consumer's conscious desire to achieve self-congruence through their pre and post purchase behaviour.

From a consumer behaviour perspective, self-image congruence refers to the match between an individual's self-concept and the product image that a consumer has assigned to a particular product or brand. The term has been used interchangeably with the terms 'self-image congruence', 'self-congruence', 'self-congruity' and 'image congruence' (Hosany and Martin, 2012). For the purpose of the literature review, the term 'self-image congruence' is applied, as conceptualised by Sirgy within his critical review (1982).

Sirgy's seminal contributions to self-concept in consumer behaviour literature provide clear implications to the future study of this field of research. One major theoretical development is in relation to Sirgy's emphasis on the multiplicity of the self-concept construct and the impact of this on achieving a sense of self-congruity. Sirgy emphasised that the make-up of a consumer's self-concept directly influences the value that is placed upon a purchase choice, according to four states of self-congruity in relation to perceived product image (1982, p.289) (table 2.1). Drawing on research into self-

esteem within the field of psychology, Sirgy (1982) argued that consumers are motivated to purchase a positively valued product to maintain a positive self-image (positive self-congruity) or to enhance their self-concept by seeking to display (through consumption) an ideal image (positive self-incongruity condition). Echoing aforementioned research into self-discrepancies (e.g., Higgins, 1987; 1989; Ogilvie, 1987), Sirgy further theorised that consumers are motivated to avoid purchasing a negatively valued product in order to control for potential humiliation (negative self-congruity and negative self incongruity conditions). Positive self-congruity was found to result in the strongest level of purchase motivation, followed by positive self-incongruity, negative self-congruity, and negative self-incongruity. This draws on the link between self-concept and self-esteem by defining how the two constraints depend on one and another - the higher the self-congruence, the higher the self-esteem levels (Rogers, 1959).

State of congruity	Definition
Positive self-congruity	Comparison between a positive product-image perception and a positive self-image belief
Positive self-incongruity	Comparison between a positive product-image perception and a negative self-image belief
Negative self-congruity	Comparison between a negative product-image perception and a negative self-image belief
Negative self-incongruity	Comparison between a negative product-image perception and a positive self-image belief

Table 2.1 The relationship between product-image perception and self-congruity (Sirgy, 1982, p.289)

However, with research in this area in its infancy, Malhotra (1981; 1989) raised a concern over the reliability of findings which highlighted the relative

importance of product image and how this is being compared to a consumer's own individual sense of self, claiming that none of the previous studies in this area had accessed the validity of the instruments used to measure self-concept fully. Drawing on Sirgy's theory of the multiplicity of the self, Malhotra's multidimensional measurement scale (1981) was developed to predict consumer choice based on the influence of the actual, ideal and social self, taking into account individual variables and situational variables that had arisen from social identity research (e.g., Zavalloni, 1973; Tajfel, 1974; Tajfel *et al.*, 1979). In contrast to Laird (1974), Malhotra (1981) evidenced that consumers were influenced by the ideal self in their purchase choice. This can be contextualised by the amalgamation of further, and indeed recent, conflicting findings in this area which argue that consumers vary in seeking actual self-congruence or ideal self-congruence depending on the product category (e.g., Ekinci and Riley, 2003; Malär *et al.*, 2011; Hosany and Martin, 2012; Upamannu *et al.*, 2014). This raises an important issue on the generalisability of self-concept research within consumer behaviour if the relationship between the self and product choice differs depending on the nature/category of the product itself.

In response to this, Belk published his seminal research paper (1988) which argued that the extended self 'appears to be a much richer construct than previous formulations positing a relationship between self-concept and consumer brand choice' (p.139). Renowned as the catalyst for change in approach and understanding of consumer behaviour (Ladik *et al.*, 2015), Belk's theory of possessions and the extended self is critically explored in

depth in the following sub-section before being placed into a digital context in section 2.4.

2.2.3 Belk's theory of possessions and the extended self

Belk's influential theory of possessions and the extended self (1988) is viewed as ground-breaking in the way that it focuses on the whole consumption process rather than solely researching buyer behaviour (Ladik *et al.*, 2015). Drawing parallels with previously reviewed research into consumer behaviour and the role of the self-concept, possessions are viewed as a 'major contributor to and reflection of our identities' (Belk, 1988, p. 139). To address the limitations of previous research into the role of product image (see previous section), the changing role of materialism across an individual's lifespan is identified (Belk, 1988; 1989) (figure 2.3). This acknowledges previous psychological research into the self-concept that recognises that an individual's view of themselves is not fixed. Linked to this, the main theoretical shift within the consumer behaviour literature is that it is not just tangible products which become part of a consumer's identity once purchased. It is reasoned that people, places, body parts, group possessions and non-branded goods are also important to shaping one's sense of self (Belk, 1988). In this way, it is reasoned that the *totality* of an individual's owned possessions represent a sense of self rather than individual objects as previously concentrated on within consumer behaviour and self-concept research. Whilst clear knowledge advances are made here, this emphasises the complexity of this area of research, further complicated by a consumer's perceived congruence in relation to the actual and the ideal self - a possession

may serve to achieve actual self-congruence in one context, yet another possession may be applied in a different context to achieve ideal-self congruence (Belk, 1988). Research into the role of possessions as part of extending the self is extensive, with a number of empirical research studies arising in recent years. Within the boundaries of this thesis, critique concentrates on literature referring to branded possessions.

- The infant distinguishes self from environment
- The infant distinguishes self from others
- Possessions help adolescents and adults manage their identities
- Possessions help the old achieve a sense of continuity and preparation for death

Figure 2.3 The functions of possessions across four stages of human development (Adapted from Belk, 1989, P.139)

Following criticism that the construct of the extended self lacked meaning and empirical identification (Cohen, 1989), Belk (1989) constructively clarified his definition and the significance of this concept within consumer behaviour research. Particular emphasis was also placed on attachment to possessions which an individual sees as closely related to one's identity:

We are more likely to be attached to things that are significant to our individual or group identity. Conversely, it is likely that things that are

more a part our identities result in greater emotional attachment than things that are less relevant to our identities. (p.130).

Congruence between the ideal and actual self is viewed as a mediating factor impacting on consumptive behaviour, with some possessions providing more meaning than others in the maintenance of one's identity (Belk, 1988). Reflecting on previous arguments that the self-concept only becomes meaningful when considered in a social context (e.g., Goffman, 1959; 1978; Schlenker, 1975; Schlenker and Leary, 1982), Belk reasons that 'relationships with objects are never two-way (person-thing), but always three-way (person-thing-person)' (p.147). From this perspective, it is assumed that there is an additional emotional attachment added to ownership of possessions to extend the self. This reflects not only the way in which the consumer views that attachment personally, but also the way in which it is perceived that the possession is seen by others. This echoes Markus and Nurius' (1986) prior assertion that:

an individual is free to create any variety of possible selves, yet the pool of possible selves derives from the categories made salient by the individual's particular socio-cultural and historical context and from the models, images, and symbols provided by the media and by the individual's immediate social experiences. (p.954)

This suggests that regardless of a consumer's self-concept, it is the conspicuous nature of the purchase when exposed to a group(s) of people that draws the consumer's attention to the relevance of their purchase to

their self-concept (actual or ideal self depending on the consumer's assessment and life-stage). Indeed, the very definition of conspicuous consumer has evolved to take account of this phenomenon. What was preliminary described as a theory behind the way in which consumers use luxury products to emulate wealth and status as 'evidence' of their social power (Veblen and Galbraith, 1973), is now used to symbolically define consumption as aiding the consumer 'to express his/her self and achieve a sense of continuity and identity' (Chaudhuri and Majumdar, 2010, p.53). From a branding perspective, this is apparent through the conscious display of brand logos, brand names or typical brand colours or patterns, and is highly supported by recent research into the impact of a consumer's self-concept when purchasing luxury goods (e.g., Truong and McColl, 2011; Grotts and Johnson, 2012; Kim and Joung, 2016; Shaikh, 2019; Dib and Johnson, 2019). Inversely, this argument is challenged by a recognised rise in inconspicuous consumption with consumers preferring to be identifiable only by the specific groups they associate themselves with (Berger and Ward, 2010) rather than society as a whole. Eckhardt *et al.* (2015) agree with this, identifying that the shift from conspicuous to inconspicuous consumption can be directly linked to the decline of the class system and subsequent decline in the exclusivity of luxury goods.

Within a present research context, highly relevant to the study stipulated in this thesis, the rise of inconspicuous consumption is attributed to a shift towards non-tangible possessions and the desire for access-based consumption rather than ownership (notably Belk, 2014; Lawson *et al.*, 2016; Denegri-Knott *et al.*, 2020). This will be reviewed within its digital context in

Section 2.4, following an understanding of brand personality as an antecedent of CBE. To this end, the following sub-section draws on the trailblazing work of Aaker (1997) whose application of the "Big Five" human personality traits (McCrae and Costa, 1987) from a psychological to a marketing context revolutionised the way in which researchers study consumer perceptions of brand image.

2.2.4 Dimensions of brand personality

To understand the reasoning behind the connection that a consumer establishes with a brand, it is necessary to apply brand personality theory as a driver of self-brand congruence. Aaker first defined the notion of brand personality as 'a set of human characteristics associated with a brand' (1997, p.347). This is underpinned by the theory of anthropomorphism, which in this context refers to the practice of individuals attributing human personality characteristics to non-human things (Belk and Kniazeva, 2018). Adapted from the Big Five model of personality (McCrae and Costa, 1987), Aaker's brand personality framework (1997) is made up of five dimensions, with 42 human-like brand personality traits positioned underneath each dimension (figure 2.4). Each personality dimension symbolically represents the way in which consumers perceive a brand's personality traits to be made up of. As is explored later in this chapter, debate continues in the literature over the generalisability of these traits. Although not without its criticisms, the majority of research which has studied brand personality opted to adapt this robust original scale (Ajeyalemi and Dixon-Ogbechie, 2020).

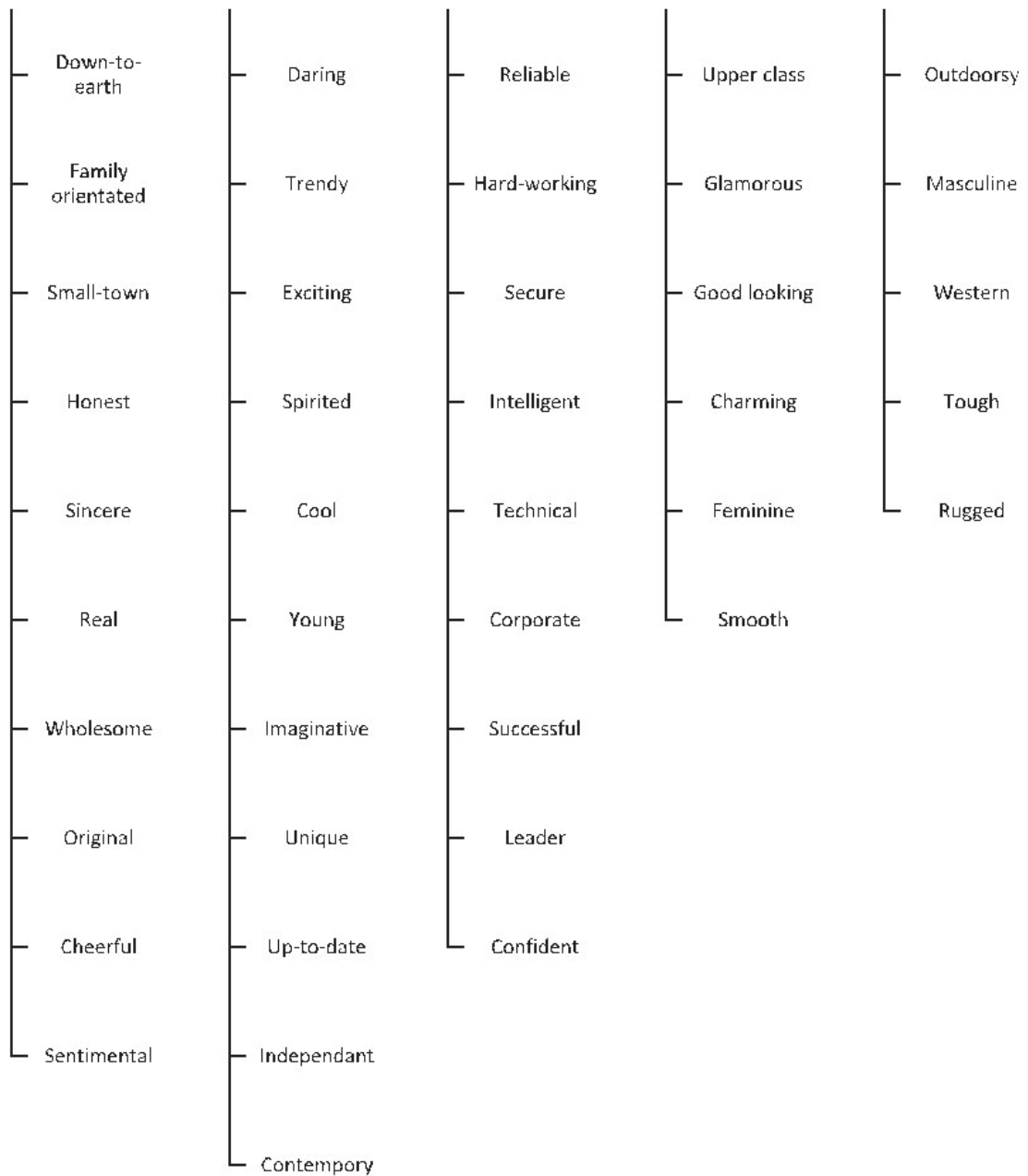


Figure 2.4 Aaker's brand personality framework (1997)

According to Bishnoi *et al.* (2016), Aaker's theoretical contributions within brand personality are considered a 'major breakthrough' (p15) in the field. Indeed, Aaker's framework (1997) has been extensively empirically tested

and adapted across multiple contexts and disciplines. To gain a contemporary perspective of the relevance of brand personality, significant value is derived from the most recent systematic review of literature in which Aaker's scale has been applied within the area of brand personality. Consequentially, the scope of the application of Aaker's scale (1997) is summarised into seven categories of research (Ajeyalemi and Dixon-Ogbechie, 2020) (figure 2.5). The research of this thesis contributes to this breakdown by adding a further area of study to explore the impact of brand personality as part of a consumer's self-concept in relation to digital brand engagement with digital possessions. This is an area which is distinctly lacking in the literature, with the majority of focus being on the marketing of tangible branded products (e.g., Lin, 2010; Punyatoya, 2011), service-based marketing, particularly within tourism (e.g., Ekinci and Hosany, 2006; Murphy *et al.*, 2011; Usakli and Baloglu, 2011; Gómez *et al.*, 2016; Sop and Kozak, 2019) and corporate branding (Abimbola *et al.*, 2012; Dean *et al.*, 2016; Spry and Pich, 2020).

Figure 2.5 Breakdown of previous applications of Aaker's brand personality scale between 2000 and 2015 (adapted from Ajeyalemi and Dixon-Ogbechie, 2020, p.37).

Notable research which informs the direction of this thesis is categorised under the heading 'Brand personality and consumer perception.' Most recently, research has examined the relationship between brand personality and consumer personality, focusing on whether perceived brand personality traits are transferred to a consumer's concept of the self. This relates directly to the concept of the malleable self which argues that people act differently according to particular situations (Aaker, 1999) in response to social cues or the need for self-presentation. As a result of this, individuals are thought to inhabit multiple identities in juxtaposition to the various roles 'played' within their everyday lives (Markus and Nurius, 1986). In light of this, Fennis and Maaland (2005) measured the impact of specific perceived brand characteristics on self-concept presentation. The results found that the brand characteristics of 'sincerity' and 'ruggedness' directly impacted on the way in which consumers viewed their own self-concept. Consumers who perceived the brand to be more sincere, also rated themselves as more agreeable. When a brand was judged to be 'rugged', consumers were more likely to view themselves as being more extrovert.

However, a plethora of research has evidenced the impact of a consumer's own personality on the way in which they perceive a brand's personality (e.g., Balaji and Raghavan, 2011; Dikcius *et al.*, 2013; Banerjee, 2016). This presents a conflicting position in the literature in respect to the cause and effect between consumer personality characteristics and brand personality characteristics. By acknowledging the relational direction of these two variables, the influence that a brand can have over how their brand image is

processed (Keller, 2009) can be ascertained. Yet, it can be contested that this is significantly impacted by continuous adaptations of Aaker's scale within the literature, with a core criticism being that Aaker's original 42 personality traits are not globally accepted. This is discussed in further detail in the following section which concentrates on the criticisms of brand personality theory and the subsequent adaptations to Aaker's (1997) framework.

2.2.5 Criticisms of brand personality theory

An important implication to consider when applying the aforementioned theory is the extent to which brand personality theory is viewed as a consumer metaphor or researcher tool to understand consumer behaviour. Much of the literature draws on the former argument, applying and adapting Aaker's perspective that consumers attribute certain personality traits to brands. This includes recent research evidencing brand personality characteristics being attributed to product brands, particularly within fashion (e.g., Ridgway and Myers, 2014; Anggraeni, 2015; Zainudin *et al.*, 2019) and sport (e.g., Carlson and Donovan, 2013; Kang *et al.*, 2016; Kakitek, 2018). However, controversially, research has also found that consumers are able to attribute brand personality characteristics to objects which are subjectively less desirable to form a brand relationship with. Of particular note is Avis, Forbes and Ferguson's (2014) application of Aaker's brand personality scale (1997) to the personification of rocks. From a convenience sample of 221, all participants were able to project a "personality" onto the three rock stimuli, providing positive and negative traits for each. However, this research cannot be considered a true application of brand personality as the rocks tested

within the experiment were not branded. The results could be considered evidence of anthropomorphism, but it is difficult to consider these from a marketing perspective where there is no purpose for the rocks being assigned a personality from a branding point of view. What this study does highlight is that there remains a discrepancy in the literature over the application of brand personality within a consumer behaviour context. Highly significant to this research, Huang *et al.* (2012) compared measures of brand personality with measures of human personality and concluded that both scales are comparable. This suggests that brand personality mirrors human personality characteristics, providing support for Aaker's theory that consumers are assigning human-like traits to brands (1997). A limitation of this research, however, is that it concentrates on comparing the actual self with brand personality, neglecting to research any other aspects of the self-concept. The researchers profess to this omission, highlighting the need for future research to examine the relationship between brand personality and other parts of the self-concept (Avis *et al.*, 2014).

In critical response to academic viewpoints which position brand personality as a consumer metaphor, such as those mentioned in the previous two paragraphs, a counter-argument questions whether consumers naturally assign human-like traits to brands within their natural settings. Azoulay and Kapferer (2003) strongly argue that human intellectual traits, such as 'competent' and 'intelligent', cannot be transferred to brands. The authors proclaim brand identity to be more useful than brand image alone in understanding brand personality. This raises the need for brand personality

traits to be understood from a multi-faceted perspective, rather than being studied in isolation.

Concern is also raised surrounding the generalisability of the personality characteristics across different product categories. The 'sincere' trait for example is claimed to be more closely associated with services rather than tangible products (Austin *et al.*, 2003). Sweeney and Brandon (2006) provide further contextualisation of this, asserting that brand personality traits correspond to the 'interpersonal domain of human personality' (p.645). This suggests that consumers form a perception of a brand once they have established a relationship with that brand. Contrary to previous research, some attribute this at a brand rather than a product-level (MacInnis and Folkes, 2017). This argument reflects that put forward by Keller (1998) and Eisend and Stockburger-Sauer (2013) that consumers assign brand personality traits to brands as a result of their experience of interacting with that brand. In this way, emphasis is placed on Consumer Brand Engagement (CBE) to establish and build on brand personality assumptions. Liao *et al.* (2017) add to this by emphasising the role of cognitive and experiential antecedents as a result of hedonic consumption. This is reflective of research conducted by Goldsmith and Goldsmith (2012) who found brand personality to be positively related to brand engagement. However, the researchers highlight that 'in the absence of an experimental study...we cannot definitely conclude that the differences in brand personality we assessed cause differences in brand engagement' (ibid, p.18). This presents a clear limitation of quantitative, cross-sectional research in this area, further amplifying the need for qualitative research to validate and extend current understanding.

The aforementioned study only concentrated on the brand personality of one brand (North Face) however, restricting the generalisability of the findings. This raises the importance of future research examining a range of different brands across multiple product categories in order to make a sustainable contribution to the literature.

2.2.6 Validation and adaptations to Aaker's brand personality scale (1997)

The main criticism of Aaker's scale (1997) is in its generalisability, underpinned by the previously discussed debate over whether brand personality provides a theoretical consumer metaphor or researcher metaphor. Bishnoi and Kumar (2016) argue that Aaker's scale is not universal and that it is the researcher's responsibility to identify any potential discrepancies due to cultural, geographical or product categories. This is supported by Radler (2018) who evidences in her bibliometric review, cultural differences as being a fundamental reason for adaptations to be made to Aaker's scale (1997). This is unsurprising in consideration of exponential research which found there to be distinct differences between cultural perceptions and behaviour as a result of different value systems (Hofstede, 1984). Discrepancies can be attributed to the transferability of the 42 brand personality items (Aaker, 1997), with researchers finding that items need to be removed or added depending on the context of the study. The 'western' trait has been especially criticised for being ethnocentric (Azoulay and Kapferer, 2003), with researchers calling for clarity over whether the term 'western' refers to 'American' or 'Non-Asian' domicile (Austin *et al.*, 2003). The term 'ruggedness' has also been found to hold different definitions

amongst different cultures (Aaker *et al.*, 2001; Kumar, 2018). Aaker *et al.* (2001) subsequently clarified the cultural implications of the scale, finding that whilst there were some similarities between the dimensions in other countries, perceptions of brand personality traits differed between cultures. This emphasises the need for Aaker's brand personality scale to be adapted depending on the context in which it is applied.

High importance is placed on validating Aaker's scale (1997) before utilising this method of measurement in another country, suggesting that the scale could be considered to be too specific to the USA (e.g., Rojas-Mendez *et al.*, 2004, Thomas and Sekar, 2008; Mishra, 2011; Srivastava and Sharma, 2016; Bishnoi *et al.*, 2016). Within an Indian context, ten items were deemed not to be applicable, with the researchers asserting that certain traits were either 'non-anthropomorphic' or 'product misfits' (Bishnoi *et al.*, 2016). Thomas and Sekar (2008) also found ten items to not be applicable in India, although these were different items to the previously mentioned study. Applying Aaker's scale (1997) in Chile, as many as twenty-six items were found to be insignificant to the study of personality traits attributed to a car brand (Rojas-Mendez *et al.*, 2004). Research has also led to the reduction of the five dimensions following scale validation (e.g., Dikcius *et al.*, 2018) or the addition of new dimensions, such as 'luxury' (Menon *et al.*, 2020). Variations have also been found when taking a mixed-methods approach to studying brand personality. Arora and Stoner (2009) evidence that different personality attributes emerged in their quantitative analysis to what was evidenced from the qualitative phase of study. This further questions the validity and generalisability of Aaker's (1997) scale. It is acknowledged

however that mixed-methods methodology to study brand personality is extremely limited (Avis, 2012). This approach is essential however to be able to address different interpretations of brand personality. In a recent bibliometric analysis of brand personality research, Lara-Rodríguez *et al.* (2019) stressed that:

...it is also pertinent to ask about the impact of the brand's personality on the different representations of the brand. Until now, brands have been analyzed without distinction, regardless of their functional or symbolic nature, and therefore, they should analyze if the brand's personality generates greater impact in this type of symbology, which will allow finding new research horizons in brand anthropomorphization. (p.12)

Relating back to earlier research into the self-concept and product image, the differences between applicable personality traits could be attributed to variations between the product categories themselves. In a re-examination of the generalisability of Aaker's framework, Austin *et al.* (2003) extend caution to the use of the brand personality measurement at an individual product brand level. When Aaker's scale (1997) was applied across a range of individual restaurant brands, the researchers reported a poor model fit. This is attributed to the research approach being too generalised rather than having clear boundaries, as intended by Aaker (1997). These findings can be further understood by subsequent research conclusions that individuals attribute different meanings to the same personality trait (e.g., Austin *et al.*, 2003; Ariff *et al.*, 2012). This accentuates the importance of piloting and

adapting Aaker's scale (1997) accordingly, taking into account potential cultural or individual biases.

A further factor which has been found to influence the way in which consumers perceive the personality of a brand, relates to the way in which the brand image has been shaped through marketing communications (Eisend and Stockburger-Sauer, 2013; Seimiene and Kamarauskaite, 2014). Advertising in particular influences the way in which a consumer views the brand as a whole and how the brand might fit with their own self-concept. This is further enhanced by the use of celebrity endorsement, or more recently, social media influencers, and is well documented in the literature (e.g., Roy, 2006; Escalas and Bettman, 2009; Roy and Moorthi, 2012; Pradhan *et al.*, 2016; Kotsi and Valek, 2017; Roy *et al.*, 2021). The intricacies of celebrity endorsement and social media marketing are beyond the scope of this thesis, however it is important to acknowledge that this phenomenon adds further complexity to the views of Sirgy (1982) and Belk (1988, 1989) when there is an apparent trilogy of brand personality perceptions between the consumer, the brand and the brand endorser. This is particularly important in regard to the source of the marketing communications, with a perceptible shift occurring with influencer marketing being viewed as more trustworthy by consumers than celebrity endorsement (Jin, Muqaddam and Ryu, 2019).

Brand trust in this instance, is defined as a consumer's held belief that the endorsed brand is reliable and committed to upholding its customers' interests and welfare (Delgado-Ballester *et al.*, 2003). Significantly, Jin *et al.*

(2019) argue that part of this increased level of trust can be explained by consumers feeling a stronger connection with social media influencers over 'traditional' celebrities. From a brand engagement theoretical lens, the online environment results in the consumer perceiving it easier to communicate with the endorser to achieve self-congruence (Zogaj *et al.*, 2020). This is further supported by Reinikainen *et al.*(2020) who evidence the role of social media comment functionality having a positive effect on the endorsement made by the influencer.

To expand on the point made in the previous paragraph, word-of-mouth (WOM), is considered as a potential moderator impacting on a consumer's perception of brand personality. Within the parameters of this thesis, the researcher is particularly interested in this from a digital perspective, including the impact of electronic word-of-mouth (eWOM) and online reviews on perceptions of brand personality. This is discussed in further detail in Section 2.5 in relation to branded app adoption in order to explore whether eWOM influences branded app retention. Contextualising this by applying the theory of self-concept, the gap in research which considers self-extension through digital possessions is addressed. Given the importance of the digital environment for brand engagement, this further enables contemporary marketing recommendations to be made, in addition to substantial contributions to the area of digital brand engagement in self-concept.

Azoulay and Kapferer (2003) further recognise the need for brand personality research to be considered within a brand identity framework, arguing that:

a stricter definition of brand personality is needed to avoid the present state of conceptual confusion in branding research, and to allow brand personality to be a rich and more useful concept with which to understand and manage brands. One should recall that 'personality' and other concepts used in marketing (such as 'self' or values) derive from psychology, and should therefore be defined and strictly described in relation to their definition in psychology, although some adaptations seem necessary (p.144).

This relates back to the construct validity issues discussed previously in this chapter and provides strong justification for brand personality measures to be incorporated as part of a wider theoretical framework. To this end, the following section focuses on the developments within CBE research which saw brand personality firmly positioned as a driver for consumer engagement.

2.3 Consumer brand engagement

The concept of CBE is complex as consumers are thought to develop relationships with brands through emotional, cognitive and behavioural interactions (Brodie *et al.*, 2011). Literature within this area is vast, offering several conceptual models to demonstrate the consumer process of brand engagement leading to customer satisfaction and loyalty. In line with the Research Objective 1, this section begins by presenting the existing literature which aims to define and conceptualise CBE:

Research Objective 1. To critically analyse existing academic literature to clarify the theoretical position of brand engagement in self-concept (BESC) within the context of digital consumer brand engagement theory

This provides the theoretical underpinning for section 2.6.2 which systematically reviews research which applies Brand Engagement in Self-Concept (BESC) theory. With research in this area in its infancy, this overview is followed by highlighting a clear gap in the body of knowledge in relation to digital brand engagement in self-concept.

2.3.1 Towards an understanding of brand engagement

Brand relationship theory has become one of the dominant theories within contemporary marketing and branding literature, citing numerous benefits of adopting a relationship theory view of consumer-brand relationships. Yet, brand relationships are intrinsically inconsistent in nature and change in response to consumer and brand behaviours (Fournier *et al.*, 2012). What underpins this is the notion that for a relationship to truly exist, both consumer and brand collectively redefine that relationship through active engagement (Hinde and Hinde, 1979). Current literature within this area of study focuses predominately on brand relationships being experiential and co-created (e.g., Vargo and Lusch, 2004, Vargo *et al.*, 2008; Brodie *et al.*, 2011; Hollebeek, 2011a, 2011b; Black and Veloutsou, 2016). This indicates a fundamental shift within relationship marketing, with modern-day consumers working alongside brands to co-create brand meaning and identity. Further support is also provided for the link between consumers'

self-concept and brand personality by evidencing how brand identity is interwoven with consumers' identity construction, culminating in active brand engagement (Banahene, 2017).

The existing literature on CBE offers numerous definitions of what constitutes 'engagement'. With various measurement scales established, this is a complex area of study with wide conceptual boundaries and dimensions. With little consensus over what defines consumer engagement or the generalisability of the concept across different cultures (Rather *et al.*, 2018), there is a clear need for more empirical research in this area. In particular, what characterises the drivers and outcomes of brand engagement remain underexplored and lack empirical evidence (Leckie *et al.*, 2016; Adhikari and Panda, 2019). This includes an immediate call for more empirical research into digital brand engagement, particularly longitudinal research (Jiménez-Castillo and Sánchez-Fernández, 2019; Taiminen and Ranaweera, 2019; Cheung *et al.*, 2020).

Brodie *et al.* (2011) propose that CBE is multi-faceted, providing an application of cognitive, emotional and behavioural dimensions of consumer engagement based on the rationale that there is interactivity between the consumer and the brand and that the consumer wants to be in that relationship. Up until recently, researchers have opted to take a narrower empirical investigation into the application of CBE across a specific sector rather than a generalised systematic review. Typically, this involved a review of CBE from a service context (e.g., Islam *et al.*, 2019; Järvi, 2019; Hao, 2020), including online services (Khan *et al.*, 2019; Islam *et al.*, 2019; Lee

et al., 2019) or from a social media marketing perspective (Deng *et al.*, 2020; Wang and Lee, 2020). Although there is little consensus of how to measure CBE, drawing on relationship marketing theory, the process of consumer engagement can be characterised by consumers' 'meaning making' of interactive brand experiences (Graffigna and Gambetti, 2015). The way in which a consumer engages with a brand can be linked to the loyalty level that they exhibit towards the brand, as well as indicating their purchase intention. From the theoretical perspective of this thesis, consumer brand engagement is defined as an individual's assessment of their brand relationships based on current self-fulfilment needs. Emphasis is thus placed on the perceived relational benefits of the brand exchange rather than on the frequency of product usage (Gao *et al.*, 2009; Dwivedi, 2015). Graffigna and Gambetti's (2015) framework (figure 2.6) provides an overview of the metaphorical relationships that exist between a consumer and a brand. The 'friendship' level indicates the lowest level of loyalty. A connection has been made between the consumer and the brand based on an understanding of possible selves but this is on a superficial level. The 'relationship facilitator' level of CBE is defined by a higher level of connection and sharing, with attention being placed on the brand as a social aggregator. The highest level of brand loyalty is observed to be at the 'compass' level. Self-brand congruence is argued to be high at this level, with the brand providing clear linkage between the consumer and their everyday life experiences. With digital CBE being addressed separately in the literature however, despite key differences between online and offline CBE being highlighted (Rasool *et al.*, 2020; Srivastava and Sivaramakrishnan, 2020), Graffigna and Gambetti's (2015) model is yet to be tested in a digital context. Furthermore, the relationship

between the ideal and the actual self on brand engagement in a digital context from this perspective is unexplored. This raises the question of whether the same three levels of brand relationship can be achieved in a digital context.

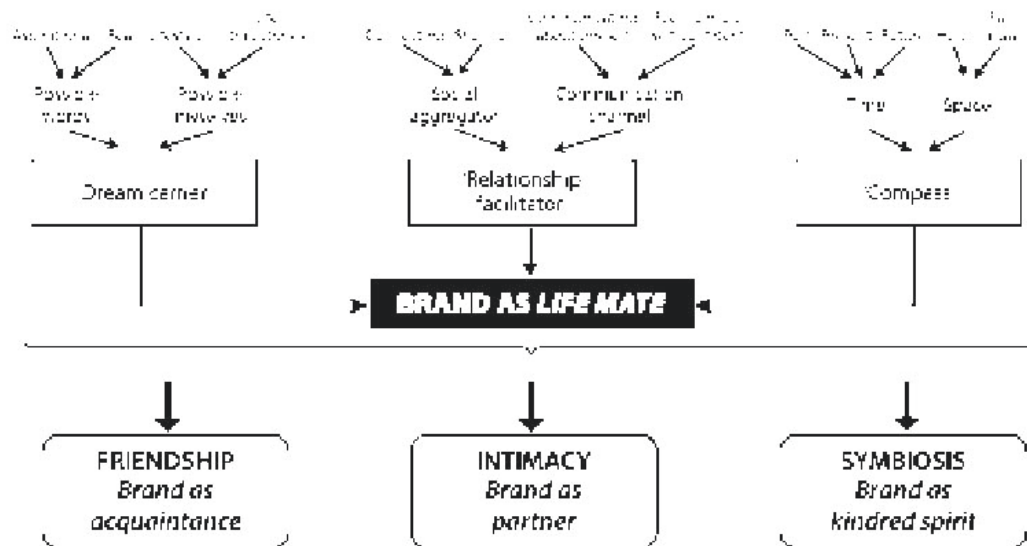


Figure 2.6 The consumer-brand engagement process (Graffigna and Gambetti, 2015, p.616)

The most recent systemic review to date (Rosado-Pinto and Loureiro, 2020) recognises the growing complexity of the topic of CBE and lack of universal conceptualisation. Identification of the main antecedents and main outcomes of CBE (figure 2.7) highlights where the research of this thesis adds to the literature by exploring CBE from the perspective of engagement and disengagement with digital branded possessions. Particular consideration is needed in relation to the multiplicity of what is deemed to be 'positive' or 'negative' brand engagement. Brand disengagement is a further area where this research will make a substantial contribution, in response to calls for more attention to be paid to this important area in need of greater

conceptualisation (Bowden *et al.*, 2015; Dutot and Mosconi, 2016; Rosado-Pinto and Loureiro, 2020).



Figure 2.7 The main antecedents and main outcomes of CBE (Rosado-Pinto and Loureiro, 2020, p.183)

With researchers adopting several different scales in previous CBE studies, Pinto and Loureiro (2020) suggest future research should continue with this to develop a specific scale in the context of the area being studied. Clark and Watson (2016) agree that where there is not an accepted framework of analysis, the research should justify their own approach to address the research gaps. Furthermore, there is a call for more mixed-methods research into this area, which currently only makes up 10% of the overall methodologies (Rosado-Pinto and Loureiro, 2020). A demand for longitudinal research is additionally prominent in the literature, in order to study dimensions of CBE required to maintain long-term brand relationships (ibid). The main area of disagreement in the literature is in relation to whether a consumer consciously opts to be in a relationship with a brand and whether this is a necessary condition for brand engagement. In contrast to Brodie *et al.*'s categorisation (2012), Fritz *et al.* acknowledge the so-called 'un-emotional purpose-based relationship' (2014, p.983) as being long-lasting

(which could be classed as 'brand engagement'), yet satisfaction with the brand is relatively low. This type of relationship can be defined as a 'marriage of convenience' whereby consumers stay with a brand out of habit rather than commitment. This can be further conceptualised by examining motivations for brand avoidance, such as brand choice being based on rejections of an alternative brand (Strandvik *et al.*, 2013; Kim *et al.*, 2016) or due to incongruity between the consumer's personality and the perceived brand personality (White *et al.*, 2012). In this way, it can be surmised that consumers are not in a relationship with a brand to extend their sense of self (Belk, 1988), but as a result of repeated brand activities causing habitual behaviour with that brand. This is based largely on derived utilitarian brand value and can be considered to moderate brand engagement, even if there is a congruence between the consumer's self-concept and the perceived brand personality characteristics.

The role of self-image congruity (congruity between the ideal self and actual self) has been well documented within the consumer behaviour literature as a mediating factor in the quality of brand relationships (Kressmann *et al.*, 2006). Under this guise, self-congruity is evidenced to positively affect brand loyalty directly and indirectly as a result of product involvement, function congruity and brand relationship quality (figure 2.8). A breakdown in self-congruity would therefore affect each of the relational dimensions, threatening the overall stability of the relationship. This is due to the previously discussed innate need for individuals to build their self-esteem by aligning themselves with brands which match their self-concept (Sirgy, 1982) in order to express their identity with possessions acting as an extension to

oneself (Belk, 1988; 1989). Any changes to a consumer's self-concept or perceived brand image would therefore have a detrimental effect on self-esteem, resulting in a need to 'detach' from the brand perceived to be causing such psychological imbalance (Kressmann *et al.*, 2006).

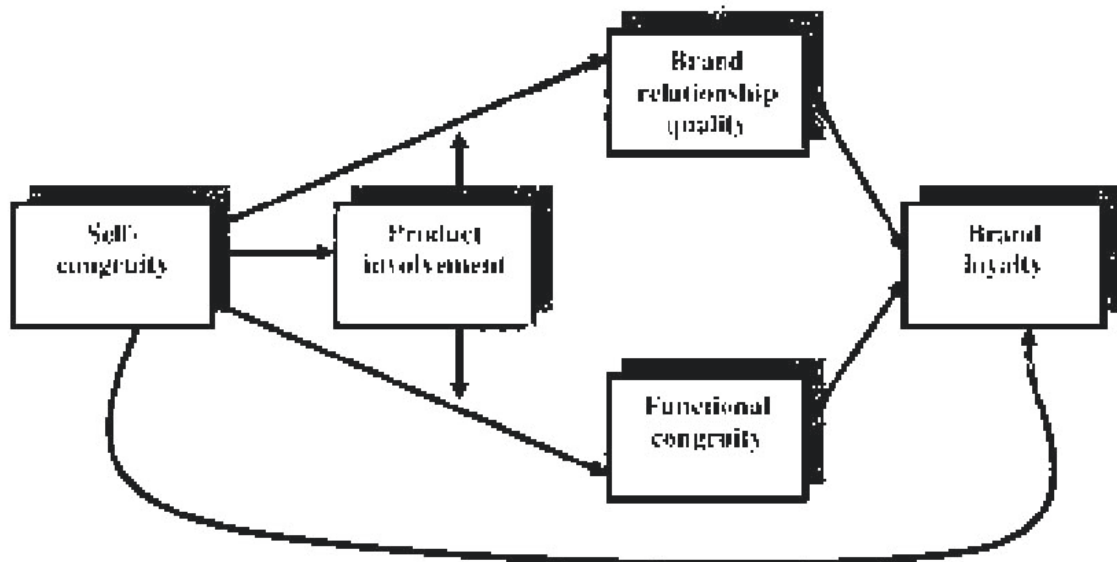


Figure 2.8 The relationship between self-congruity and brand loyalty (Kressmann *et al.*, 2006)

Research into this area is limited, with greater attention being paid to the antecedents of brand loyalty than what leads to brand disengagement. Bowden *et al.* (2015) contest that 'conceptualisations of relationship ending have been largely speculative, underscoring our ignorance about disengagement itself, its unique hallmarks, as well as the processes by which it operates' (p.775). To fulfil this gap in understanding, the researchers propose as a result of their qualitative findings, that the nature of brand disengagement stems largely from failure to meet consumer expectations. These expectations they observe are in the most part based on utilitarian value and functional outcomes (*ibid*). This relates closely to Kressmann *et*

al.'s (2006) aforementioned conceptualisation of the relationship between self-congruity and brand loyalty. From this perspective, 'utilitarian value' relates directly to the 'product involvement' and 'relationship quality' variables – the less interpersonal the relationship, the more the consumer views their relationship with the brand as transactional. Thus, when the product involvement (or service encounter) ends, there is no need for further brand interactions.

Brand engagement can be further explained in consideration of 'functional congruity.' Relating back to Sirgy's (1982) original conceptualisation, functional congruity is defined as the match between the consumer's expectations of the product performance and the performance level that they perceived to have received. In contrast to previous assertions on the role of the self-concept within consumer behaviour, a significant body of literature positions functional congruity as a stronger predictor of brand loyalty within certain contexts (e.g., Johar and Sirgy, 1991; Ahn *et al.*, 2013; Esmailpour, 2015). Several authors continue to report a relationship between the two however, arguing that functional congruity is positively influenced by self-congruity (e.g., Sirgy *et al.*, 1991; Jamal and Goode, 2001; Helgeson and Supphellen, 2004; Sirgy *et al.*, 2005; Yun and Good, 2007). Hung and Petrick (2011) provide further insight into the previously discussed individual influences of the ideal and actual self through their conceptualisation of both factors on functional congruity and overall behaviour intentions (figure 2.9). From this perspective, 'self-congruity' reflects a match between the totality of the self-concept ('self-images') – the ideal self, actual self, social self, social ideal self - and the affective emotion towards the perceived brand image of a

tourism destination ('affective image'). The 'functional congruity' is defined in this context as the relationship between tourists' ideal expectations of the utilitarian value of the destination ('ideal functional image') and their overall perceptions of the features of the destination experience ('cognitive image'). The results from this mixed-methods research, confirmed ideal self-congruity led to the highest behavioural intention, with self-congruity positively influencing functional congruity. Whilst this research advances understanding considerably by separating out the various elements of the self-concept, a key limitation is in its generalisability outside of a tourism context, justifying the need for further research in this area. Significant to the contributions of this thesis, the relationship between self-congruity and functional congruity in particular lacks empirical research in a digital context, despite observed differences between offline and online consumptive behaviour.

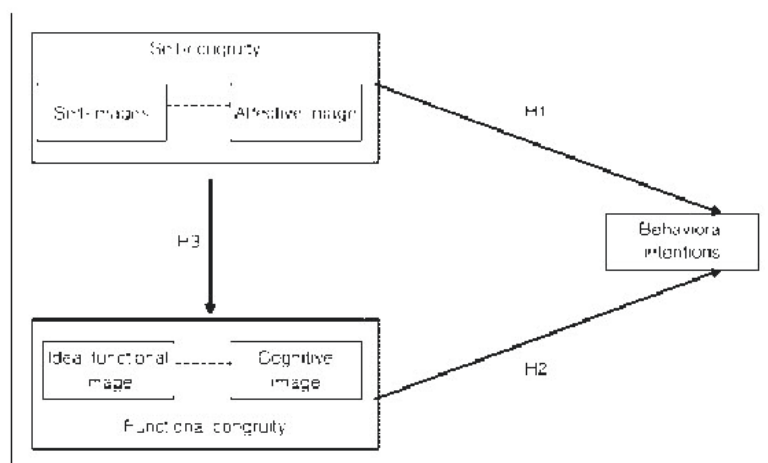


Figure 2.9 The relationship between self-congruity and functional congruity on behavioural intentions (Hung and Petrick, 2011, p.102)

Reflecting on the previously discussed theoretical concepts which this study draws upon, there is a clear assumption being made that all consumers include brands as part of their self-concept in order to seek congruence

(Sirgy, 1982) or to provide a metaphorical extension of their sense of self (Belk 1988, 1989, 2014). What is presented in the following section is an emergent theory that argues that consumers differ in the level of emphasis that they place on valuing brands as part of the self-concept (Sprott *et al.*, 2009). Research into Brand Engagement in Self Concept (BESC) is growing yet lacks extensive empirical research. This research adds to this body of knowledge by positioning the theory of BESC as a moderating factor between the desire for self-brand congruence and continued brand engagement. By critically analysing relevant research which has applied BESC in a marketing context, current gaps in knowledge are foregrounded, particularly in relation to the application of BESC in a digital context.

2.3.2 Brand engagement in self-concept – definition and scale development

Building on research that consumers show variations in the way in which consumers incorporate brands as part of their self-concept, Sprott *et al.* proposed the term 'Brand Engagement in Self-Concept' (BESC) as a 'generalized view of brand in relation to the self' (2009, p.92). This acknowledges previously cited research which argues that individual differences impact on consumers' own structures of self-knowledge. Particular emphasis is placed on favourite brands which are viewed as being closer to a consumer's self-concept than least favourite brands. Increasing levels of BESC result in stronger links between an individual and the extent to which their favourite brand is associated with the self (Sprott *et al.*, 2009). Measuring this moderating variable has implications for predicting anticipated

brand relationship quality, as well as conceptualising customer loyalty and life-time value; both highlighted in the previous section as current limitations within the existing CBE literature.

Sprott *et al.*'s BESC scale (2009) is made up of a one-dimensional measure of brand engagement through eight items rated on a 7-point Likert scale, following a review of relevant literature within the areas of self-concept and CBE. BESC is measured as a continuum, with low levels of BESC attributed to those who do not view brands as important to their self-concept. High levels of BESC are observed by consumers who view brands as highly important to their own sense of self. The measurement construct demonstrates the importance of studying the relationship between consumers' self-concept and the brands they identify with. The research contributes to this area of knowledge by quantifying levels of BESC with brand exposure, purchase behaviour and brand recall, whilst also highlighting the importance of studying the implications of individual differences on brand choice. Of particular relevance to this thesis, when examining the precedents to long-term brand engagement, it was found that consumers with a high level of BESC were more willing than those with a low levels of BESC to wait longer for their favourite brands to release a new product (Sprott *et al.*, 2009). This implies that brand loyalty is stronger with consumers with high levels of BESC, particularly with products where there is strong brand identification as personified through a brand name or logo.

It is important to acknowledge the limitations of Sprott *et al.*'s (2009) original research. No longitudinal or qualitative data was collected to study the effects

of BESC in terms of long-term brand engagement in an offline context or a digital context. In addition, the extent to which consumers with a high level of BESC avoid brands which they deem as not being part of their self-concept was limited to one cross-sectional study. To markedly add to the growing body of literature within this field, these limitations are addressed through the second research objective of this thesis:

Research Objective 2. To examine whether there is a relationship between the digital extended self and brand engagement in self-concept (BESC)

With BESC being a relatively new construct, a systematic review of existing literature which applied the concept of BESC was conducted (see Appendix A). This includes all peer-reviewed published research between the year 2009 (following Sprott *et al.*'s initial conceptualisation) to the year 2020. The systematic review was conducted as a scoping exercise in line with the research objectives. Only the most relevant studies which inform the direction of this research are explored in depth in the following sub-sections, focusing on drivers and outcomes of BESC (section 2.3.2) and generalisability of the BESC scale (section 2.3.3). This is in accordance with guidance from Fisch and Black (2018) to synthesise and interpret knowledge in order to derive meaningful conclusions. In addition to reporting the context of the research and the major findings of each respective study, the methodological approach was also noted, highlighting a distinct lack of mixed-methods and longitudinal research in this area.

2.3.3 Drivers and outcomes of BESC

Examining research into BESC, Goldsmith *et al.* (2012) found a significant, positive relationship between materialism, BESC and status consumption, confirming previous evidence linkages between the three relational factors. However, this research is limited to quantitative data, resulting in no exploration of the drivers of such relationships or whether there is any longevity in these findings beyond the research period. In an attempt to understand the drivers to BESC, Razmus *et al.* (2017) focused on intrinsic and extrinsic personal aspirations, as part of a consumer's self-concept. Their findings support evidence previously highlighted into conspicuous consumption and self-concept (section 2.2) through the assertion that extrinsic aspirations are positively correlated with BESC whereas intrinsic aspirations are negatively correlated with BESC. In this way, it can be argued that consumers who possess more extrinsic aspirations as part of their self-concept, are more likely to want to extend their sense of self through brand associations.

This is further supported by research into two cosplayer communities (Mazzoli *et al.*, 2019) which applied self-determination theory to understand the motivations behind BESC in the context of individuals dressing up to represent different fictional characters (defined as 'cosplay' from a performing arts perspective). Echoing the findings of Razmus *et al.* (2017), the researchers found that the tendency to include brands as part of the self-concept was influenced by extrinsic aspirations driving the cosplayers to show through branded fashion items the characters they embody as the person they see themselves as. This relates back to previous research into the actual self and possessions and the extended self in that the cosplayers are

externally representing their own self-concept. In contrast to Razmus *et al.* (2017), personal (intrinsic) aspirations were found to have an indirect effect on BESC, although the moderators of this relationship were not explored by the researchers in this study. This provides a clear gap in research in relation to the potential moderating effect of intrinsic aspirating on levels of BESC.

Applying research from psychology into the self-concept, emphasis is placed on the importance of individual differences. When considering the outcomes of a high level of BESC, it is therefore important to examine research samples for validity and generalisability of key findings. Building on previous findings that a high level of BESC leads to greater brand loyalty (Spratt *et al.*, 2009; Goldsmith *et al.*, 2012), Ismail *et al.* (2020) evidence distinct categories of Gen Z consumers in relation to levels of BESC and value consciousness (VC). BESC was found to moderate the relationship between VC and brand loyalty to varying extents, resulting in four consumer segments being added to the literature concerning CBE and Gen Z – ‘attentive’, ‘dedicated’, ‘switchers’ and ‘prospective’ (ibid) (figure 2.10). The ‘dedicated’ consumers, with a high level of BESC and a high level of VC, were found to be the most brand loyal out of the four groups, followed by the ‘attentive’ consumers. The ‘Switcher’ consumer group had the lowest levels of BESC and VC and were found to be the most likely to switch between brands. This adds to previous research by highlighting the importance of BESC as a moderating factor on brand loyalty. The study however was based on a sample of students in Malaysia, which the researchers denote has a ‘unique culture’ (ibid). Furthermore, the research was of a cross-sectional design and therefore based on brand loyalty intention rather than actual brand loyalty over a period of time.

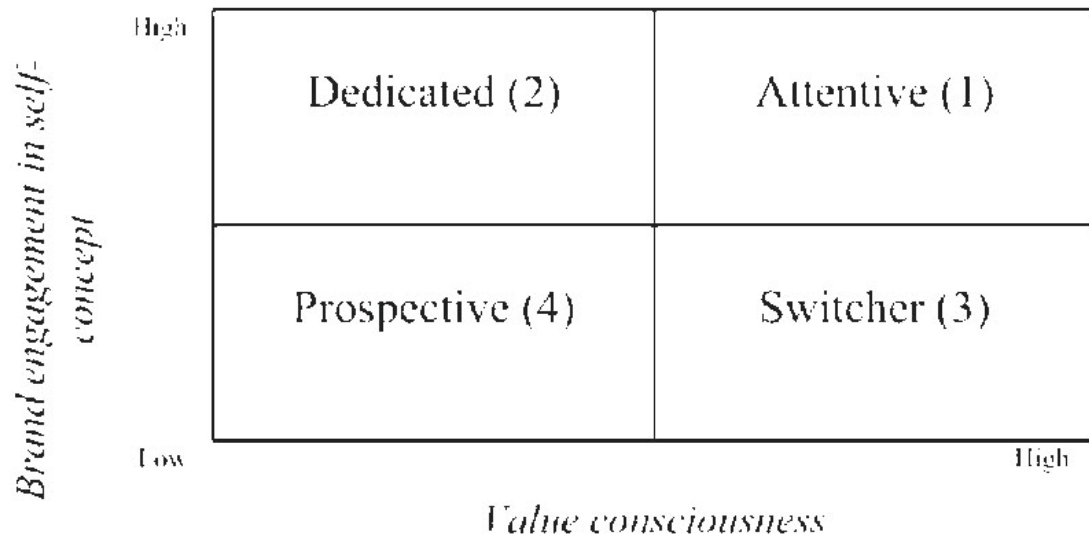


Figure 2.10 Consumer segments of Generation Z in relation to Brand Engagement in Self Concept (BESC) and Value Consciousness (VC) (Ismail *et al.*, 2020, P.9)

Crucially, brand engagement with favourite brands has been found to be mediated by a perceived threat to the self-concept, resulting in consumers showing less of an importance to extending the self through brands when attempting to protect their self-identity (Liu *et al.*, 2018). This is highly significant to the area of self-brand engagement as this suggests that even consumers with a high level of BESC are vulnerable to brand disengagement. A clear gap in research here is in exploring the psychological reasoning behind this disengagement through qualitative research that takes a more in-depth exploration into the human psyche, extending the work of the majority of quantitated research presented in the existing literature.

2.3.4 Scale generalisability

Being a relatively new concept within the consumer behaviour literature, there is currently limited empirical evidence to validate the BESC theory, presenting a clear gap for further research and testing. Previous research that has applied the BESC scale cross-culturally reports the scale to be unidimensional, with high internal consistency across age, gender, ethnicity, income and education level. Reinecke *et al.* (2011) report however that BESC levels decrease with age and increase with household income (*ibid*). This is conflicting with household income generally increasing with age prior to retirement (GovUK, 2020), and therefore in further need of research. Despite continuous support to be reported in the literature of the global construct validity of the BESC scale (Rasmus and Laguna, 2017; Rasmus and Laguna, 2019; Ismail *et al.*, 2020), Flynn *et al.* (2013) and Rasmus *et al.* (2020) found also culture to have a significant impact on levels of BESC. When making cross-cultural comparisons between the USA and Korea, Flynn *et al.* (2013) found that consumers from the USA had a higher level of BESC than Korean consumers. However, materialism was found to be more prevalent in Korean culture than in the USA. Applying Sprott *et al.*'s BESC scale (2009) across Austria, Italy and Poland, Rasmus *et al.* (2020) reported varying levels of BESC. The researchers argue that consumers in Poland were found to have the highest level of BESC due to being 'most sensitized to brands in relation to the self' (2020, p.790). It should be noted however, that the consumers they tested in Poland were from the youngest age group and age has previously been found to be a mediating factor of BESC (Reinecke *et al.*, 2011). Furthermore, the BESC scale could be considered as too generalised to compare across cultures, with calls for a more 'brand specific' measure of BESC being made in the literature (Flynn *et al.*, 2013).

Moreover, it is pertinent to fill the gap in the literature that is overwhelming clear from the lack of qualitative research within this area. In order to gain an in-depth understanding of the drivers and outcomes of BESC, qualitative research needs to be conducted to explore the quantitative findings in their real-world settings (Dwivedi *et al.*, 2020). This will add to the literature through the methodological advancements that are made in studying this area of CBE, in addition to the theoretical contributions made to fulfil the aforementioned current gaps in research. What is particularly explicit within this section is the need to conduct further research in relation to BESC from a digital brand engagement context as well as extending the research into possessions and the extended self in consideration that computer-mediated environments have been found to have explicit implications on the formation of the ideal and actual self (Turkle, 2005; 2011; Belk, 2013; 2014; 2020; Okazaki *et al.*, 2019; Mirbabaie *et al.*, 2020). This will be explored in depth in the following section in order to provide a holistic understanding of BESC in relation to digital branded possessions to extend the digital self.

2.4 Marketing to the Digital Self

In recent years, the consumer behaviour literature has widened considerably to explore the implications of the digital environment on CBE. Under this broad umbrella, particular attention has been paid to studying digital brand communities (e.g., Habibi *et al.*, 2014; Essamri *et al.*, 2019; Cheng *et al.*, 2020), and digital marketing strategies to increase brand engagement online and offline (e.g., Goldsmith and Goldsmith, 2012; Leckie *et al.*, 2016; Mohammad *et al.*, 2020). What is significantly lacking in the literature, is an

understanding of the differences between a consumer's self-concept in the online environment in comparison to a consumer's perception of their sense of self in an offline environment. Without this knowledge, brands are essentially targeting consumers under the assumption that individuals' needs, wants and self-presentation are unimpacted by the online environment. To address this gap in knowledge, section 2.4.1 applies research into the so-called 'digital self' to a marketing context in order to ascertain the implications of this for the research under study. This is followed by section 2.4.2 which examines the emergent area of research into engagement with digital branded possessions, building on Belk's theory of possessions and the extended self (1988). Section 2.4.3 focuses on providing a theoretical background to the main contribution to the literature in regard to the continued usage and non-usage of branded Smartphone Applications (apps). This addresses a fundamental gap in the literature, with much research having previously concentrated on branded app adoption and a lack of attention being paid to why consumers continue or discontinue using branded apps.

2.4.1 Defining the digital self

As the internet evolves and expands, academic interest from multiple disciplines continues to diversify. Of relevance to the identified field of study is the impact the digital environment has on the self-concept of individual internet users. It is imperative to define this shift in understanding of the self to be able to take an ontological approach to assessing the implications in both an online and an offline existence (Hongladarom, 2011). The term

'digital self' is frequently interchanged with such identifications as 'cyber self', 'online self', 'virtual self-presentation' and 'virtual self'. The largest body of research refers to the 'virtual self' and generally refers to avatars that gamers create as a representation of their actual self or ideal self in a virtual gaming world (McCreery *et al.*, 2012). Research in relation to the virtual self through avatar formation is vast and beyond the scope of the research in respect of the impact of the digital self on brand engagement, yet offers an alternative perspective to how an individual can engage with the digital environment to reveal a part of their self-concept. The definition applied within this thesis is one which places the concept firmly within the marketing literature and is synonymous with Belk's updated theory of possessions and the extended self (2013).

Applying Belk's (2013) theory of the '4 Cs', the self is considered to embody a projection of an individual's desire to connect with others remotely, consume online content to influence their behaviour intentions, create online content to reflect their personal and social aspirations, and to take control of the content that they consume. Under this guise, the digital self cannot be viewed in isolation to an individual's consumption behaviour, or in avoidance of the impact that changes in technology have had upon representations of the self. Epps (2014) characterises the digital self as developing from two phases. The first phase corresponds with Kohut's theory of transference (2009) in that the self is projected and traverses space and time to connect to people remotely. This relates closely to self-esteem in that the greater the similarity between the self and that which it is projected on to, the higher the individual's self-esteem is thought to be. From this perspective, the digital

self is a symbolic representation of the offline self through the use of signs and symbols in a digital environment. These could be in relation to the use of specific tools such as websites, blogs or social media platforms as symbolic representations of the self, or through the use of emojis, images, icons or hyperlinks (Schau and Gilly, 2003). In this way, internet users are in control of the way in which they construct themselves in a digital environment, using technology to display their notion of self symbolically. Davis (2014) theorises this process as 'self-triangulation' in which the digital self and the offline self reflects the individual's self-concept. The digital environment has furthermore been found to provide greater opportunities to build self-esteem in an offline sense by developing coping strategies to deal with any negativity received in a digital environment (Whitman and Gottdiener, 2016). This argument corresponds to Turkle's (1984; 1999; 2005; 2011; 2012) observations which principally identified the computer as a mirror to an individual's self-concept; a 'second self' rather than a tool. With the growth of the internet, this notion developed over time to re-evaluate identity construction and relationship building in relation to other people now being present in the 'looking glass' of the virtual world (Turkle, 1999, p.643).

The perspective of the digital self presented above implies that the internet user desires for there to be congruency between their digital self and offline self for triangulation to occur. An alternative perspective takes into account the multiplicity of the self, recognising that the digital environment allows for multiple digital selves, which may or may not relate to each other or the offline self. This aligns with Goffman's observations (1959) that people vary between 'front stage' and 'back stage' personas, depending on where they

are and their respective audience. Whilst 'back stage' identities are considered private to the individual, 'front stage' personas are argued to be contextual and deemed appropriate by the individual for that moment in time. This is an interesting concept to apply to the digital environment which arguably transverses space and time. The way that an internet user chooses to portray their multiple identities online at any particular moment in time, in reality is captured digitally to be viewed at any point in the near or distant future (Beck, 2015). With this in mind, it can be said that digital technology provides an individual with the opportunity to construct multiple versions of the self, disseminated to different audiences. What is more, digital versions of the self can be entirely separate from the person that is presented in a physical world. How and why digital technology is used in this way is not only a fascinating area of enquiry, there are also clear implications for brands trying to form relationships with consumers based on their self-concept, as discussed earlier in this chapter.

The second phase of the digital self involves the individual maintaining a sense of digital identity whilst gaining an 'enhanced presence in physical space' (Epps, 2014, p.137). Technology does not create a digital self, the digital self is created based on the users' intentions towards the use of technology in relation to their own self-branding (Whitmer, 2019). This poses an insightful yet challenging wide area of research as technology, and the way people engage with technology, is constantly changing. Furthermore, the literature continues to debate the extent to which identity construction within the online world affects an individual's self-concept outside of the digital environment (Davis, 2013). This is made further complicated as the lines

between our 'offline' lives and our 'online' lives become increasingly blurred (Jordan, 2009). Indeed, Suler (2015) argues that it is a false dichotomy to distinguish between the two. At the onset of the internet, people can be said to have viewed cyberspaces as 'disembodied' in that there was initially little connection between our physical bodies and online activities we engaged with. In this way, the internet was viewed as more of a passive tool for knowledge enhancement.

With the growth of digital devices having more of a physical presence in our daily lives, such as with Smartwatches and virtual reality headsets, it can be argued that digital technology has naturally become an extension of ourselves (Belk, 2013). Furthermore, Chen argues that the construction of the digital self 'unconsciously relies on lived experience and mediated experience' (2016, p.234). In this way, Thrift (2003) argues that digital devices are more than just a commodity in that they cross the boundary between human and inhuman through the presence of 'intelligent environments' that connect not just with the user, but with the world around them. Cyberpsychology by its very definition is concerned with this phenomenon, viewing the digital realm as an 'extension of our minds' (Suler, 2015, p.22). This supports Turkle's more recent contribution to this academic field of study, asserting that the computer 'enters into our thinking about mind through our everyday interactions with computational objects' (2011, p.204). Particularly with wearable devices, it can be argued that the screen is no longer a mere reflection of oneself, as historically argued by Turkle (1985), but rather an extension of the self as a result of the increased opportunities to utilise the digital environment to increase one's self esteem and take control over the

maintenance and development of one's self-concept (Belk, 2013; 2014; 2016). Jenkins and Denegri-Knott refer to the use of digital possessions in this way as 'consumer mind extensions' (2017, p.2), although research has predominately applied this concept to Artificial Intelligence (AI).

The updated concept of Belk's theory of possessions and the extended self is discussed in the following sub-section.

2.4.2 The extended digital self and consumer behaviour

Belk (2013) updated his seminal theory of possessions and the extended self to acknowledge the extended self in a digital environment, following criticisms that his original writings do not take into account the 'digital fusions' that have occurred (Sheth and Solomon, 2014, p.125). Rather than seeing digital consumption as separate to offline consumer behaviour, Sheth and Solomon (ibid) highlight three fundamental 'fusions' between offline and online behaviour (figure 2.11), urging Belk to consider the impact of digital technology in line with increasing research into the formation of digital identities. This takes into account aforementioned arguments into the blurring of 'online' and 'offline' environments, the fusion of the consumer also being a producer of content within the digital realm, and the move towards greater digital technological presence as part of the body. In response to this, Belk (2013) proposed five thematic developments to the theory of possessions and the extended self (1998) (figure 2.12). Each of these themes has become the subject of much academic debate and interest from multiple perspectives as digital technology continues to expand. Continuous scrutiny of these areas is important, with the fundamental acknowledgement that as technology

changes, so too will our understanding of the digital self and its position within consumer behaviour. This calls for applied and specific further research into the digital self from a marketing perspective, in order to understand how changes within academic argument in this area inform the field of consumer behaviour research. Only then can conclusions be drawn to inform the future application of knowledge and empirical testing within the CBE and BESC literature.

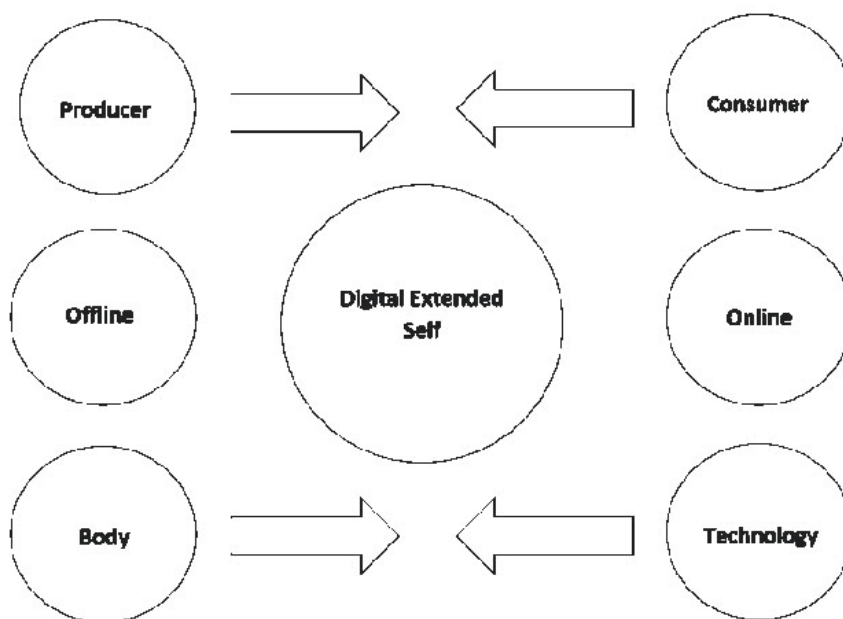


Figure 2.11 The digital extended self – Three boundary fusions (Sheth and Solomon, 2014, p.125)

The areas of research from Belk's presentation of digital modifications of the digital self (2013) that are of high importance to the research study of this thesis are dematerialisation and co-construction of the self. These areas of research are critically appraised to highlight the significance of this to marketing to the digital self.

SUMMARY OF DIGITAL MODIFICATIONS OF THE EXTENDED SELF

Digital dimension	Self	Possessions
Dematerialization		Attachment to and singularization of virtual possessions; almost, but not quite the same
Reembodiment	Avatars affect offline self; multiplicity of selves	Attachment to avatars
Sharing	Self revelation; loss of control	Aggregate possessions; sense of shared place online
Co construction of self	Affirmation of self; building aggregate extended self; "Attachment to Virtual Possessions in Videogames"	
Distributed memory	Narratives of self	Digital clutter; digital cues to sense of past

Figure 2.12 A summary of the digital modifications of the extended self (Belk, 2013, P.3)

Undeniably, the internet has led to, and continues to involve, a change in consumption behaviour through the digitalisation of once purely physical objects, such as books, CDs and DVDs. This shift has resulted in several changes to the consumer's self-concept as extensions of the self are now projected through non-tangible 'digital possessions' rather than physical objects; an evolution which has been termed 'dematerialisation' (Belk, 2014). This poses a highly interesting shift within the marketing literature which previously concentrated on the challenges posed by intangibility of services (Rushton and Carson, 1989) rather than the intangibility of products. Ownership of digital possessions is one particular area of contention within the literature. Whilst digital possessions remain intangible in that they are only present in a virtual sense, ownership is argued to differ depending on the consumer's psychological associations with that item and the usage intentions (Denegri-Knott *et al.*, 2012; Cushing, 2013; Helm *et al.*, 2018). One consideration is that digital possessions serve to liberate the consumer from physical ownership by being access-based and therefore only being available to the consumer during the consumption period, such as through

music and television streaming services. Bardhi & Eckhardt (2012) support this view, asserting that consumers have more of a 'liquid relationship' with digital possessions, forming short-term attachments based on the value of such objects at a particular moment in time. This brings to the forefront research into the shifting nature of ownership of possessions and the impact of this on attachment and long-term product usage as a form of brand engagement. Lawson *et al.* agree that 'consumers are increasingly attracted to the idea of access rather than ownership' (2016, p.2615) of goods and services. The researchers suggest that there are several motivating factors which influence the consumer to choose access-based digital possessions rather than tangible goods and services, identifying four different clusters of consumers based on their different purchase motivations. This suggests that consumers can be categorised by individual differences to understand their use of digital possessions. However, the evidence presented is based on behavioural intentions to use access-based possessions rather than analysing actual usage data. Highly significant to the study within this thesis, nevertheless, are the findings which evidence that access-based consumption is significantly different to the consumption of physically owned possessions (Lawson *et al.*, 2016). Reflecting back on section 2.3, research must therefore determine how digital possessions are being used to extend the (digital) self, and to what extent CBE occurs in the digital environment as a result of digital BESS. This is particularly important with digital virtual goods (DVGS) which cease to exist in an offline context.

One particularly important difference between physical and digital possessions rests with the lack of legal ownership of the latter. With access-

based consumption resulting in temporary (or 'liquid') consumption, fundamental importance is placed in the literature on the psychological ownership of goods to extend the self. Psychological ownership can be defined as a cognitive and affective state in which a consumer places personal meaning and significance on a possession which they view as having a close connection to themselves (Jussila *et al.*, 2015). Significantly, this concept is closely related to theories of self-concept and extending the self, and an area which is viewed as a highly valuable area of future research with the CBE literature (Hulland *et al.*, 2015; Jussila *et al.*, 2015). Particular emphasis is placed on researchers exploring how psychological ownership is changing the self-concept. Importantly, Morewedge *et al.* (2020) acknowledge in their conceptual review that 'it is likely that features of psychological ownership are not universal or static' (p. 213). This relates back to the importance of researching individual differences on consumptive behaviour and the need for a holistic approach to studying how digital possessions are used to extend the self over a period of time. Indeed, the digital self has been found to be extended to a greater extent with some digital possessions more than others. Digital photographs and social messaging platforms, alongside digital CVs, are deemed to have the greatest impact on self-extension (Cushing, 2011). Digital music also allows for individuals to develop their own self-concept through digital music sharing functionality, mainly through self-expression but also from an altruistic perspective (Lee *et al.*, 2011).

With greater capability to share digital possessions with others online than in an offline context, it can further be argued that digital possessions allow for great ability to project one's actual self and ideal self, depending on individual

motivations to engage with such technology. For example, digital photographs are no longer considered to be valued for their functional role of capturing memories. Contrastingly, digital images are most often regarded as a tool for the construction of self-identity and communicating a user's self-concept to others (van Dijck, 2008). Despite this perceived control held by the digital self however, an individual's self-concept remains fragile within an online environment open to sharing of non-owned content, including photographs and music. There is a threat of unintended exposure of the self, particularly on social networks where people can 'tag' and comment on other users' profiles. This has led to greater emphasis being placed on exploring online self-presentation techniques, with research relating to the sharing of information in order to examine whether users present their actual selves or ideal selves online (e.g., Jin, 2013; Gil-Or *et al.*, 2015; Michikyan *et al.*, 2015; Dhir *et al.*, 2016; Marshall *et al.*, 2020).

Within Belk's original possessions and the extended self theory (1988), the concept of sharing from a consumer behaviour perspective is linked to the way in which consumers extend themselves by gaining the approval of others for their possessions. Belk (2013) notes that previously this kind of behaviour would have been rude in an offline context due to 'oversharing' but is now considered quite acceptable. In contrast, the digital environment provides increasing opportunities to manage and construct how one is seen by others in an online, and consequently offline perspective. Gaining an understanding of self-concept through consumers' use of brands as a means of digital self-extension is critical for brands to adapt their marketing strategies in the ever-evolving digital era.

One strategy that has been identified to help individuals to maintain their sense of digital self is through the use of others in the co-construction of the self. Building on previously discussed theoretical knowledge that brands can be viewed as extensions of one's self-concept, the digital space is argued to facilitate increased brand engagement through interactive experiences between consumer and brand (Brodie *et al.*, 2011). This relates directly to Sheth and Solomon's identification of a 'digital fusion' (2014) between the consumer as both a producer and consumer of branded content. Outside of brand-initiated and organically grown brand communities, which are beyond the scope of this thesis, the digital environment provides the opportunity for brands to build closer relationships with consumers in order to create meaningful brand interactions (Hollebeek, 2011a) .

The use of brand social media pages has gained a growing amount of attention in relation to how consumers engage with these fan pages to extend the self. Particular attention is placed on Candice, Hollenbeck and Kaikati's (2012) research which evidenced consumers interacting with branded Facebook pages to express varying parts of the self-concept (figure 2.13). Interestingly, the social self is not represented here, despite considerable evidence highlighting the role of social media in shaping user's identities to be viewed by others. However, this does provide evidence of the role of brands in the digital space to partake in the co-construction of individual identities, drawing on previously discussed research into the self-concept and CBE (section 2.3). This is further amplified by research into the outcomes of digital extension through digital brand engagement in relation to increased

levels of brand loyalty and positive WOM (e.g., Leventhal *et al.*, 2014, Wallace *et al.*, 2017; Wu *et al.*, 2018; Park *et al.*, 2020). Crucially, research has also found ideal self-congruence between the consumer and brands incorporated into the digital self to mediate so-called 'trash-talking' in which consumers defend a brand that has received negative feedback from other consumers (Japutra *et al.*, 2018). This can be related back to the notion of 'ideal self presentation'(Candice *et al.*, 2012), with an individual exercising their need to protect their own sense of identity in order to maintain higher self-esteem. In this way, consumers engage with WOM opportunities for self-preservation rather than for providing feedback to a brand (Saenger, Thomas and Bock, 2020) as part of the co-construction of the self online.

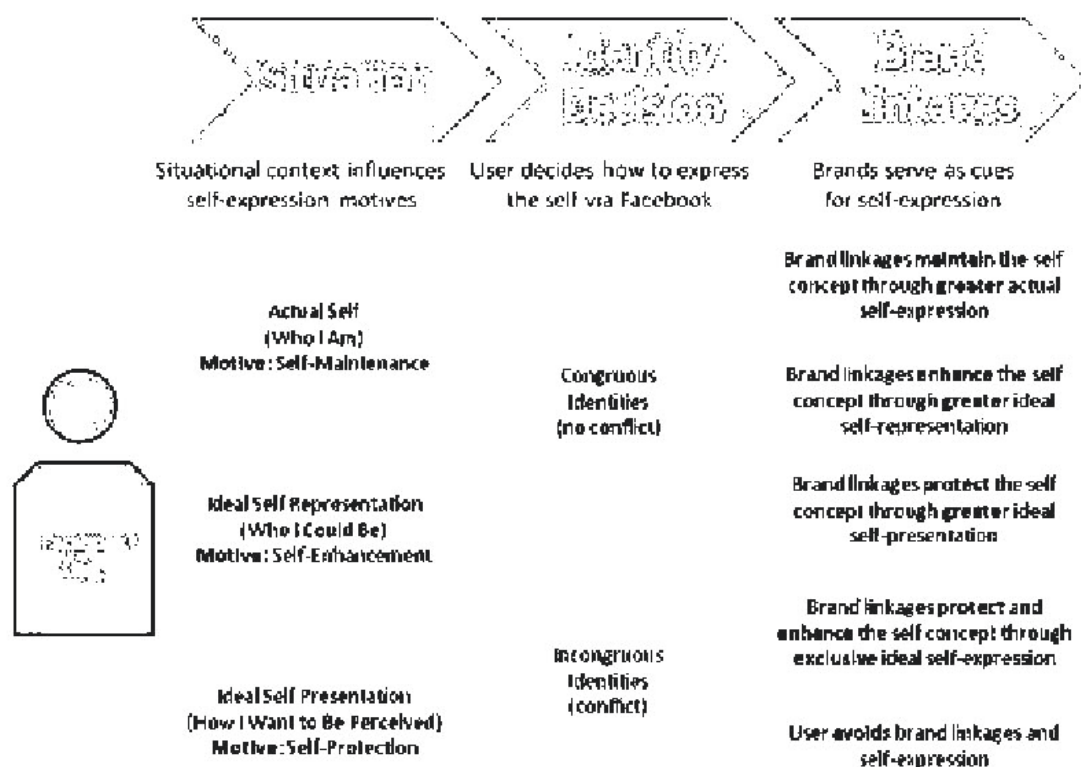


Figure 2.13 Expression of the self-concept through branded Facebook pages (Candice *et al.*, 2012)

Although there is a growing amount of research focusing on digitally branded content that is shared with others, research into the relationship between the digital self and brand-owned content which is not shared with others is distinctly lacking. As demonstrated within this critical review, gaining an understanding of self-concept through consumers' use of brands as a means of digital self-extension is critical for brands to adapt their marketing strategies in the ever-evolving digital era. Yet, there is a considerable gap between research into physical branded goods to extend the self and digitally branded goods, especially those which are typically not shared with others and therefore relate to the ideal and the actual self rather than the social self. With app engagement growing, particularly amongst Gen Z (Sözer, 2020), yet app retention continuously found to be low (AppAnnie, 2020), a clear and pressing need for research in this area is recognised (Ho and Chung, 2020). Consequently, the final section of this literature review goes beyond research into app adoption to consider factors impacting on app retention in relation to digital possessions and the extended self, moderated by BESC. Non-usage of branded apps is also discussed, with the non-usage of digital possessions being cited as a further neglected area of research (Ickin *et al.*, 2017).

2.5 Branded Smartphone applications

The final section of this literature review assesses existing research into brand engagement with branded apps in order to highlight key gaps in knowledge which this thesis fulfils. For the purpose of the review, branded apps are defined as 'software downloadable to a mobile device which prominently

displays a brand identity, often via the name of the app and the appearance of a brand logo or icon, throughout the user experience' (Bellman *et al.*, 2011, p. 191). With the ability to choose and download apps from the relevant app store and store these to one's personal Smartphone device, apps themselves can be defined as 'digital possessions' (Belk, 2014) which consumers form particular attachments to (Roy *et al.*, 2017; Chin *et al.*, 2019; Li and Fang, 2019; Tran *et al.*, 2020), yet empirical research into the reasons for this attachment is significantly lacking.

Section 2.5.1 begins by highlighting key findings from existing research into continued app usage, which is fundamentally based on usage continuance intentions. Calls for further research into actual usage as a form of digital brand engagement are positioned in light of this. Section 2.5.2 focuses on a further area of contribution in relation to non-usage of branded apps in which a user has downloaded an app to their Smartphone but has either discontinued using or not engaged with at all. This positions the research within the area of 'app hate' as well as more generally adding to the literature of non-usage of digital possessions and the role of the self-concept. This section is summarised by drawing conclusions on research into the self-concept, and digital brand engagement with branded apps to extend the (digital) self. By making links between these identified focus points, an applicable research approach and methodology is adopted in line with the research objectives to inform the direction of the thesis.

2.5.1 Intention to use branded Smartphone applications

Being highly personable devices, Smartphones can be viewed as an extension of oneself in which consumers can manage their daily lives as well as well as interact digitally (Epps, 2014). In light of this, the scope of the research lies beyond technology adoption, focusing on branded apps that a consumer has already downloaded to their Smartphone device rather than apps that they intend to download. This enables usage patterns with branded apps to be studied in order to identify whether any links can be made between continued usage and digital BESC, as previously conceptualised in the aforementioned sections of the literature review.

Highly significant to this study, is evidence which pinpoints individual differences in personality traits which affect preference for applications usage patterns (e.g., Meng *et al.*, 2014; Xu *et al.*, 2016; Fang, 2017; Kim and Lee, 2018). Meng *et al.*'s (2014) longitudinal research is of particular importance as one of the few studies which measures engagement with branded apps across a substantial period of time. From a sample of 120 Smartphone users studied across a three-year period, the Big-Five personality traits were used to examine how individual differences impacted upon the amount of time spent using apps. Findings indicated that individuals found to be more open/less conscientious were more likely to use their apps for a greater amount of time than less open/more conscientious individuals. When app categories were broken down further, interestingly introverted individuals were observed to play more games than extroverted individuals who spent more time on social networking, multimedia and browser apps. This raises the importance of studying specific app features to determine their significance when correlating any relationship between individual personality

differences and app usage behaviour. This is supported by Xu *et al.* (2016) who compared personality traits across a wide range of app categories using app usage data as part of a large-scale field study into app adoption. Their findings indicate that personality has a significant impact on app adoption, with the Big Five personality traits showing varying correlations across the categories apart from 'openness to experience' which was found to have no impact on app adoption across any of the seven categories that were studied. The research of this thesis builds on the machine-learning model which was utilised through a specifically designed Android app to predict personality traits, by applying a traditional self-report method. This allows for perceptions of personality to be gathered based on an individual's own self-assessment. Xu *et al.*'s findings (2016) can further be contextualised by studying app usage continuance on individual apps within the category of m-commerce. This allows for focused research to emerge beyond the adoption period to support previous research into intended app usage.

Longitudinal research has not been conducted to specifically test for a relationship between a user's self-concept and their usage of their favourite branded apps and how this usage effects brand engagement. However, Peng, Chen and Wen's (2014) cross-sectional research found that intention to adopt branded Smartphone apps within the banking industry was significantly linked to perceived brand relationship and perceived consumption value of the app, bringing together notions of branded digital possessions being an extension of oneself through brand identification and specific app features contributing to this. Usage continuance intention to engage with branded apps was further explored by Li and Fang (2019) in the context of the

MyStarbucks app. Applying the Expectation Confirmation Model (ECM) (Bhattacharjee, 2001), the researchers evidence that congruence between the consumer's self-concept and perceived brand personality has a positive effect on brand attachment which subsequently lead to usage continuance intention. This is complemented by perceived usefulness of the app and satisfaction towards the branded app (ibid), highlighting that self-congruence directly impacts on the likelihood of a consumer continuing to use an app based on their attachment to the brand.

To build on the two studies reviewed above, usage intention needs to be studied in relation to actual usage. This is particularly important as usage intention has previously been found to be significantly different to actual usage in the context of habitual technological behaviour (Cheung and Limayem, 2005; Limayem *et al.*, 2007). Furthermore, a more holistic look at a user's branded app engagement is needed to determine the moderating effect of BESC on continued usage, as informed by previously discussed research into self-concept and CBE. Currently, research in this area is limited. Of particular significance are Yang's (2016) findings which show a strong moderating effect of self-congruence between a consumer's ideal self and perceived brand image. Using a survey method and Likert scale, Yang (ibid) measured ideal self-congruence as moderating effect on the relationship between consumer empathy and brand attachment. Findings propose that the higher the level of ideal self-image congruence between the consumer and brand (brand image correlates with a consumer's ideal self), the greater the attachment the consumer will possess to the brand's app. No evidence however is presented in relation to specific usage of the apps or whether this

had an effect on long-term brand engagement. There is also no comparison measured between a consumer's ideal self-congruence with their branded apps and a consumer's actual self-congruence with their branded apps.

Reflecting on the research discussed above, a clear research gap is presented as the previous sections of this review highlighted the moderating role of the entirety of the self-concept on brand engagement. In a digital context this is yet to be explored in relation to branded apps, leading to the third and fourth objectives of this thesis:

Research Objective 3. To explore congruency between a consumer's ideal self and perceived brand personality as a form of digital self-extension, moderated by level of brand engagement in self-concept (BESC)

Research Objective 4. To explore congruency between a consumer's actual self and perceived brand personality as a form of digital self-extension, moderated by level of brand engagement in self-concept (BESC)

The importance of this area of study is further highlighted in the following sub-section by reviewing research into the outcomes of branded app usage as a form of brand engagement, which has been found to lead to increased brand loyalty, purchase intention and brand love.

2.5.2 Usage of branded Smartphone applications as a prerequisite to brand engagement

For brand engagement to occur, as previously determined within section 2.3, interactivity between a consumer and a brand is required. In terms of branded apps, brand engagement can be construed as continued usage of the app once it has been downloaded, equating to continued interactivity between a consumer and the brand. Kim, Lin and Sung's research (2013) into engaging consumers via branded Smartphone apps through unique experiences offers great insight into how mobile technology can be used by brands to stimulate engagement. This takes the emphasis away from tangible product experiences to online interactions which the consumer seeks to repeatedly involve themselves in (Lemmink *et al.*, 2019), interwoven with consistent brand messages via the branded app (Bellman *et al.*, 2011). In this way, consumers are able to experience meaningful brand experiences by brands incorporating 'vividness attributes' which utilise mobile technology to engage the consumer, such as location technology. This was found to be utilised to a lesser extent by service brands however, where informational message strategies were more prevalent (Kim *et al.*, 2013). This could be due to services requiring more information-based content to provide 'tangibility' to the services they offer.

Noort and Reijmersdal (2019) extend these findings, evidencing that an informational app enhanced cognitive brand responses whereas an entertainment-based app increased affective brand responses. This is consistent with previously discussed research into brand value which highlighted the importance of functional congruity, supported by self-image congruity (e.g., Sirgy *et al.*, 1991; Hung and Petrick, 2011; Johar and Sirgy, 2013). However, this research is based on an experimental design in which

participants were given either an entertainment-based or information-based app to download. The research was not based on the participants' own downloaded apps and therefore contradicts research into possessions and the extended self (Belk 1988, 1989; 2014). In order for a possession to be used to extend the self, the ownership of this (including psychological ownership as would be the case with branded apps) needs to be meaningful as part of the consumer's self-concept.

Measuring consumer engagement with branded apps relates directly to what has been defined in the literature as 'app stickiness' based on consumers' willingness to continue using particular apps after initial download to their device (Kim *et al.*, 2016), particularly if users are information seekers and dependent on the app functionality (Sarkar and Sarker, 2019). Kim *et al.*'s research (2016) positions the area of app research beyond app adoption by measuring the correlation between mobile app features, perceived benefits and post-adoption behaviours in relation to continued usage and subsequent word-of-mouth behaviour. By utilising motivational theory and extending previous applications of the Technology Acceptance Model (TAM), conclusions are drawn into the implications of both intrinsic and extrinsic motivational factors on the relationship between app characteristics and post-adoption behaviour. Stocchi *et al.* (2019) support these findings by evidencing perceived usefulness and perceived ease of use of app features to significantly affect intention to continue using the app, as well as increased likelihood to recommend the app to others. This is further conceptualised by Tseuen-Ho and Jia-Wei (2020) within their hierarchical structure of mobile app stickiness which places increased value on the functional value of the app as well as the

perceived self-efficacy within retail apps. This is reflective of research into continuance intention with internet-based services which emphasised the role of cognitive absorption (CA) (Jumaan *et al.*, 2020). CA is defined as 'as a state of deep involvement with IT' (*ibid*, p.3) and was found by the researchers to be the most robust predictor of usage continuance, influenced by expectation confirmation and customer satisfaction. This is contextualised by the observations of Shin and Back (2020) who recognise cognitive engagement as 'absorption' and 'attention' towards a brand. Tseuen-Ho and Jia-Wei's (2020) research however is a rather generalised view on the effects of app functionality on post-adoption behaviour as individual differences between Smartphone users are disregarded despite the previously discussed correlations that have been identified in relation to app adoption and possessions and the extended self. The research was also based on only one company's app, restricting the generalisability of the findings.

One key question which remains from analysing the existing literature, is the importance of individual differences on continued usage of branded apps. This takes the focus of research into branded apps beyond the functional perceived value of the apps to the emotional and social values which consumers attribute to the branded apps that they download (Hsu and Lin, 2015; Alnawas and Aburub, 2016). This is reinforced by Alnawas and Aburub (2016) who applied the users and gratifications theory to examine the benefits of engaging with branded apps to the user, in order to contextualise findings between app usage and increased customer satisfaction and purchase intention. They concluded that there needed to be a shift in focus from technology adoption and specific ease of use app features to investigating the

impact of the drivers of customer satisfaction, leading to purchase intention. This includes learning benefits, social integrative benefits, personal integrative benefits and hedonic benefits. Alnawas and Aburub (ibid) further outline the need for future research to examine how product and consumer characteristics (including perceived individual differences) moderate the relationship between the interactive benefits of apps, customer satisfaction and purchase intention.

Research into perceived personality of branded apps is significantly limited, despite previous research highlighting that consumers assign personality dimensions to social media pages (e.g., De Moya and Jain, 2013; Doodoo, 2018; Carpentier *et al.*, 2019) and websites (e.g., Okazaki, 2006; Opoku *et al.*, 2009; Vinyals-Mirabent *et al.*, 2019). The most relevant research to consider takes a generalised overview of apps as a whole rather than focusing on m-commerce apps specifically. Tan *et al.* (2018) reason that perceived app personality traits are derived from the user's personality traits, echoing previous research that possessions are being chosen that are congruent as a form of maintenance of the self-concept. The researchers note however that the nature of the app must be taken into account when assessing the personality (Tan *et al.*, 2018), although they deliberately instructed participants to ignore the brand of the app. This starkly contrasts with previously discussed research into the importance of brand personality on the ownership of physical and digital possessions. Whilst the researchers provide four distinct dimensions of 'app personality', the role of the perceived brand personality of the app is ignored. This poses a clear gap in the research between brand personality and branded apps to truly understand the

relationship between app usage and brand engagement, moderated by levels of BESC. Furthermore, the research is based on self-reported app behaviour rather than actual behaviour which promotes another clear gap between behaviour intentions and actual behaviour. Qualitative research is therefore needed to examine whether the user is attributing a brand personality or an app personality. If a branded app is to be examined as a digital extension of the self, the perceived foundations of the congruence need to be examined. A key contribution to this thesis lies in bridging this gap in understanding through the fifth research objective:

Research Objective 5. To investigate consumers' perceptions of their brand relationship in relation to digital BESC and digital self-extension

The impact of consumers' expectations and attitudes towards branded apps need to be taken into account to study the influence of direct experience on the continued usage of apps as an intangible digital possession. It is also important to assess the drivers and outcomes of forming brand relationships through a digital medium to conceptualise the role of digital possessions within BESC as an extension of the self in a digital environment (Pentina *et al.*, 2013). Although research has identified key drivers and barriers for users and non-users' intentions to use Smartphone applications, as discussed in the previous sub-sections, actual usage data has not been conceptualised in relation to the totality of the theory of self-concept. More in-depth research into the relationship between the fluidity of the digital self and brand relationships additionally needs to be addressed, highlighting the changing role of the consumer when marketing to the digital self (Sciarrino, 2014;

Hendrix, 2014). This further draws attention to the need for qualitative data to be collected in order to interpret the meanings that a consumer places on their branded digital possessions as an extension of the self. Moreover, attention needs to shift to reasons for disengagement with branded apps, with Wang, Kim and Malthouse (2016) emphasising that:

When consumers go to the trouble of downloading and installing a branded app and then find that it does not do anything they find valuable, the negative effect toward the app may carry over to the relationship with the brand itself. (p.18)

Added to this potential damage to the brand relationship, is the risk of negative WOM as a result of app hate (Islam et al., 2020), which is explored in the following sub-section.

2.5.3 Disengagement with branded Smartphone applications

Disengagement (also referred to as 'non-engagement' in the literature) with branded apps is highly important to study in order to contribute knowledge to the area of brand disengagement with digital possessions where research is deemed to be significantly lacking (Viswanathan *et al.*, 2017). The term 'brand detachment' emerged within the marketing literature to advance understanding of the dissolution of brand-consumer relationships. From this perspective, two dimensions of brand detachment can be assessed in terms of 'partial' and 'total detachment.' Partial detachment indicates that the consumer has chosen to show less frequent engagement with a brand,

whereas total disengagement involves complete deviation of brand loyalty (Heilbrunn, 2001). This section begins by considering 'partial detachment' in relation to reasons cited for why consumers stop using a branded app. 'Total disengagement' is considered in the context of why apps are deleted off of a consumer's Smartphone. This is followed by an examination of the emergent area of 'App hate'; the first conceptualisation of app avoidance due to consumers developing a dislike towards the brand itself (Islam *et al.*, 2020). The contributions are summarised by bringing together these three areas as part of a longitudinal approach to studying disengagement with branded apps.

With much of the app adoption research and app usage continuance research demonstrating the importance of perceived hedonic and utilitarian benefits of branded apps on continued usage, it seems pertinent that non-usage would be categorised by these expectations not being met. However, a lack of focused research in this area exists in the literature to confirm this. This is due to much of the previously discussed research being based on predictive behaviour rather than actual behaviour. Furthermore, brand disengagement in general is viewed as an area which receives considerably less attention (Zarantonello *et al.*, 2016). Research into why consumers delete an app is particularly limited, especially in relation to the deletion of branded apps.

Key areas for further research which can be drawn from existing studies into the deletion of apps in general (e.g., Ickin *et al.*, 2017; Vagrani *et al.*, 2017) are categorised in relation to the apps being perceived to no longer be of use, poor app functionality, storage issues, informational over-load, boredom with

the app, time consuming, and lack of trust towards the app. Vagrani *et al.* (2017) place particular emphasis on apps being deleted due to not meeting the user's expectations. Consistent with the majority of app research, these findings however are drawn from self-report surveys rather than being based on qualitative understanding or observed app data over a period of time; further emphasising a key contribution of this thesis.

Understanding is further challenged by findings that users are hesitant to delete their apps, despite often being faced with phone storage problems (Park *et al.*, 2018). Park *et al.* (ibid) reflect that there are five states of 'burden' which are felt by a consumer when faced with deleting apps (table 2.2). Further to this, emotional burden can be further understood by taking into account the extent at which the app is being used to extend the self. Previously discussed research into the extended self suggests that congruence between the consumer's self-concept and perceived brand personality of the app could be resulting in an increased level of self-esteem (Sirgy, 1982). However, this is currently unexplored, providing a substantial gap in understanding of non-used yet non-deleted apps that this research fulfils.

Burden Type	Definition
Time Burden	The process of deleting an app requires a significant amount of time.
Financial Burden	App deletion risks a financial loss (e.g., coupons/offers/points etc.)

Mental Burden	App deletion requires attention and concentration.
Privacy and Information Burden	App deletion is a risk to user's personal information stored within the app (e.g., passwords/health data/images etc.)
Emotional Burden	The process of deleting an app raises a user's anxiety level, is deemed to be annoying or tiresome.

Table 2.2 Categorisation of app deletion burdens (Park *et al.*, 2018)

Although the above research provides a good basis for understanding why someone may or may not delete an app, this is challenged by recent technological advancements which impact upon this choice. Pivotal, the act of removing an app so that it can no longer be seen on a user's smartphone was made automatic following the launch of iOS 11 in 2017. Rather than having to consciously delete an app, a default feature enables unused apps to be 'offloaded'; the app usage data is saved but the app is temporarily hidden in order to reserve phone storage space. There is a clear gap here in relation to brand engagement factors previously addressed in sections 2.3 and 2.4. To bridge this understanding, the emergent area of so-called 'app hate' (Islam *et al.*, 2020) can be applied. This provides the first conceptualisation of brand app avoidance by discontinuing the use of a branded app and is a key area of the literature of which this thesis adds substantial knowledge to.

Section 2.2 foregrounded the concept of self-brand discrepancy as a determinant of brand disengagement. In the context of branded apps, Islam *et al.* (2020) apply Lee *et al.*'s brand avoidance theory (2009) to conceptualise the key drivers for consumers choosing to discontinue engaging with a branded app. Their conceptual framework (figure 2.14) provides a broad overview of the antecedents and consequences of app hate which require further empirical testing. Of particular interest to the line of enquiry is that of 'online symbolic avoidance' which the researchers describe as 'any conflict between symbolic meanings of goods or services and an individual's self-concept could lead to brand hate' (Islam *et al.*, 2020, p.5). This is further compounded by functional and moral avoidance behaviours.

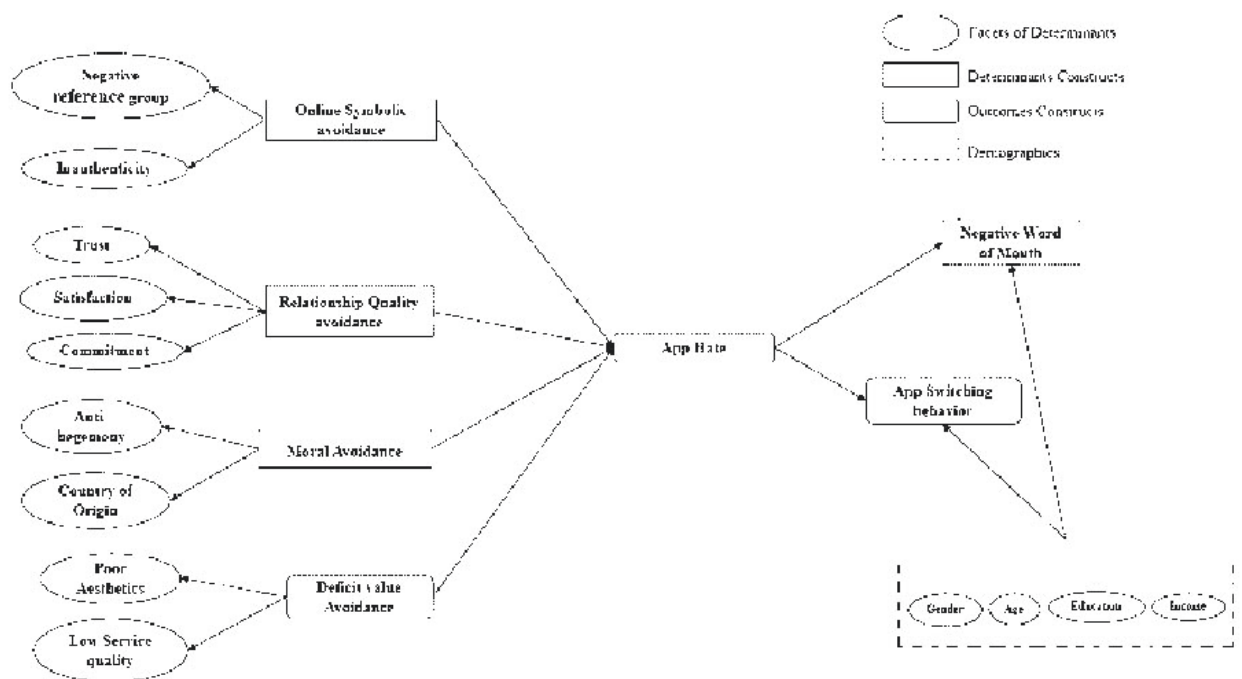


Figure 2.14 Determinants and consequences of app hate (Islam *et al.*, 2020)

The consequences of app hate are further highlighted as areas for further research, particularly in a digital context. Negative word of mouth in an online

environment has previously been found to negatively impact on brand loyalty, brand purchase intention and brand equity. However, whilst research into online reviews in general is growing (e.g., Cui *et al.*, 2012; Ludwig *et al.*, 2013; Eslami *et al.*, 2018), from the perspective of a consequence of discontinued branded app engagement, there is relatively little to draw upon (Genc-Nayebi and Abran, 2017). App switching behaviour is also an area with limited empirical findings to date (Roy, 2017; Salo and Makkonen, 2018), yet it is of central importance with an ever expanding app store providing consumers with an abundance of apps to download.

As highlighted by Islam *et al.* (2020), a key limitation of app hate research, despite its clear theoretical contributions, is that it is based on quantitative, cross-sectional data. A call is therefore made for future researchers to conduct research into the 'true behavior of branded app users' (ibid, p.13). To the author's knowledge, no longitudinal research has been carried out to infer whether any further parallels can be drawn between disengagement with branded digital possessions such as branded apps, and level of BESC. This highlights a further important gap in the academic literature, leading to the sixth and final research objective of this thesis:

Research Objective 6. To advance knowledge within the area of elapsed brand relationships through the study of BESC and digital self-extension

2.6 Chapter summary

The theory of self-concept has been increasingly judged within the academic literature as a valid and measurable construct to apply when assessing the influence of a consumer's sense of self on their consumptive behaviour in an environment which continuously blurs offline and online identities. Furthermore, with evidence confirming the importance of relationship marketing, self-concept is evolving as a crucial independent variable to research as a precedent to brand engagement through the contemporary perspective of BESE. With research limited in this area, clear theoretical gaps have been found to advance knowledge in this area. This takes into account the multi-faceted nature of self-concept research, particularly within the evolving area of enquiry into the digital self. By contributing to a growing area of research into branded Smartphone apps, the effects of the digital self on continued digital brand engagement, under the conceptual umbrella of the theory of brand engagement in self-concept and self-extension, can be studied.

This literature review has furthermore strongly highlighted a lack of qualitative research in this area, with the vast majority of the existing literature taking a cross-sectional, quantitative research approach. A clear gap in research further exists in relation to the lack of longitudinal studies. The literature review has highlighted that current research findings based on cross-sectional results are limited by not identifying the long-term effects of consumer brand relationships on brand engagement. The area of brand disengagement in relation to the theory of self-concept has additionally been identified as an area ripe for research, particularly in relation to app hate and app deletion. Accordingly, considering the key theoretical constructs

addressed within each section of this review, the subsequent chapter presents the methodological framework to address the following research objectives:

Research Objective 1. To critically analyse existing academic literature to clarify the theoretical position of brand engagement in self-concept (BESC) within the context of digital consumer brand engagement theory

Research Objective 2. To examine whether there is a relationship between the digital extended self and brand engagement in self-concept (BESC)

Research Objective 3. To explore congruency between a consumer's ideal self and perceived brand personality as a form of digital self-extension

Research Objective 4. To explore congruency between a consumer's actual self and perceived brand personality as a form of digital self-extension

Research Objective 5. To investigate consumers' perceptions of their brand relationships in relation to digital BESC and digital self-extension

Research Objective 6. To advance knowledge within the area of elapsed brand relationships through the study of BESC and digital self-extension

Chapter 3 Research Methodology

3.1 Overview of the chapter

Having reviewed the literature to underpin the current gaps in knowledge and construct the research objectives to be addressed, it is necessary to define an appropriate methodology in accordance with the research paradigm. Section 3.2 considers the research methodology in respect to the philosophy behind the research and the way in which knowledge is constructed. The chapter progresses to section 3.3 which justifies the most appropriate research methods within the context of the research paradigm and the kinds of data required to address the research objectives.

Under an interpretivist research paradigm, the methodological road set out by Blaikie and Priest (2017, p.37-56) has been adapted in section 3.4 to guide the research process and align the research methods accordingly. This framework considers an abductive logic, with the initial aim of the research process being to better understand a social phenomenon, as addressed through the research gaps identified within the literature review chapter. The purpose of the research is to contribute to knowledge by interpreting the meanings given to everyday concepts within the parameter of digital possessions and the theory of BESC, within an idealist ontology.

In reference to the research methods, a triangulated research approach is discussed and critiqued as a viable route within a constructionist epistemology. This consists of two studies running concurrently. Study One, as discussed in section 3.5, takes a quantitative questionnaire research

design, combining three empirically tested scales to identify the route of direction within Study Two. Study Two, as detailed in section 3.6, adopts a mixed-methods research design involving a quantitative questionnaire and connective ethnographic research which combines online quantitative data collection across a three-month period, and qualitative semi-structured interviews. The chosen research methods are positioned within their marketing contexts, with reference to previous studies which have applied similar methodological approaches. The limitations of the research methods are discussed, with explanation of how any known issues of reliability and validity were addressed following a pilot study (section 3.7). This is followed by justification for the sampling framework in section 3.8.

Section 3.9 details the ethical implications of the research in respect to data handling, privacy and confidentiality, participant safety and wellbeing, and risk assessment. This is of particular importance due to the nature of the research being positioned within online and offline contexts, and the private nature of the Smartphone device that was evidenced from the literature review. Section 3.10 summarises the main points from the chapter.

3.2 Research paradigm - Constructivism

A credible research paradigm is fundamental to developing a research strategy to test the hypothesis and address the research objectives of the study. A clear understanding of this provides knowledge of the impact of the commitments of that research philosophy (Johnson and Clark (Eds.), 2006) on the methodological approach. The challenge, as highlighted by Blaikie and Priest (2017), is to identify the research paradigm which will enable the

research to be conducted in the most effective way, given the philosophical commitments imposed between different paradigms.

The term 'paradigm' arose from the seminal observations of Kuhn (1963) that in order to understand scientific discoveries, we must first acknowledge the philosophical framework researchers with similar viewpoints are working within. Significant to future understanding of scientific and social research, Kuhn highlighted that 'the particular conclusions (the researcher) does arrive at are probably determined by his prior experience of the fields, by the accidents of his investigation, and by his own individual makeup' (1963, p.16). Following observations that these assumptions and philosophical standpoints proved to be similar for groups of scientific researchers, Kuhn later defined the term 'paradigm' to refer to a 'disciplinary matrix' which includes 'all the shared commitments of a scientific groups' (Kuhn, 1974, p.10).

Within a contemporary context, the assumptions and philosophical beliefs impacting upon groups of researchers defined within a particular research paradigm, are classified under the terms 'ontology', 'epistemology' and 'axiology' (Saunders *et al.*, 2016, p.127). Ontology forms the basis of the way in which the nature of reality is viewed as a way to understand 'the study of being' (Crotty, 1998, p.9). Here a comparison can be made between objectivism (including positivist and post-positivist research) and constructivism (encompassing post-modernism) to distinguish between differences in the way in which researchers view the world (Bell *et al.*, 2018). With objectivism, the research focus centres on realism, incorporating the

view that social entities are external to the way in which physical entities of the natural world are observed (Saunders *et al.*, 2016). For objectivists, social phenomena and meaning is seen as beyond the influence of individuals. In contrast, constructivism takes an ontological position which foregrounds the role of the individual in constructing meaning from social phenomena (Crotty, 1998). With the researcher being interested in the way in which individuals extract meaning from their possessions, grounded within their own sense of self as an individual, a constructivist ontological position was undertaken. This is supported by Crotty who asserts that the limitation of an objectivist ontological approach is that 'it makes people's everyday understandings inferior, epistemologically, to more scientific understandings' (*ibid*, p.13). With the purpose of the research being to interpret meaning from consumers' perceptions of their digital possessions, a constructivist approach was therefore appropriate and necessary.

Epistemology refers to the philosophy of how knowledge is constructed and shared with others. This is important to consider as part of the research process in search of generalisable knowledge as, in the words of Lynch, 'the secret to what truth is lies with what it does' (2011, p.11). What constitutes 'true knowledge' and one's relationship with this knowledge is therefore at the centre of epistemological positions. It is important to understand the implications of the epistemological assumptions in relation to the choice of methods and the strengths and limitations of research findings from taking such an approach. This is a reflexive process (figure 3.1) which considers how core beliefs and assumptions translate to the research philosophy and ultimate research design that is adopted (Bristow and Saunders, 2015, cited

in Saunders *et al.*, 2019). From an objectivist philosophical point of view, knowledge is considered to be scientifically generated and therefore concern is only given to observable phenomena in order for it to be considered credible (Blaikie, 2007). The research methods employed must therefore identify observable behaviour that can largely be quantified in order to test or validate an underpinning theory against empirical evidence. In contrast to this, constructivists consider that knowledge is constructed based on individuals deriving meaning from the world around them (Gray, 2013). Knowledge is therefore considered to be subjective rather than observable, drawing on assumptions about the inner workings of human behaviour (Crotty, 1998). Choice of research methods under this epistemological stance take more of a qualitative research approach, immersing the researcher within the context of the participants' social world impacting upon the development of knowledge.

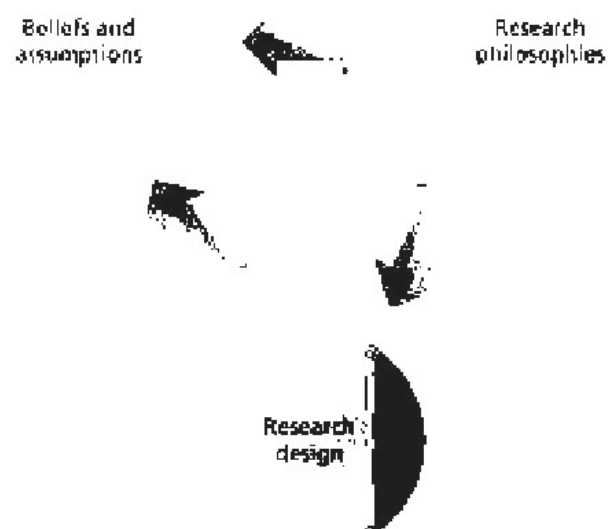


Figure 3.1 The research design process (Bristow and Saunders, 2018)

The following sections will justify and critique the theoretical perspective based on the influence of the research philosophy on the research design and strategy. This will be followed by an in-depth consideration of the ethical implications of the study, in reference to the axiology of the research which places importance on the role of ethics and values within the research process (Saunders *et al.*, 2016). This equates to the way in which the researcher acknowledges the values of the research participants as well as how the researcher views themselves within the research paradigm.

3.3 Theoretical perspective – Interpretivism

Once a philosophical research stance has been established in relation to the ontological and epistemological assumptions and beliefs, a theoretical perspective to underpin the chosen research methods can emerge. With the most influential theoretical perspectives being that of positivism and interpretivism (Gray, 2013), it is important to consider the key strengths and limitations of each to ensure the most appropriate strategy is established to achieve the research objectives.

Based on the constructivism research philosophy, the study takes a theoretical perspective of interpretivism. This frames an exploratory approach to uncovering the reasoning behind the way in which individuals utilise their digital possessions in the real world. Rather than focusing on consistencies between the data sets, with an interpretivism approach to research, an ideographic view of individual behaviour is taken (Cassell *et al.* (Eds), 2017). This is highly relevant to the overall thesis which aims to fulfil a gap in the literature by contributing qualitative research to a research area which is

largely quantitative in nature. This approach further lends itself to an ethnographic design in order to interpret how brand engagement with digital possessions changes over a period of time. This will be discussed in more detail in section 3.5.

The opposing theoretical perspective of positivism contrasts to the chosen philosophical position as the researcher is viewed as external to the discovery of knowledge (Lincoln and Guba, 2000), providing little opportunity for a qualitative investigation into individual differences in meaning, as foregrounded by taking a constructivist research paradigm. Furthermore, referring back to the progressive observations of Kuhn (1963), positivism is challenged for being too prescriptive in scientifically testing empirical theory. This has led to the emergence of a postpositivist approach which acknowledges that independent reality is possible and one can only measure probabilities as opposed to certainties within research. However, a postpositivist research philosophy still relies on objectivity and generalisability, often involving quasi-experimental methods (Cook *et al.*, 2002).

By taking an interpretivist stance, the researcher could be more reflexive in the research process. In this way, the focus of the research was not solely on testing hypotheses but on gaining an understanding of the quantitative results through in-depth qualitative enquiry. The research design was thus underpinned by taking a subjective view on the quantitative results of Study One, allowing for greater understanding to be explored through Study Two. This involved the researcher being part of what was being researched to gain

a true sense of reality and the way in which meaning was created by individuals in light of the impact of others around them (Howell, 2012). With the framing of this co-existence, it was important that the participants' social contexts were acknowledged and the complexity of the data gathered so as not to process the data at face-value. It followed that an abductive approach to analysing the data was taken, in accordance with an interpretivist perspective and the aligning underpinning theory of the self-concept. This approach is further supported by Etherinton (2004) who highlights:

...nothing is fixed; knowledge can only be partial and built upon the culturally defined stocks of knowledge available to us at any given time in history; reality is socially and personally constructed; there is no fixed and unchanging 'Truth' (p.27).

This contrasts with a deductive approach to research which concentrates on deducing applicable evidence from the hypotheses, driven by theory to be empirically tested. This usually involves taking a generalised and specific scientific approach to answering particular research problems. The appeal of such an approach, according to Heit (2007) is that an objective view is taken to drawing logical, valid conclusions from the data. With the subject matter of digital possessions and BESC being an area of emergent research however, as highlighted in the literature review chapter, a deductive approach would be unsuitable given the lack of empirical evidence to be tested. Moreover, according to the philosophical position, the research is positioned from a social science standpoint rather than within the natural sciences. In contrast to a deductive research approach, under an interpretivist philosophy, the

purpose of the hypothesis testing is to measure the causality between the variables in order to compare these to observed phenomena in Study Two, and gain an understanding behind the hypotheses of Study One. An abductive approach is therefore better suited within the parameters of the chosen philosophy. This is particularly evident given the exploratory nature of the research. In contrast to the pursuit of deducing empirical evidence from a positivist or postpositive stance, through the process of induction, in accordance with a constructivist philosophy, the researcher is able to contribute to theory by providing frameworks for *interpreting* social phenomenon (Howell, 2012). However, it must be acknowledged that there is some overlap between deductive and abductive processes given the aim being to draw patterns from the multi-phase study in order for the results to be generalised from a psychological standpoint. Shephard clarifies this position through his assertion that 'we generalize from one situation to another not because we cannot tell the difference between the two situations but because we judge that they are likely to belong to a set of situations having the same consequence' (1987, p.1321). It is through this inductive reasoning that the research strategy was designed, placing emphasis on the process of understanding the identified social phenomena as well as validating the end results.

3.4 Research strategy and methodological framework

Based on the literature review and the philosophical position outlined above, a methodological framework (figure 3.2) was designed to address the research objectives from a mixed-methods, multi-study approach. The conceptual framework sets out two studies – Study One, a cross-sectional

quantitative questionnaire and Study Two, a multi-phase, mixed-methods research study, taking an exploratory ethnographic approach. At the end of the research period, the findings from Study One and the findings from Study Two are compared using methodological triangulation. Within a marketing context, there is a growing need for a mixed-methods approach to better understand individual subjectivity that is not captured within the quantitative survey design which is currently most commonly used in the field (Hewege *et al.*, 2013). Triangulation in this context is defined as 'the use of multiple methods mainly qualitative and quantitative methods in studying the same phenomenon for the purpose of increasing study credibility' (Hussein, 2015, p.3). In this way, multiple methods are used to increase the research validity and measure different dimensions of the same phenomena rather than purely to cross-validate the data.

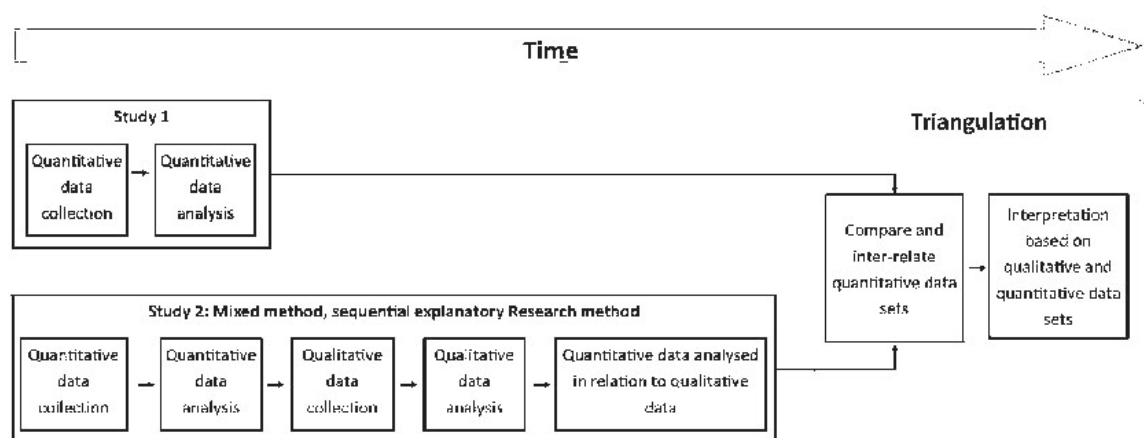


Figure 3.2 Methodological framework (Source: Author, 2017)

Taking a constructivist approach, the research purpose is to increase the opportunities for knowledge development within the research area in order to make a substantial contribution to the literature. By utilising different

research methods to gain both qualitative and quantitative data, the results are compared in respect of the research objectives to ascertain whether similar conclusions can be drawn. If the findings show similarities between all three methods then it can be said that validity has been established (Creswell and Miller, 2000). This is what is referred to in the literature as the 'between-method of triangulation' whereby qualitative and quantitative methods are combined to test a single phenomenon. This is contrasted with the 'within-method of triangulation' which focuses on utilising complementing methods to achieve convergent validity and cross-referencing of internal data collection (Jonsen and Jehn, 2009). The between-method of triangulation has been criticised however, due to the epistemological and ontological differences between qualitative and quantitative research methods (e.g., Fielding and Fielding, 1983; Hunt, 1991; Blaikie, 1991). Fielding and Fielding raise a particular issue with this method being inappropriate for 'pursuing "objective" truth' (1983, p.33). Flick (2018) however stresses that it is impossible to capture objective reality, asserting that 'different methods remain autonomous, operating side by side, and their meeting point is the issue under study' (p.23). Patton (2002) further supports this, arguing that inconsistencies between methods should not be viewed as a limitation but rather an opportunity to gain more in-depth meaning from the data.

Both the quantitative and qualitative data collection relates to the exploratory nature of the study, taking an abductive approach. The quantitative data forms the basis of the inquiry to test the hypotheses in order to ascertain whether any correlations between self-concept and digital possessions are present. The qualitative methods enabled a deeper understanding of the

phenomenon to be gained once it has been defined in a digital context. In this way, triangulation is applied to ensure that the reality observed in Study One corresponded with the inferences from Study Two. Study Two further allows the research to enrich the findings through the collection of qualitative data for deeper understanding of what has been deemed as a socially constructed phenomenon. Jonsen and Jehn (2009, p.123-150) describe this process as 'member checking' whereby participant feedback is used to further evaluate the research findings in the context of the participants' own sense of reality. Key advantages of triangulation therefore include:

increasing confidence in research data, creating innovative ways of understanding a phenomenon, revealing unique findings, challenging or integrating theories, and providing a clearer understanding of the problem (Thurmond, 2001, p. 254).

Joslin and Müller agree with this assertion, affirming that researchers adopt triangulation 'to identify interesting new phenomena, provide alternative perspectives to complex problems, and gain a richer and more holistic understanding' (2016, p.1043). Here, emphasis is placed beyond purely aiming to justify the results across different research methods, particularly when empirical evidence is lacking, to validating the results in the specific context of the sample population. The chosen research methods and data collection tools are discussed and placed within the appropriate research context in the following section according to the conceptual model of this thesis (figure 3.3)

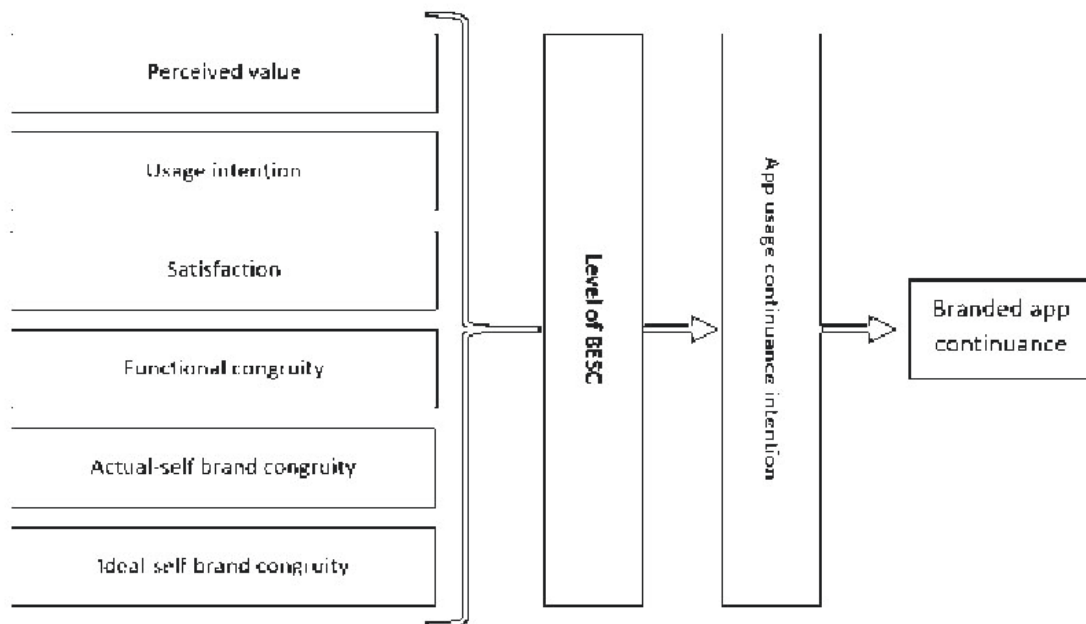


Figure 3.3 Conceptual framework (Source: Author, 2017)

3.5 Study One research methods and data collection

Under a constructivist paradigm, the research aims to take a social sciences perspective to address the research objectives and fulfil the gaps identified within the literature review. The rationale for the methodological approach taken, correlates with Ladyer's definition of a social sciences, interpretive research perspective:

'The purpose of social equity is to purpose ever more adequate knowledge...(and) ever more powerful explanations of phenomena.' (1998, p.9)

As conceptualised in section 3.4, the research was conducted through the use of a quantitative questionnaire in Study One and mixed-methods connective ethnographic research in Study Two. The following section discusses the study One methodology and data collection, followed by an examination of each of the phases of Study 2 in section 3.6.

3.5.1 Study One - Quantitative questionnaire design

The first study involved a quantitative research design, analysed through multiple regression analysis. According to Punch's definition, quantitative research can be generalised to be aiming to achieve three main purposes within the research process - 'it conceptualises reality in terms of variables; it measures variables; and it studies the relations between these variables' (2014, p.205). It is therefore crucial that the research method chosen enables the identification and measurement of variables impacting on the research objectives. To address research objectives 3 and 4, the following hypotheses emerged from a review of the relevant literature:

H1: Level of BESC positively moderates intended usage continuance of branded Smartphone applications

H2: Congruence between a consumer's actual self and perceived brand personality and a high level of BESC positively affects intended usage continuance of branded Smartphone applications, moderated by level of brand engagement in self-concept (BESC)

H3: Congruence between a consumer's ideal self and perceived brand personality and a high level of BESC positively affects intended usage continuance of branded Smartphone applications, moderated by level of brand engagement in self-concept (BESC)

An online self-report questionnaire method was selected as this method can be specifically designed to measure the effect of the independent variables (IVs) on the dependant variable (DV) through the application of empirically tested, appropriate and quantifiable measurement scales (Sreejesh *et al.*, 2014). This is consistent with prior research studies to enable direct comparisons and validation of the results to be made. The advantages of a using a questionnaire method include the convenience of administration in that they can be distributed for participants to complete without being under the direct supervision of the researcher (Rowley, 2014). Furthermore, by utilising the Call for Participants website (2018) to host the online questionnaire, the questionnaire could be continuously promoted to recruit participants who met the research criteria (section 3.8). This provided the opportunity to increase the response rate; a larger data set henceforth increased the validity of the research as well as the generalisability of the sample to the population under investigation.

Dependent on the research analysis processes, Rowley (2014) advises at least 100 responses are collected. Using the internet to conduct the questionnaire has additionally been found to increase response and completion rates, particularly for the age range of the sample population. Selm and Jankowski (2006) reason that this is due to increased accessibility to reach participants through computer-mediated communication, the efficiency of the data collection, and the relevance of the medium to the sample age bracket. Conducting questionnaires online, however, does implicate some methodological problems to be overcome. This includes the need for optimisation of the questionnaire across various servers to ensure

that the questionnaire can be accessed securely (Hewson *et al.*, 2002). To control for this, the questionnaire was hosted on the JISC-owned Online Surveys platform (2018) (formerly Bristol Online Survey (BOS) which offers reliable connectivity which is fully compliant with UK data protection laws. To reduce privacy concerns impacting on participant recruitment and retention (Hewson *et al.*, 2002), ethical consent was an essential requirement following the acceptance of a detailed participant information sheet. Ethical considerations and controls for online research methods are further addressed in section 3.10.

The questionnaire took a cross-sectional time horizon in order to maximise data collection from the specified sample. One disadvantage of a cross-sectional design is that cause-effect relationships can be difficult to establish with all the variables being collected at the same time (Saunders *et al.*, 2018). This was addressed in Study Two which studied the variables over a period of three months and is further discussed in the section 3.5.2. The following sub-sections provide further details of the design of the Study One quantitative survey data collection tool.

3.5.2 Study One scales of measurement

The measurement scales applied within the questionnaire design include Aaker's brand personality scale (1997) and Sprott *et al.*'s Brand Engagement in Self-Concept (BESC) scale (2009), to the extended Expectation Confirmation Model (ECM) (Bhattacharjee, 2001). This is appropriated to the identification of the independent, dependent and

control variables to be measured in order to test the hypothesis, in accordance with the conceptual framework of this thesis.

Referring back to the definition of quantitative research being concerned with the relationship between variables (Ladyer, 1998), cause and effect is measured by analysing the impact of the independent variables on the dependent variable. In the context of the research objectives, the independent variables correspond to perceptions of self-congruence and perceived brand personality of branded apps, and whether this has an effect on intended usage continuance as the dependent variable. Level of BESC acts as the moderating variable in accordance with the salient outcomes of the literature review. The term 'control variables' refers to factors which may confound the study of the independent and dependent variables, which need to be removed or controlled (Punch, 2014). The control variables identified by the literature review are accounted for as part of the questionnaire design, by the inclusion of the extended ECM model (Bhattacharjee, 2001).

As this was exploratory study, justification was made for the application of Sprott *et al.*'s (2009) scale within the specific context of measuring BESC levels with digital branded possessions, namely branded Smartphone Applications. Although a significant amount of research has been conducted to understand the relationship between self-concept and brand engagement with physical branded possessions, an understanding of how this is mediated by online settings remains under-researched (Woodsmall and Bechkoff, 2016). This research extends these previous research by taking a mixed-methods approach. The purpose of applying the BESC scale within Study One

was to validate the moderating role of level of BESC on usage continuance intention of digital possessions, namely branded apps. Following this validation, levels of BESC were placed in their real-world context in Study Two to explore the relationship between intention to continue engaging with favourite branded apps and actual continued usage of branded apps.

Following a review of the literature and a pilot study (section 3.7), the BESC scale items remain the same as the original validated BESC scale (Sprrott *et al.*, 2009) (figure 3.3). Participants were asked to select the degree to which they relate to each item, on a 7-point Likert scale. The participants were asked to select three favourite branded apps in line with Sprrott *et al.*'s (2009) original conceptualisation that differences exist between consumers in regard to the extent to which favourite brands are used as part of self-concept development. The BESC scale was used as a moderating variable to provide further understanding of the relevance of a consumer's general tendency to include brands as part of their self-concept. Measuring this alongside the IVs, allowed for the emergence of implications for marketing managers to adjust their marketing communications appropriately depending on whether their target consumer segments have a high or low level of BESC.

I have a special bond with the brands that I like
I consider my favourite brands to be a part of myself
I often feel a personal connection with the brand I most prefer
I can identify with important brands in my life
There are links between the brands that I prefer and how I view myself
My favourite brands are an important indication of who I am

Figure 3.4 BESC scale items (Sprrott *et al.*, 2009)

The BESC scale (Sprrott *et al.*, 2009) can be criticised for not distinguishing between the ideal self and the actual self; a deeply embedded theory within the consumer behaviour literature (section 2.3). To overcome the potential confounds of this oversight, the BESC scale (Sprrott *et al.*, 2009) was positioned alongside Aaker's Brand Personality Scale (1997) in order for any difference between the ideal self and levels of BESC and the actual self and levels of BESC to be measured, in accordance with the hypotheses. In this way, a more in-depth examination of perceived brand personality is drawn out from the research rather than taking a generalised view of BESC.

Aaker's brand personality scale (1997) was selected as this is the most common and extensively empirically tested method for measuring brand personality within the field of marketing and other disciplines (section 2.3.3). Importantly, this measurement scale has additionally been previously applied to measure consumer's perceptions of their ideal self and their actual self (e.g., Kressman *et al.*, 2006; Liu *et al.*, 2012; Huang *et al.*, 2012). This is in contrast to previous measures of self-concept which used semantic

differential for consumers to rate their ideal and actual self (e.g., (e.g. Birdwell, 1968; Dolich, 1969; Hughes, 1976; Malhotra, 1988; Ross, 1971; Sirgy, 1985). Although semantic differential scales are widely used and advantageous in that this measurement design is considered easy for participants to understand (Osgood and Tannenbaum, 1957), one challenge of this type of measurement scale is that the approach relies heavily on linguistic analysis and involves extensive stages of establishing semantic dimensionality (Verhagen *et al.*, 2015). By measuring self-concept and perceptions of brand personality on the same scale, self-congruity scores could be computed by finding the absolute difference between the two variables (Kressmann *et al.*, 2006). By taking this approach, individual differences in understanding of the brand personality traits were further controlled for as the congruency scores reflect each participant's own assessment of the meaning behind each scale item. This was further validated in Study Two as part of the semi-structured interviews and projective techniques, as discussed in section 3.6.

With the scale being applied to a UK context, the category headings for Aaker's 42 dimensions were scrutinised for their cultural understanding through a review of the literature and a pilot study. Following the approach of Zentes *et al.* (2008), all 42 items were included as part of the final questionnaire in order to gain a comprehensive understanding of the generalisability of Aaker's scale (1997) within the context of digital possessions. After data collection, Exploratory Factor Analysis (EFA) was conducted to validate the scales (Smith, 2009) before the reduction of items

as a result of Confirmatory Factor Analysis (CFA). Full details of this are provided in section 3.7.

To measure the dependent variable of usage continuance attention, the extended Expectancy Confirmation Model (ECM) (Bhattacharjee, 2001) was incorporated following a review of alternative measures of mobile app adoption and continued usage. Despite advancements in studying technology adoption in general, a lack of research into app adoption utilising the extended TAM model (2008) has been conducted (Roy, 2017). From the perspective of the researcher's constructivist paradigm, the extended TAM model (2008) can be criticised for restricting research findings to app adoption (e.g., Peng *et al.*, 2014; Lu *et al.*, 2015; Shen 2015). Such a quantified measurement framework limits the extent to which the research objectives can be studied within the context of individual social reality; a notable contribution to knowledge, with a recent literature review into app research highlighting that:

there is dearth of studies using qualitative and experimental research design and inductive approach and apparent bias for technology adoption models while ignoring behavioural theories such as social constructivist approach (Gera et al., 2020, p.160).

In contrast to the extended TAM model, app research has applied the extended Expectancy Confirmation Model (ECM) (Bhattacharjee, 2001) as a justified measurement scale. Rather than centring on technology adoption, the ECM model focuses specifically on the continuance intention of

information systems. Furthermore, this model has previously been empirically tested in relation to mobile internet services (e.g., Kim, 2010, Lee and Kwon, 2010), Smartphones (e.g., Hew *et al.*, 2017) and crucially for this research study, Smartphone apps (e.g., Hsu and Lin, 2015; Humbani and Wiese, 2019; Li and Fang, 2019; Verkijika, 2020; Chiu *et al.*, 2020).

To measure the dependent variable, the rationale behind ECM and app usage intention asserted by Hsu and Lin (2015) was applied. This focuses on users' perception of the congruence between their expectations of their apps upon download and their perceptions of the app post-usage. This further enabled the researcher to measure whether there is any correlation between perceived levels of satisfaction (as a result of congruence between pre- and post-usage expectations) and the hypothesised congruence between the participants' self-concept and perceived branded app personality.

The ECM measurement scale (Bhattacharjee, 2001) was adapted to be relevant to the research context of the participants' favourite three branded apps following a review of relevant studies in the CBE literature within the areas of brand satisfaction, expectancy value and functional congruity (figure 3.4) , and the pilot study. Participants were asked to rate each item on a 5-point Likert scale. A usage continuance score was calculated for each of the participants' pre-determined favourite branded apps in order to validate the findings further and provide a more robust approach to data collection.

<p><i>Value expectancy:</i></p> <p>My experience with using my favourite branded app was better than I expected</p> <p>The service level or function provided by my favourite branded app was better than I expected</p> <p>Overall, most of my expectations from using my favourite branded app were confirmed</p> <p><i>Usage intention:</i></p> <p>I have not used my favourite branded app but intend to in the future</p> <p>I intend to continue using my favourite branded app</p> <p>I intend to discontinue using my favourite branded app</p> <p><i>Satisfaction:</i></p> <p>I would strongly recommend my favourite branded app to others</p> <p>I am satisfied with this branded app</p> <p>I am pleased with this branded</p> <p>I am content with this branded</p> <p>I am delighted with this branded app</p> <p><i>Functional congruity:</i></p> <p>Using this branded app improves my personal performance</p> <p>Using this branded app increases my personal productivity</p> <p>Using this branded app enhances my personal effectiveness</p> <p>Overall, this branded app is useful in my personal management</p>

Figure 3.5 ECM scale items under the relevant theoretical constructs (Adapted from Bhattacharjee, 2001 and Hsu and Lin, 2015)

3.5.3 Questionnaire design

The questionnaire was designed using the JISC-owned Online Surveys platform (2018) as a secure and trusted digital survey tool used by 88% of UK higher education institutions (JISC, 2019). A copy of the questionnaire can be found in Appendix B. To address the aforementioned research gap and limitations of previous cross-sectional research, real-world branded app usage was assimilated by asking the participants to complete the questionnaire in relation to three self-proclaimed favourite branded apps that they currently had downloaded on their personal Smartphone device. Specific examples of branded apps were not given in order to avoid influencing participant responses.

As the questionnaire included the amalgamation of three pre-existing scales and thus a large number of variables, a considerable amount of attention was paid to designing the questionnaire. This was especially important to avoid questionnaire fatigue (Saunders *et al.*, 2018), particularly as participants were asked to rate each of the Aaker's 42 personality traits (1997) for the actual self and ideal self. To avoid potential bias, Sirgy's (1982) advice was followed, by positioning perceptions of the ideal self prior to reflecting on the actual self. To measure self-congruence between the self and perceived brand personality, participants were asked to only select the brand personality traits which they deemed each of their three favourite branded apps to possess. This allowed for a self-congruity score to be calculated (Kressmann *et al.*, 2006), without the participants having to complete Aaker's brand personality scale for a third time.

A further limitation of questionnaire design is in the response rate (Bell *et al.*, 2018). To address this issue, the questionnaire was designed so that participants could only save their information and submit their responses if they had completed every question. The interactivity of the online survey interface has also been evidenced to increase engagement in comparison to paper self-completion questionnaires (Gunter *et al.*, 2002; Murthy, 2008). This furthermore reduces the likelihood for missing values impacting on the data analysis process. Research suggests that lack of response is also driven by participants attitude to the topic under exploration (Bogner *et al.*, 2018). This provides further justification for the sampling approach, which is discussed in sub-section 3.7.

3.5.4 Study One data analysis

With Study One of the research taking a quantitative design to inform the subsequent direction of the research, the researcher acknowledged that a robust process of data analysis is paramount to establish construct validity and reliability of the research methods and subsequent findings (Sreejesh *et al.*, 2014). This sub-section sets out that process of analysis, beginning with the importance of data cleaning and Missing Value Analysis (MVA). This is followed by the inclusion of descriptive statistics to test the normality of the data. The validity of the measurement scales were assessed through Cronbach's Alpha to check for internal consistency. Item generation was achieved through Exploratory Factor Analysis (EFA). Data collected via the quantitative questionnaire was then analysed using SPSS in accordance with the following research aims of Study One:

1. To validate the ideal and actual self as two separate constructs, as put forward by the comprehensive literature review.

2. To examine the moderating effect of BESC on the relationship between ideal and actual self-congruence and perceived brand personality on intended usage continuance of digital branded possessions. To be measured by testing the following hypothesis:

H1: Level of BESC positively moderates intended usage continuance of branded Smartphone applications

H2: Congruence between a consumer's actual self and perceived brand personality and a high level of BESC positively affects intended usage continuance of branded Smartphone applications, moderated by level of brand engagement in self-concept (BESC)

H3: Congruence between a consumer's ideal self and perceived brand personality and a high level of BESC positively affects intended usage continuance of branded Smartphone applications, moderated by level of brand engagement in self-concept (BESC)

3. To provide evidence for the research direction of Study Two, based on the key findings of Study One.

The first research aim was addressed through descriptive statistics to ascertain any difference between the measurement of the ideal self and the

actual self. A Paired T-test was applied to each dimension of Aaker's personality scale (1997) for the ideal and the actual self as a valid measurement to determine whether this is a statistically significant difference between two variables (Field, 2018).

The second research aim was achieved by testing each of the three hypotheses through hierarchical regression (as detailed in Chapter 4).

The third research aim was achieved and is summarised in Chapter 4 as a clear visualisation mapping the areas for further exploration to research objectives four, five and six.

3.5.5 Ensuring for validity and reliability of the Study One data

With this being the first time to the researcher's knowledge that the three empirically tested scales have been combined within one questionnaire design, it was crucial that the validity of these measures was rigorously tested. To apply Aaker's scale (1997) to a digital branded app context, in line with previous research, Exploratory Factor Analysis (EFA) was conducted. The main aim of EFA is to ascertain the number of necessary factors needed to explain the relationships between the variables (Field, 2018). As a result of Principle Component Analysis (PCA) (see Appendix C), 26 personality traits from Aaker's 42 items (1997) were retained (figure 3.5). This is similar to previous studies which also identified the traits 'wholesome', 'small-town' and 'masculine' to be inappropriate. Three traits 'glamorous', 'good looking' and 'smooth' shifted from Dimension Four on Aaker's scale (1997) to Dimension

Two on the new adapted scale; showing a closer relationship to the adjectives used by Gen Z to describe desirable image traits. Two traits from Dimension One on Aaker's scale (1997) moved to Dimension Four on the new scale, again reflecting contemporary terminology amongst the age group under study.

To measure discriminate validity, the final factor items were determined by a factor loading of >0.6 (Hair *et al.*, 2010) and an eigen value of 1. The Cronbach Alpha scores are judged as reliable for each dimension, ranging from 0.66 and 0.84. The overall KMO measurement was accepted at .647.

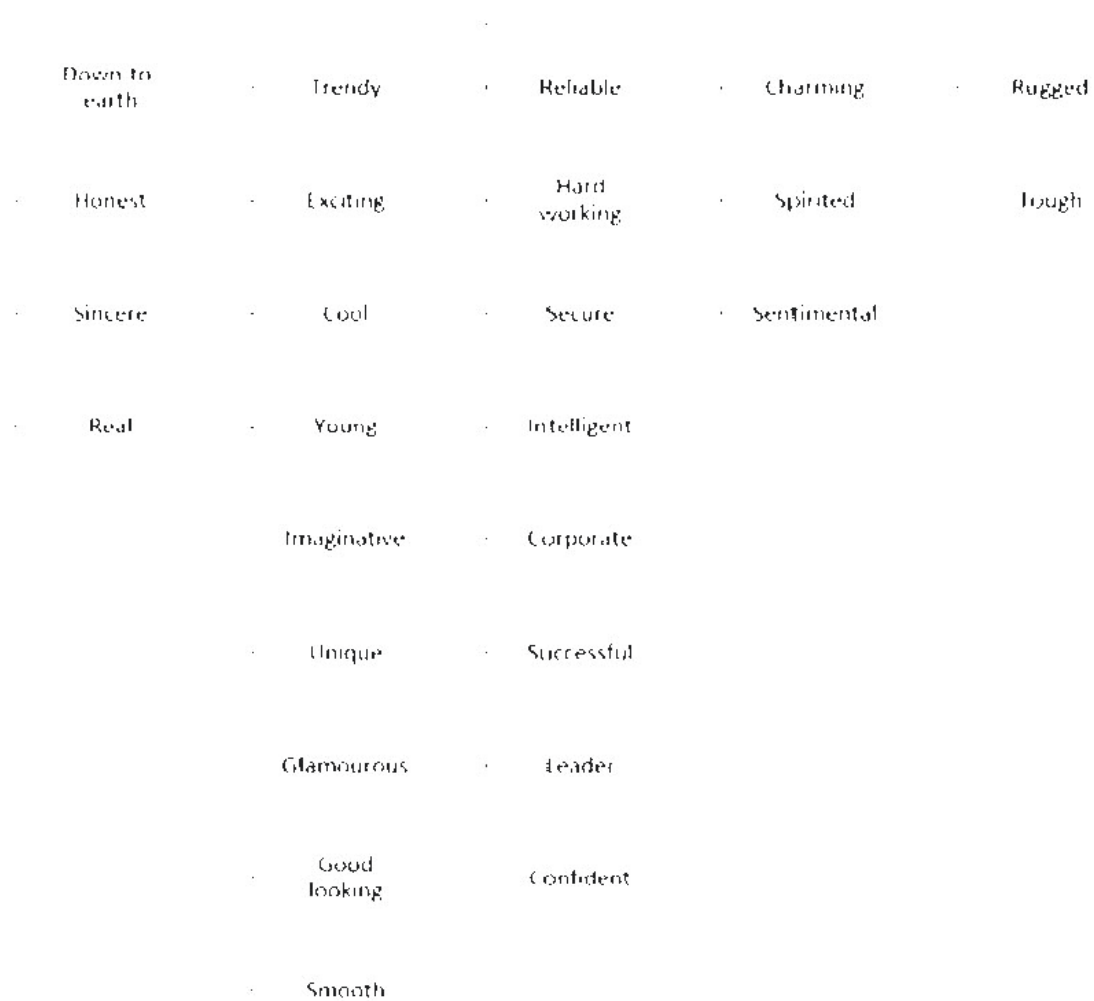


Figure 3.6 An adaptation of Aaker's brand personality scale (1997) for branded app research (Source: Author, 2020)

The Brand Engagement in Self-Concept (BESC) scale (Spratt *et al.*, 2009) was used to measure the degree to which research participants perceived brands as part of their self-concept. The construct consists of 8 items and has a high level of internal consistency, as determined by a Cronbach's alpha score of 0.865. EFA was additionally performed on the BESC scale and all

items were retained and loaded to the one factor as per the original empirically tested scale (see Appendix D).

The Expectancy Confirmation Model (ECM) (Bhattacharjee, 2001) was employed to measure the extent to which research participants intended to continue using their branded Smartphone applications. The construct consists of 15 questions and has a high level of internal consistency, as determined by a Cronbach's alpha score of 0.822. This is consistent with previous research which utilised the ECM to measure intention to continue using Smartphone devices and associated online services. EFA confirmed factor loadings under four dimensions ('functional value', 'satisfaction' and 'value expectancy' and 'usage continuance') (see Appendix E). Two items were removed as they had factor loadings lower than 0.6 (Hair *et al.*, 2010). This could be due to the discrepancies between positive and negative loadings within this factor. The key findings from Study One are presented in Chapter 4.

3.6 Study Two – Mixed-methods research design

The purpose intention of Study Two was to provide a stronger understanding of the research objectives and hypotheses tested in Study One through connective ethnography. Creswell and Plano Clark (2011) distinguish between three main types of mixed-methods research design (figure 3.6). A convergent research design is applied to merge the results from both quantitative and qualitative data sets in order to gain a complete understanding of a research problem or to validate findings across the

different methods. This approach is typically conducted during one phase of study which allows for both quantitative and qualitative responses. An advantage of this type of research design is that 'researchers are able to give voice to participants as well as report statistical trends' (ibid, p.71). The specifics of a convergent design lie with the type of variation taken, but typically the main challenge is in the merging of two data sets.

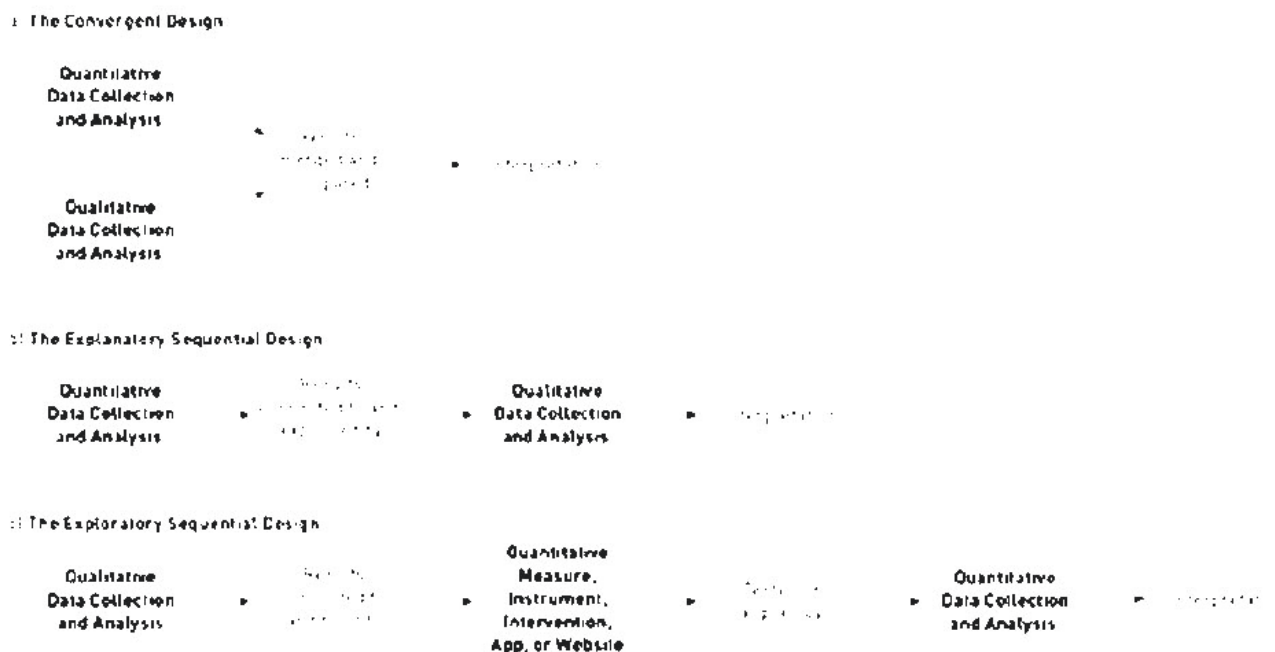


Figure 3.7 The three main types of mixed-methods research design (Creswell and Plano Clark, 2011)

In contrast, an explanatory sequential design positions the research methods across distinct interactive phases. The first phase typically begins with quantitative data collection, proceeded by qualitative data collection and analysis to elaborate on or explain the quantitative findings. A key strength of this design is in the flexibility of the approach which allows for the second phase of data collection to be guided by the data gathered during the first phase of the study. The third mixed-methods research design is the

exploratory sequential design which typically prioritises the collection of qualitative data in the first phase, followed by quantitative data collection. This approach is often applied when conducting exploratory research which aims to uncover new themes, guided by initial variables identified through qualitative research (Brannen, 2008). In this way, the qualitative findings are able to shape the way in which the quantitative research is carried out.

Based on the triangulation approach critiqued in section 3.4 to align Study One with Study Two effectively, an explanatory sequential design was selected for Study Two (depicted as research design (b) in figure 3.6). This involved the initial collection of quantitative data through the administration of the self-report questionnaire used in Study One, in addition to quantitative observational data gathered through connective ethnography. This was followed by qualitative data collection as a result of semi-structured interviews, enhanced by projective techniques.

The following section begins by placing connective ethnography within the overall research strategy. The research methods applied within Study Two are justified to enhance understanding in line with research objectives 5 and 6:

Research Objective 5. To investigate consumers' perceptions of their brand relationships in relation to digital BESC and digital self-extension

Research Objective 6. To advance knowledge within the area of elapsed brand relationships through the study of digital BESC and digital self-extension

3.6.1 Connective ethnography

The term 'ethnography' as an approach to research, lacks a single, standardised definition, yet is fundamentally classified as 'the study of people in naturally occurring settings or 'fields' by means of methods which capture their social meanings and ordinary activities'(Brewer, 2000, p.10). It transpires then that virtual ethnography is concerned with understanding human nature in an online setting. Hines (2000) highlights that virtual ethnography can be considered a broad umbrella term for observational research via the internet, drawing on two main theoretical schools of thought – internet culture and the internet as a cultural artefact. With the former perspective, the primary focus is on studying the way in which online communities form in cyberspace (Driscoll and Gregg, 2010). To engage with this, netnography is largely employed as a qualitative research method which measures the relationship between the individual and their online connections (Costello *et al.*, 2017). A branch of ethnography, researchers typically carry out observation, participatory or non-participatory, of online communities or social media 'spaces' (Kozinets, 2010). This definition however presents a debate in the literature in terms of what constitutes 'active' and 'valid' online observational research.

Costello *et al.* (2017) highlight that the broadening of the term netnography has led to missed opportunities to partake in the construction of online communities; a once fundamental aspect of netnography. This echoes the notion that there has been a divergence in the way that online ethnography is viewed due to mobile technology making it difficult to distinguish between online and offline consumption contexts (Garcia *et al.*, 2009). This furthermore corresponds with the aforementioned argument that the internet mediates the establishment and preservation of multiple versions of the self.

To study individual experiences of the internet as opposed to the holistic beliefs of online communities, Study Two takes a connective ethnographic approach. In contrast to netnography, connective ethnography is concerned with the lived experience of the internet user (Dirksen *et al.*, 2010). This method serves a much more suitable purpose to be able to fulfil the research objectives which do not just focus on online contexts but are interested in the meanings that consumers give to their digital possessions across online and offline settings in order to extend the self. This approach also allows the research to gain individual insight into the research phenomena rather than the collective viewpoint of an online community. Indeed, connective ethnography emerged within the field of ethnography to serve the very purpose of research beyond the boundaries of online and physical offline environments (Leander and McKim, 2003). This is openly recognised by Hine (2000) who emphasises the role of the ethnographer to explore the consequences of identity construction rather than to validate them:

The intention is to sidestep question of what identities really are and whether reality is really there, by shifting to an empirical focus on how, where and when identities and realities are made available on the Internet... There is no guarantee that the identity performances seen in cyberspace will mirror those performed in offline setting. (p.118)

Through a connective ethnographic approach, the researcher collected quantitative app usage data from the research participants across a three-month research period in order to take an abductive approach to understanding how technology is being used by Smartphone users trying to make sense of the world, with the research being designed from a constructivist paradigm. The application 'iOS Screen Time' ran in the background of the participants' personal Smartphones to gather application usage data across a three-month period. The app does not collect any sensitive data or any information which could identify the participants. The anonymised data was used to specifically measure the amount of times that each of the participants open a branded application on their device and how long they spend within that application. Data across the research period was used to quantify the frequency that each participant engaged with the three favourite branded Smartphone apps which they named on the preliminary questionnaire (see figure 3.7 for an example).

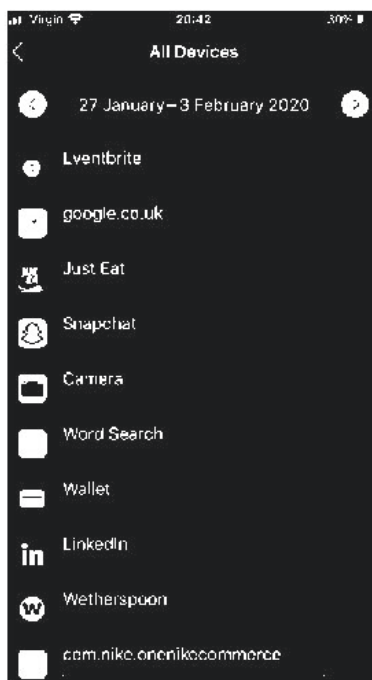


Figure 3.8 Example screenshot of Participant N’s app usage data for week 9 which shows app usage for two of their three favourite branded apps, Just Eat and Wetherspoons

The ethnographic data submitted by the participants on a weekly basis to the researcher, also identified which apps remained on the participants’ Smartphones despite lack of engagement with the app recorded over the research period. This approach consequently adds to an area of the literature which predominately utilises cross-sectional research to measure adoption of branded digital possessions by predicting, rather than observing, the implications of this on digital brand engagement. Further exploration of the reasons behind usage and non-usage of branded apps, as recorded during the three-month research period, was undertaken through semi-structured interviews at the end of the research period. This included the use of projective techniques as an expressive method for connective ethnographic digital storytelling (Underberg and Zorn, 2013). This is justified further in

the following section as a suitable research method for Phase Two of Study Two of the research.

3.6.2 Semi-structured interviews with projective techniques

The second phases of Study Two involved the collection of qualitative data through semi-structured interviews at the end of each of the participants' three-month research period to gain a deeper understanding of the way in which consumers extract meaning from their branded apps. Moreover, the interviews provided an opportunity for interaction between the participants and the researcher in order for in-depth discussion in relation to the research objectives. This overcomes what Hines raises as a 'major issue to be confronted in designing an ethnographic study of the Internet' (2000, p.44-45), by gaining face-to-face access to participants (albeit through an online platform). Participants were involved in a reflective process to determine their viewpoints on their digital brand engagement through their digital possessions and how this was perceived to impact on their self-concept.

All participants who completed the three-month research period were invited to participate in the online interviews. The interviews were conducted online within the context of the study which foregrounds the breaking down of boundaries between online and offline worlds. It was important that the interviews were synchronous and semi-structured so that each interview could be adapted in response to the interviewee's interpretations and lived experience of the research period. Participant retention has also been found to be higher with synchronous as opposed to asynchronous interview

techniques as more of a relationship can be built with participants if the interview takes place in real-time (Kazmer and Xie, 2008). To conduct synchronous conversations, a web conferencing tool is regarded to be most convenient and ethical, reducing the challenges of the traditional face-to-face interview (Hooley *et al.*, 2012). Furthermore, Curasi (2001) highlights the credibility of this online data collection method as part of the triangulation approach to increase credibility and confirmation of findings.

In the context of consumer-based research, Gruber *et al.* (2008) advocate an online laddering interview process whereby the interviews are conducted in stages in order to encourage the participant to reflect on the subject of the interview before applying their own world view. This method is typically used within marketing to understand the value that consumers place upon a product as 'means-ends' approach to uncovering unconscious motivations for consumer behaviour (Reynolds and Olson, 2001). Gruber *et al.*'s (2008, p.261) approach was applied to align the self-concept with the value attributed to digital possessions (namely branded apps) in accordance with the research objectives (figure 3.8). An interview schedule and example question prompts can be seen in Appendix F.

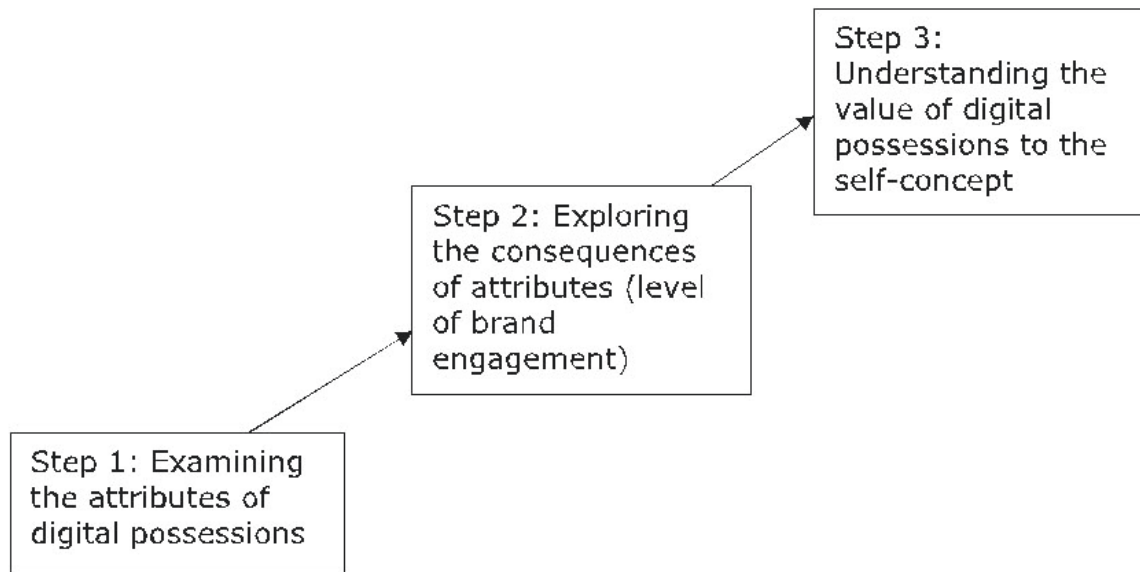


Figure 3.9 Laddered online interview approach (adapted from Gruber *et al.*, 2008, p.261)

Semi-structured interviews were incorporated into the research design as part of the researcher’s recursive, constructivist approach to addressing the research objectives. A key advantage of qualitative interviews is that they allow for deep understanding of individual behaviour. As highlighted by Ravitch and Carl (2019):

In qualitative research, it is centrally important to delve into each person’s experience and to relate those to other participants’ experiences so that you can come to understand a fuller range of perspectives and experiences about a particular topic or phenomenon (p.125).

This aligns with a key contribution of this thesis being to extend current understanding of the way in which consumers use their digital possessions to extend the self. Interviews further complimented the mixed-methods, multi-

phase approach by contextualising the data collected via the questionnaire and throughout the app usage period. This is considered critical to capturing the complexity of the field under study (Gummesson, 2005; Petrescu and Lauer, 2017). As a consequence of this, Cameron and Molina-Azorin (2011) argue that:

...the almost straightjacket constraints felt by researchers during the paradigm wars have slowly but steadily been loosened and contemporary and relevant business and management researchers are beginning to see the benefits that a mixed methods research approach offers (p.268).

The role of projective techniques is discussed in depth in the following subsection, drawing on recent applications of the method within marketing research to identify the strengths and limitations.

3.6.3 Justification for including projective techniques

Projective techniques can be defined as a research tool or approach which are used to access participants' unconscious desires or conscious deep-seated beliefs through the use of unthreatening stimuli which participants to project their inner subjective thoughts upon (Morrison *et al.*, 2002). The method can be applied as part of individual interviews or focus groups and is mainly used as part of a mixed-methods research design (Kolb, 2008). Projective techniques are particularly useful as part of individual semi-structured interviews as they can be easily administered and participants are not placed

under any peer pressure to provide socially desirable responses (Morrison *et al.*, 2002). Within the context of the study, projective techniques were applied in order to address research objectives 5 and 6 in greater depth.

Projective techniques are particularly useful for exploring new research areas, as established in the literature review chapter and the aforementioned in gaps in research which this thesis fulfils. Within the academic literature, projective techniques are divided into five categories: association, construction, completion, expressive, and choice ordering (Bond and Ramsey 2010; Hofstede *et al.* 2007; Pich and Armannsdottir 2015) (table 3.1). This distinction is useful in order to adapt the various techniques appropriately in accordance with the type of data which needs to be collected in order to address the research objectives. In accordance with the research paradigm, the projective techniques chosen to address the research objectives identified for Study Two were 'construction', 'completion' and 'expressive'.

Category	Examples of projective technique tasks
Association	Connecting the research object with images, words and thoughts.
Completion	Finishing sentences, stories, arguments.
Construction	Answering questions about feelings, beliefs, completing speech bubbles in cartoons collages and clay modelling.
Choice Ordering	Ranking product benefits
Expressive	Role playing, storytelling, drawing.

Table 3.1 The five categories of projective techniques (Bond and Ramsey 2010; Hofstede *et al.* 2007; Pich and Armannsdottir 2015)

The construction technique provided a complex approach to understanding consumer attitudes and behaviour by encouraging consumers to construct a story from a given stimulus (Donoghue, 2000). In contrast to word association techniques, construction methods aim to retrieve brand knowledge which is less easily accessible, including consumers' unconscious thoughts and behavioural triggers. In this context, it is the process the consumer goes through to get to the end result that is of great interest (Pich and Dean, 2015). This is based on the theory that through storytelling, any brand-related knowledge which has been stored in the memory in narrative form can be retrieved (Koll *et al.*, 2010). There remains a lack of consensus however into how reliable this form of data collection is due to the subjective nature of interpretation (Slabbinck and Van Kenhove, 2009).

Residing between the simplicity of word association and the complexity of construction techniques, completion techniques involve providing participants with an incomplete sentence, conversation or story to complete. This is deemed a particularly useful technique when there is limited amount of research time, although does require a high degree of interpretation (Donoghue, 2000) which could be construed as falsifying the data as a result of researcher bias. How this is controlled for is discussed later in this chapter.

A further common projective technique within consumer research is expressive techniques, typically featuring an element of role-playing or creative expression through drawing or storytelling (Pich and Armannsdottir, 2015). Similar to the construction technique, participants are shown a series of pictures or cartoons and are asked to put together a story as if they were

one of the characters. One such technique, known as the Thematic Apperception Test (TAT), is used widely within clinical psychology as well as in marketing research. An example of this is 'The House Where the Brand Lives' – a method used within the advertising industry to encourage consumers to compare brands through individual personification of where the brand would 'live', such as the size of the house they would live in or what the rooms inside each brand's 'house' would look like (Morrison *et al.*, 2002).

The first part of the interview involved an in-depth reflection of each of the participant's three-month app usage period. The emphasis here was not on quantifying app usage, rather an attempt to understand the role of branded apps in the lives of consumers, in order to add to the area of branded app retention, as identified in the literature review as a key contribution of this thesis. The first projective technique was integrated into the second stage of the laddered interview process. To understand consumers' perceptions of their digital brand relationships (research objective 5), the 'House where the brand lives' activity (Morrison *et al.*, 2002) was adapted in line with the key themes that arose from the literature review and the pilot study. Each participant was provided with a scenario in which the three brands they identified as their favourite branded apps are positioned in a fictitious room drawn by the author and shared with the participants on the online platform Blackboard Collaborate Ultra. An example of this is provided in Appendix G.

Participants were asked to imagine themselves in the room and were given a series of questions to encourage them to reflect on their interactions with the three personified brands depicted in the on-screen drawing. By involving each

participant in this constructive progress, the participants expressed greater details about themselves and how they view their brand relationships than with the standard questioning. This includes projections of the brand's personality characteristics (as conceptualised by Aaker's brand personality scale (1997)) and how this relates to perceptions of their own self-concept. By involving each participant in this constructive progress, participants were able to express greater details about themselves and how view their brand relationships than they would do with standard questioning (Boddy, 2005). This technique also allowed the researcher to compare the participants' responses with their BESC score obtained from the questionnaire to cross-reference the extent to which each participant views brands as part of their self-concept.

The third part of the interview incorporated expressive projective techniques to add to and contextualise the self-report data obtained from the quantitative questionnaire to measure ideal-self and actual-self congruity. By encouraging participants to share a photograph of the person they would most like to be, some of the aforementioned limitations of collecting quantitative self-report personality data were addressed. Rather than solely relying on participants being truthful in their assessment of the totality of the self-concept within the questionnaire, the expressive projective techniques uncovered knowledge which participants may not have previously been willing to disclose or were consciously aware of (Kolb, 2008). This resulted in an increased level of understanding of the participants' thought expression as well as reducing researcher bias by limiting the amount of researcher interpretation during the data analysis stage (Pich *et al.*, 2015). This

approach also addressed a concern raised in the pilot study that participants were unwilling or felt uncomfortable talking about themselves. By referring to their ideal self in the third person through the use of a photograph prompt, participants could project their emotions onto an external embodiment. This allowed for the participants to make sense of their own thoughts (Cassell *et al.*, 2017) whilst feeling less vulnerable to personal questioning.

3.6.4 Data Analysis of the semi-structured interviews

As a qualitative research tool, the data obtained through projective techniques is largely analysed through qualitative analysis techniques which are designed to uncover themes and patterns emerging from the projections (Morrison *et al.*, 2002). However, there is some confusion in the literature around the precise analytical process to be adopted (Ramsey *et al.*, 2006) in order to effectively analyse what is deemed as typically subjective findings. To address this, Pich and Dean (2015) provide a robust illustrative framework to formalise a systematic approach to analyse and interpret data collected through projective techniques (figure 3.9). This begins with a coarse-grained phase of analysis to gain an understanding of the broad themes that can be elicited from the data. A fine-grained phase follows this in order to refine the categories identified in the preliminary stage of analysis, in accordance with Butler-Kisber's (2010) two-stage analytical process. This includes exploring the participant's responses individually to ascertain any hidden meanings within the data to reveal a greater insight into the initial data analysis (Pich and Dean, 2015). Within the context of Study Two, this resulted in the creation of eighteen participant profiles as a visual representation of the data

distribution across all phases of study. Crucially, this was validated through a process of 'cross-checking' in order to compensate for any limitations that have arisen by including different research methods (De Loo and Lowe, 2011).

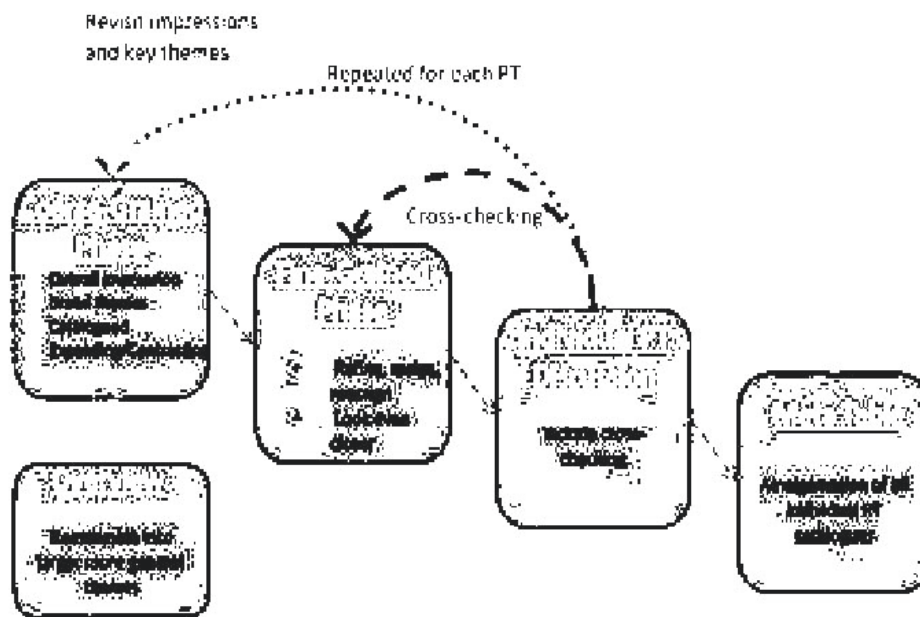


Figure 3.10 A systematic approach to data analysis for data obtained through projective techniques (Pich and Dean, 2015, p.120)

Further triangulation occurred by comparing the findings from the quantitative questionnaire administered within Study One and Study Two, the digital ethnographic data obtained across the three-month research period and the results from the semi-structured interviews. This added to the validity and reliability of the results by overcoming the potential bias of using a single method of data collection, particularly when collecting self-report data concerning personality traits. The key themes analysed from all stages of the research were then collated into a meta-table to highlight the consistencies and inconsistencies in the data. The meta-table data allowed for analysis

across the research outputs in order to generalise the findings in response to the research objectives. Following further re-visiting of the key themes, the triangulated findings from both research studies are presented as the main findings of this thesis, presented in Chapter 4.

3.6.5 Ensuring the validity and reliability of Study Two data

A highly debated criticism of semi-structured interviews (and qualitative research in general), is that this research method is based on subjectivity and lacks generalisability. Subjectivity refers to the extent to which researchers are thought to influence their participants or the analysis of the findings due to the open-ended nature of the research approach (Bell and Bryman, 2018). Gray (2018) argues however that a key purpose of qualitative research as part of an interpretative philosophical approach, is to present multiple subjectivities that reflect lived experience. The subjectivity of interview-based research can be addressed by foregrounding the theoretical context of the research (Ravitch and Riggan, 2016). However, Collin and Stockton (2018) caution that 'an overreliance on theory could prevent the salience and importance of data from coming through' (p.9). In this way, the laddered interview approach described in section 3.6.2 placed the theoretical constructions as central to the holistic examination of the research, without being myopic by collecting data from just one research method. Furthermore, a valid and robust method of analysing data which utilises project techniques was applied (Pich and Dean, 2015) throughout the Study Two data analysis period and as part of the triangulation of all data sets.

Lack of generalisability relates to the temporal and partial nature of the interview in which researchers concentrate on extracting meaning from a particular period of time (Ravitch and Carl, 2019). Additionally, with the value of the interview being to collect rich data from individuals, a smaller sample is often utilised in comparison to large-scale quantitative survey research. The researcher addressed this limitation through the process of triangulation which allows for the rigor and validation of quantitative statistical data to underpin the richness of the qualitative findings (Petrescu and Lauer, 2017). This also reduced the risk of confirmation bias by balancing the strengths and weaknesses of the different research methods in order to make stronger conclusions.

To further increase the reliability and validity of the data collected, the following sub-section discusses key learnings from a pilot study (conducted in November 2018) which resulted in appropriate adaptations to all phases of the research.

3.7 Pilot study

The aim of the pilot study was to test the proposed methods and data analysis procedures to ascertain if any appropriate adjustments needed to be made. This is fundamentally important for self-completion questionnaires, especially when completed online, due to the absence of the researcher to respond to any enquires (Bryman and Bell, 2011). The pilot study additionally enabled the researcher to test the interview questions and projective techniques which require a refined approach to questioning in order to be effective (Boddy, 2005). Potential ethical concerns were also addressed, with

particular attention being paid to GDPR regulations (2018) and privacy issues related to the private nature of Smartphone data (Epps, 2014).

A hermeneutic circle approach was taken to interpret each part of the research that makes up the whole study, based on the researcher's enhanced understanding following participant feedback (figure 3.10).

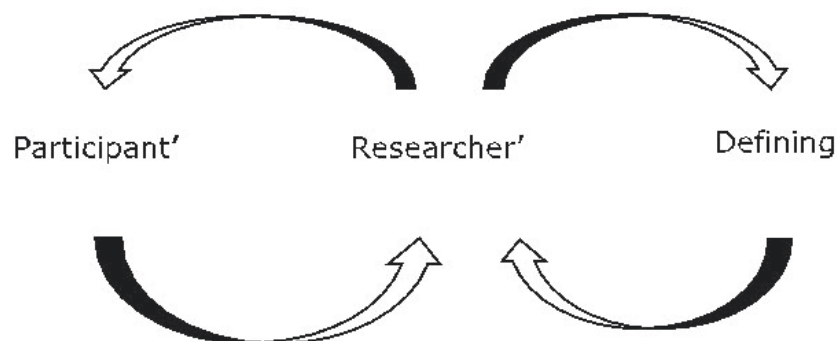


Figure 3.11 A hermeneutic circle approach to the pilot study (adapted from Schwandt, 2007)

A convenience sample of ten iOS Smartphone users within the 18-25 age range were recruited from a random sample at the University of Northampton to aid convenience and to be representative of the overall population from which the sample for the study would be drawn. Initially, the participants provided signed consent to participate in a pilot for the quantitative questionnaire for Study One. This was followed by a focus group to gather feedback on the participant information sheet, questionnaire design and completion time. The category headings for each of the measurement scales were discussed, with particular attention being paid to the scale items for

Aaker's Brand Personality Scale (1997) as this was originally designed for an American rhetoric and possibly needed to be adapted to be tested in a UK context (Smith, 2009). It was also important to consider the flow of the questionnaire, particularly with the design encompassing the randomisation of three different measurement scales. By using previous empirically tested measurement scales, the researcher compared results from the pilot study to previous research which applied the same scale items. This ensured consistency as well as identifying any confounding variables which may have been overlooked in the research design (Bell *et al.*, 2018).

The second half of the focus group tested the Study Two research methods. Firstly, participants were asked to access the iOS Screen Time feature on their personal Smartphones for the researcher to observe whether any difficulties arose in the interpretation of the written instructions. The semi-structured interview questions and projective techniques were then piloted with the group, with the researcher noting emotional responses to the tasks as well as the depth of data that was collected.

The pilot study further enabled the researcher to test the proposed data analysis procedures. This included initial analysis of the quantitative survey data from Study One and interpretation of the interview data from Study Two. Following the pilot study and subsequent advice from the author's supervisors to validate the resulting interpretations, a number of adjustments were identified across all phases of study (table 3.2). These amendments were further cross-referenced with the relevant academic literature before being incorporated into the final research design.

Identified issue from pilot study findings	Adjustment made to research design
Confusion over what was meant by the term 'branded app'.	Definition added to the participant information sheet and questionnaire as well as adding a note that social networking applications are not to be included as a favourite branded app.
Questionnaire length varied from 10 minutes to 20 minutes completion time. Some survey fatigue with those who spent 20 minutes completing the questionnaire.	Wording updated on participant information sheet to reflect difference in completion times. Clear instructions added to questionnaire of how to complete the questions efficiently.
Some confusion with some of the terms included on Aaker's scale – 'small town', 'wholesome' and 'Western'.	Following a review of the literature, the researcher made the informed decision not to remove these items at this stage so as not to invalidate the scales. Principal Component Analysis would be conducted to ascertain the final items to be included for analysis.
Questionnaire analysis difficult with a small sample but differences could be identified between the ideal self and the actual self based on response variations to Aaker's scale.	At least 100 participants are needed for full analysis to be conducted. It was identified that a T-test was needed to establish statistically significant difference between the ideal and actual self.
Question 6 on the ECM scale will need to be re-coded due to the inverse of meaning.	Question 6 re-coded in SPSS to measure expectancy confirmation via the ECM.
Blackboard Collaborate tested with users signing in as a 'guest'. Issue raised that the link could expire. WIFI speeds could cause disruption. Platform better accessed on a laptop rather than a Smartphone so that it is easier to look at apps.	Place holder meeting request to be used when arranging interviews and then guest link to be sent the day before the interview. Participants to be made aware that they can re-join if they lose internet connection. Need to make it clear that the interview should be accessed using a laptop rather than a Smartphone device.
Some participants expressed difficulty in imagining a brand as a person in the room scenario.	Room scenario for the construction task adapted to include 'brand people' in the form of stick drawings with logo heads to represent each of

	<p>the favourite brands. Room background drawing edited to resemble more of a recognisable room rather than a line drawing. Interview guide updated to include the questions which produced the richest data and were best understood by the participants.</p>
<p>Some participants displayed signs of discomfort when describing their ideal self.</p>	<p>Photograph of ideal person introduced to the expressive task to take the attention away from a personal viewpoint of the ideal self.</p>
<p>Participants found it difficult to describe self-congruence.</p>	<p>Circle of self-congruence task to be included for participants to be able to visualise the perceived difference between their ideal and actual self.</p>
<p>Ethical concern raised over whether the iOS Screenshot data could be traced back to them.</p>	<p>Researcher made it more explicit on the participant information sheet and consent form that all data, including the iOS Screenshot data, would remain anonymous. Participants have to consent to take part in the research at the beginning of the research period and provide weekly consent by sending the researcher their weekly Screenshot screenshots. Further guidance was sought from the Market Research Society (MRS).</p>

Table 3.2 Research design amendments as a result of the pilot study (Source: Author, 2018)

3.8 Sampling framework

Sampling is considered a key step in the research design process in that it informs the extent to which the research results can be generalised to a population. To develop a sampling framework, it was pertinent that the researcher did so in close consideration of the research aims of the study (Silva, 2015). A non-probability homogenous purposive sampling method was

applied as a justified approach to the exploratory nature of the research, in an emerging area of study which lacks empirical research (Woodsmall and Bechkoff, 2016). This relates to the purpose of Study One which was to identify the relationship between the variables in order to be able to compare these findings, through triangulation, to the ethnographic research of Study Two. The more data that could be gathered, the greater the internal validity as opposed to the external validity of the results (ibid).

3.8.1 Sampling technique

The term 'population' refers specifically to 'the universe of units from which the sample is to be selected.' A 'sample' then is equated to a segment of the overall population under study (Bryman and Bell, 2011, p.187). Sampling can broadly be divided into two distinct categories – probability sampling (also referred to as 'random sampling') and non-probability sampling. A probability sample denotes a sampling method which aims to ensure that everyone within the unit of population has a chance of being selected for the study. With non-probability sampling however, some units of the overall population are more likely to be selected for the study than others (Bryman and Bell, 2011). A non-probability sampling technique was selected for this research study as a more flexible approach as this does not require access to an entire population. The purpose of the research was to explore the relationship between levels of BESC and continued usage of digital possessions. In consideration of the digital possession under study (branded apps), the most appropriate sample of the population evidenced to be the most prolific users. The limitations of this sampling technique are in the generalisability of the

results and the greater chance of sampling errors if the sample is not representative of the population. However, with a lack of previous comparative research to reflect upon, the researcher placed emphasis on gaining a comprehensive understanding of the social phenomena set out in the research objectives rather than focusing solely on the generalisability of the results (Etikan *et al.*, 2016).

The main non-probability sampling techniques include convenience sampling, snowball sampling, purposive sampling and quota sampling. Convenience sampling involves the researcher selecting participants who are most likely to be able to participate in the study. This is particularly useful for pilot studies aiming to test the methodological approach rather than gathering a representative sample. Snowball sampling involves participant recruitment through word of mouth by encouraging participants to share the study details with their own networks. This is a useful technique for hard-to-reach populations but is considered to be non-representative and does come with ethical implications concerning protecting the anonymity of the participants (Pajo, 2018). For this study, purposive sampling was selected to enable the researcher to set criteria needed for the participants to take part in the study. Using homogenous sampling, participants were selected based on particular characteristics of interest to the researcher. This focused the research on the specific variables identified rather than studying an entire population. It is acknowledged that purposive sampling is limited in that the results cannot be generalised to a wider population. However, as discussed above, a key aim of interpretative research is to contribute to a body of knowledge rather than to generalise findings. As argued by Denzin, 'the interpretivist rejects

generalisation as a goal and never aims to draw randomly selected samples of human experience' (1983, p.133). This perspective is amplified in consideration of Study Two of this research which takes a qualitative approach to addressing the quantitative findings. Williams (2000) supports this mixed-methods approach with the same sampling method applied across both studies:

interpretivism only has limits if it is regarded in methodological isolation of other strategies, such as the survey...researchers' theories about process and structure can be exposed to the meaning criteria of those whose experiences the researcher wishes to explain
(p.221-222).

In this way, meaning comes from the triangulation process rather than in consideration of the findings from Study One and Study Two in isolation.

3.8.2 Sample size

For Study One, the sample consisted of 162 men and women from a population of Smartphone users between the ages of 18 and 25, currently using an iOS Smartphone and residing in the United Kingdom. This specific age range was selected as this user group were identified as the most active Smartphone application users in the UK (Ofcom, 2020). As age was not identified as a variable within the research, focusing on this particular Generation ('Gen Z') allowed for more detailed active engagement to be monitored. The sample was made up of iOS users only to ensure that there

was consistency throughout both studies of the research project, with Phase One of Study Two utilising an iOS application for data collection (see section 3.6.1). A larger sample size for Study One was required due to this stage of the research taking a quantitative approach to test the hypotheses.

Thirty participants volunteered to take part in Study Two from a different sample of Generation Z iPhone users, aged 18 to 25, to those who participated in Study One. Phase One involved the participants completing the same quantitative questionnaire that was administered in Study One. The purpose of this was to collect quantifiable data for the three variables that were found in Study One to affect branded app usage intention, namely actual and ideal self-congruence, congruence between self-concept and perceived brand personality, and level of BESC. A separate sample was recruited so that the three-month digital ethnographic research period could commence immediately after the completion of the questionnaire during an initial set-up interview. This was important to reduce social desirability bias and to gain an accurate understanding of branded app usage within real-time parameters. This is a key attribution to extend the large body of cross-sectional research within the field of CBE and BESC.

3.8.3 Participant recruitment

Participants were recruited for both studies through the researcher's own networks and through advertising the research project on the Call for Participants (CfP) website and social networks. CfP is an online service which provides a global platform for recruitment for academic research. CfP was

selected after similar projects were showcased and successfully recruited participants on the CfP website. The customisable nature of the research page (Appendix H) furthermore allowed for set criteria, as per the purposive sampling technique, to be agreed before the participants could partake in the research. The set criteria referred to the age of the participants (between 18 and 25 years of age), their location (must be based in the United Kingdom) and the essential requirement to own an iOS Smartphone device. If the participants met *all* of the criteria, they could then complete the online questionnaire by clicking on the link through the CfP advertisement. The research advertisement was live on the CfP website between January 2019 and June 2019. A total of 162 questionnaires were completed for Study One (n=162).

3.9 Ethical considerations

The research aims to 'maximise benefit for individuals and society and minimise harm and risk' (ESRC, 2018) by abiding by the University of Northampton's ethics policy and Ethics Committee guidance, including the updated Data Management Policy (2018) and Risk Assessment guidelines. Ethical approval for the Pilot Study and Study One was provided by the University of Northampton's ethical committee in April 2018. Ethical approval for Study Two was provided in July 2019. The ethical considerations were addressed in respect to the overall methodological approach as well as in relation to the individual research methods used across the two studies and data handling. This is in light of the tightening of research ethics and guidance following the growth of digital research methods and the impact generally of technology on the research landscape (Miller and Birch (Eds.), 2012).

Informed consent was a requirement for all stages of the research. Prior to consenting to take part in the research study, it was vitally important that all participants were fully informed and understood the aims of the research, how the research data was going to be gathered, and how the data would be stored and used in the future for academic purposes. For Study One, informed consent was provided on the Call for Participants website, prior to access being granted for the participants to take part in the study. The Call for Participants website requires that ethical approval is given for the research studies that are uploaded to the website and prospective participants are made aware of this. Participants must tick a box at the beginning of the questionnaire to consent to take part in the research (Appendix I) to be able to proceed to question 1. Participants are given an email address to contact if they wish to withdraw their data from the study up to one month from the end of Phase 1 data collection. Each participant was assigned an identification number for the removal of data if this was requested.

Ethical considerations were of the utmost importance for the connective ethnographic phase of the research. Participants were made aware that the research included overt observation and that no data would be collected without the participants' informed consent. Participants are asked to consent to run the iOS ScreenTime feature already installed on their Smartphone device in order to gather application usage data across a three-month period. The app did not collect any sensitive data or any information which could identify the participants and required that the participants submit their own app usage data screenshots, providing continuous consent for data to be

captured. The anonymised data was used to specifically measure the amount of times that each of the participants open a branded application and how long they spend within that application. No data was gathered in regard to the app activity to protect the participants' anonymity and privacy. Hammersley and Atkinson (2007) note that privacy is a particular concern with ethnographic research when the researcher is obtaining data that was not intended for public consumption. This is highly relevant to Smartphone data collection as Smartphones are highly personable devices. To overcome these concerns, participants provided informed consent prior to taking part in the research period. All participants were given the right to withdraw from the study up to one month after the research period, consequently deleting all app usage data screenshots and they were informed that they could disable the iOS Screentime feature if they wished to withdraw from the study.

The management of data is a primary concern, especially using a Smartphone application as a data collection method as this raises concerns of privacy and security. To reduce the risk of data being shared outside the realms of the research, part of the reason for the researcher stipulating that the research focuses on iOS users is due to Apple's strict data management and privacy terms and conditions. By default, all data is encrypted on any given iOS device (Apple, 2018). Furthermore, Apple has rigorous terms and conditions (2018) which developers must abide by for their application to be available on the Apple app store. The data usage application was set up so that the participant remains anonymous, with the researcher having no access to any personal information, including the participants' IP address, name, age, gender, ethnicity, or location. For data analysis purposes, each participant

was given a unique identification number so that the usage data can be correlated with the data collected in the questionnaire with the same unique identification number.

Phase two of the second study involved the collection of qualitative data to gain a deeper understanding of the way in which the participants extract meaning from their branded apps and digital possession in general. The data was gathered through qualitative online semi-structured interviews (see Appendix J for example transcript) which subsequently posed different ethical concerns to the quantitative research methods. Participants were required to give informed digital written consent to take part in the semi-structured interviews via a file transfer of the consent form via Blackboard Collaborate Ultra. Participants were informed that they can stop the interview at any time and could withdraw their data from the study up to one month after the end of the data collection period. Study Two participants were made aware at the start of the research period that they would receive a £25 Amazon voucher as a thank you gesture for contributing time and effort to the study, after they had completed all phases of the research.

3.10 Chapter summary

This chapter has set out the methodological approach of the research study, underpinned by a constructivist paradigm and interpretivist approach to the research. The research methods were placed within a conceptual methodological framework which details two studies, taking a triangulation approach to data analysis. The research methods were justified in terms of their strengths and limitations, as well as the appropriateness of the method

in light of the researcher's philosophical research stance. Justification was given for a purposive sampling technique which aligns with the researcher's constructivist research philosophy to take an exploratory approach to understanding the social phenomena of utilising branded digital possessions as form of digital self extension. The chapter concluded with consideration of the key ethical issues associated with the research study and how the researcher controlled for these.

Chapter 4 presents the research findings from both studies, leading to a process of triangulation and interpretation of the quantitative and qualitative research findings. This is followed by a discussion of the main findings in Chapter 5, before research conclusions are drawn in Chapter 6.

Chapter 4 Research Findings

4.1 Overview of the chapter

The purpose of this chapter is to validate the results obtained through the different research methods and separate samples of the population under study (Gen Z iPhone users). Additionally, this chapter aims to provide a holistic view of the data through the amalgamation of data sets in order to report the main findings.

The chapter is comprised of seven sections. Section 4.2 presents the quantitative data obtained from the Study One questionnaire which was distributed from January 2019 to June 2019. SPSS statistical analysis was carried out on a total of 162 questionnaires (n=162) from a sample of iPhone users aged 18-25. This is reported through the descriptive statistics to provide a numerical interpretation of the initial analysis, followed by linear and hierarchical regression in section 4.3 to test the following hypotheses:

H1: Level of BESC positively moderates intended usage continuance of branded Smartphone applications

H2: Congruence between a consumer's actual self and perceived brand personality and a high level of BESC positively affects intended usage continuance of branded Smartphone applications, moderated by level of brand engagement in self-concept (BESC)

H3: Congruence between a consumer's ideal self and perceived brand personality and a high level of BESC positively affects intended usage continuance of branded Smartphone applications, moderated by level of brand engagement in self-concept (BESC)

The findings address research questions two and three and provide a statistical context to underpin the research approach of Study Two, as presented in section 4.4.

Section 4.5 details the data collected from Study Two which took a multi-phase approach involving the same questionnaire from Study One, connective ethnography to examine branded app usage over a period of three months, and semi-structured interviews for a deeper understanding of branded app usage continuance. A total of eighteen iPhone users aged 18-25 completed all phases of Study Two. The quantitative data was analysed manually by the researcher. Thematic analysis was conducted via NVivo to draw conclusions from the qualitative data.

The final stage of data analysis was triangulation of all data sets (figure 4.1) and is presented in section 4.6. This involved addressing the research objectives holistically, as part of a constructive approach in which meaning is obtained through inter-connectivity of data that reflects reality. The qualitative findings from the semi-structured interviews, enhanced by the use of projective techniques, provide empirical evidence of the quantitative causal relationships found in Study One and the app usage data obtained through the weekly Screentime reports in Study Two. Amalgamation of the data sets

allowed for conclusions to be drawn within and across the participant profiles which were produced as part of Pich and Dean's (2015) systematic approach to analysing data achieved through projective techniques. An example of an individual profile can be seen in appendix G. Following the completion of the individual profiles, the key themes and sub-themes from each of the participant profiles were collated in a metatable. This provided a further opportunity for cross-checking, as well as identifying any discrepancies or inconsistencies with the data obtained from Study One. The chapter concludes in section 4.7 with a summary of the key findings which resulted in five proposed outcomes of digital brand engagement with branded apps.

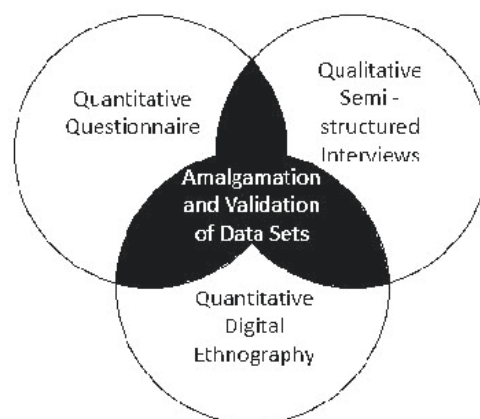


Figure 4.1 Triangulation of data to produce amalgamated research findings (Source: Author, 2020)

4.2 Study One exploratory data analysis

The first step in the data analysis process was to conduct Exploratory Data Analysis (EDA) to understand the main characteristics of the data collected via the multi-scale questionnaire administered in Study One (n=162). This was carried out in two stages. Firstly, descriptive statistics provided a useful

way to visualise and summarise raw data in a meaningful way that allowed for patterns to emerge. Secondly, inferential statistics were employed to test the hypotheses and draw general conclusions from the data to inform the direction of Study Two.

4.2.1 Descriptive statistics

The first part of the questionnaire asked participants to rank each of Aaker's brand personality items on how closely the personality attribute matches their ideal self (the person they would like to be). Table 4.1 details the frequency distribution of the most dominant personality dimension from across the five personality dimensions from the 162 respondents. This suggests that for the ideal self, the most dominant favourable personality dimension is competence, with 43.2% of participants selecting items under this dimension on Aaker's scale most frequently.

Personality Dimension	Frequency (%)
D1: Sincerity	22.8
D2: Excitement	14.8
D3: Competence	43.2
D4: Sophistication	6.2
D5: Ruggedness	5.6
No dominant dimension	7.4

Table 4.1 Frequency of dominant personality dimension assigned to the ideal self (n=162)

Participants were then asked to rank the personality items according to their actual self-concept (how they currently see themselves). Table 4.2 reveals that the most prominent personality dimension in terms of how participants currently view their self-concept is sincerity. 44.4% of participants rated the personality items under the sincerity dimension as the most dominant.

Personality Dimension	Frequency (%)
D1: Sincerity	44.4
D2: Excitement	25.9
D3: Competence	13.1
D4: Sophistication	3.1
D5: Ruggedness	2.5
No dominant dimension	11.1

Table 4.2 Frequency of dominant personality dimension assigned to the actual self (n=162)

Comparing these two tables, it is noted that there is a difference in the way in which the participant would like to be in the future (ideal self-concept) and how they currently see themselves (actual self-concept). Although 43.2%, would like to possess personality characteristics under the 'competence' dimension, only 13.1% currently see their dominant personality being made up of traits under this dimension. Despite the dominant personality dimension for the actual self being sincerity, the ideal self rating for this reduces from 44.4% to 22.8%.

In the second part of the questionnaire, participants were asked to record their three favourite branded apps considered to be 'm-commerce' apps. Participants who listed a social media app were eliminated from the final dataset. Out of a total 486 branded apps included in the final data set (with each of the 162 participants choosing three favourite apps), the most commonly cited app was the 'Amazon' app. 18% of participants listed 'Amazon' as one of their favourite branded apps. From the top five branded apps, 'Amazon' was followed by 'ASOS', 'Pretty Little Thing', 'Nike' and 'Misguided'. 32% of all favourite branded apps were from fashion-related brands. 45% of participants had at least one fashion-related app and 17% of participants listed all three of their favourite apps as being from fashion-related brands. This included high-street fashion brands (such as 'ASOS', 'Zara', 'Shein' and 'H&M'), sportswear brands (including 'Nike', 'Sports Direct' and 'Adidas') and luxury designer fashion brands (such as 'Hugo Boss', 'Rolex', 'Ted Baker' and 'Louis Vuitton'). A break-down of all categories of m-commerce apps that were recorded by the participants as favourite branded apps can be seen in figure 4.2.

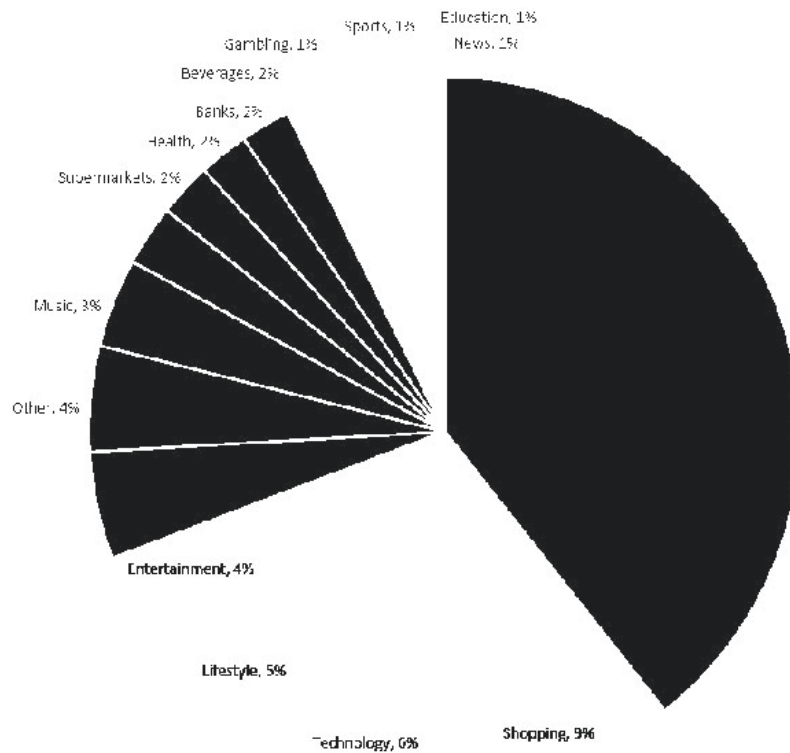


Figure 4.2 Categories of favourite branded apps from study one

Participants were asked to rate the personality characteristics for each of their chosen favourite branded apps according to Aaker's brand personality scale (1997). Overwhelmingly, the most dominant brand personality characteristic was competence, with 99.4% of participants attributing items under this dimension to their chosen apps. This aligns to the dominant ideal self personality dimension, suggesting congruency between branded app personality and ideal self-concept. This is discussed further in the hypothesis testing in section 4.2.2.

Levels of brand engagement in self-concept (BESC) were measured in the third part of the questionnaire. The overall spread of the BESC scores showed that the lowest score was 1.23 and the highest BESC score was 5.62. The

median BESC score was 4.53. Overall, 62% of participants recorded a high level of BESC and 38% of participants recorded a low level of BESC.

The final part of the questionnaire applied the expectancy confirmation model (ECM) to measure participants' intention to continue using each of their favourite branded apps. Of those who had previously used their favourite apps, 79% either tended to agree or strongly agreed that they intend to continue using their favourite branded apps, with 14% selecting 'neutral'. Of those who intended to continue using their favourite apps, 80% had a high BESC score and 20% had a low BESC score. This implies that BESC is having a positive effect on app usage continuance intention, relating strongly to H1.

Only 6% of participants strongly disagreed or tended to disagree that they intend to continue using their favourite branded apps. 14% of participants had not used their favourite branded apps but intended to in the future. When comparing the BESC score of this group of participants, 79% had a high BESC score, whereas 21% had a low BESC score. This implies that despite not yet using the app, the participants had attributed this as a favourite app due to the brand association and/or their expectations of the app.

When asked whether their branded app exceeds their expectations, a mean total of 30% strongly agreed or tended to agree that app usage was better than expected, with 45% stating strongly agreed or tend to agree that most of their expectations of their favourite apps were confirmed. 10% disagreed or strongly disagreed that their favourite app met their expectations (figure 4.3). When asked if they would strongly recommend their branded app to

others, 81% agreed or strongly agreed, whilst 19% stated that they would not recommend their app to others.

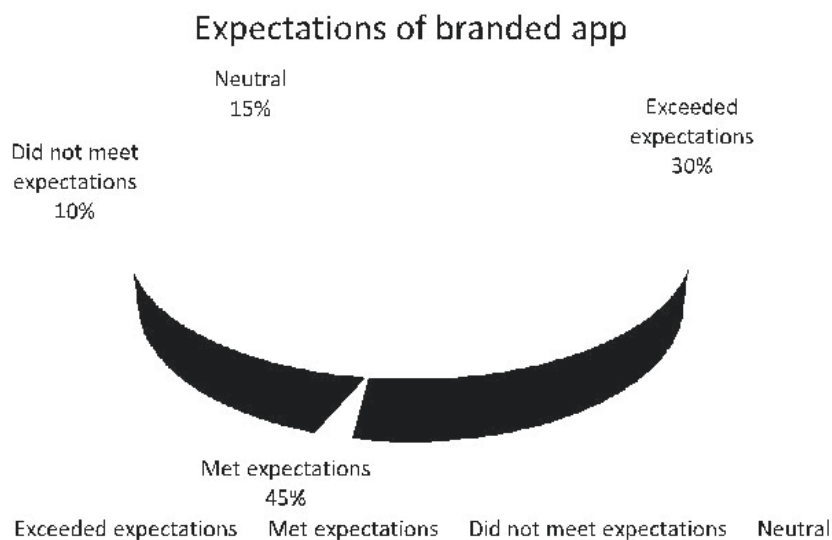


Figure 4.3 The extent to which favourite apps met participants' expectations (mean of three favourite branded apps)

To assess functional brand value attributed to favourite branded apps, participants were asked to rate the extent to which using their branded app improved their personal performance, productivity, effectiveness and management. The mean functional value scores from participants' three favourite branded apps are presented in table 4.3. This implies that the majority of participants attributed high functional brand value to their branded apps based on the perceived benefits of the app within their daily lives. This provides an area for further exploration in Study Two to understand the relationship between perceived functional brand value and app usage continuance.

Functional value	Strongly agree	Tend to agree	Neutral	Tend to disagree	Strongly disagree
Increases personal performance	20%	31%	25%	12%	12%
Increases personal productivity	26%	33%	29%	10%	2%
Increases personal effectiveness	28%	36%	23%	7%	6%
Increases personal management	27%	37%	22%	10%	4%

Table 4.3 Percentage of attributed functional value scores to favourite branded apps

4.2.2 Tests of normality

Prior to testing the hypotheses, normality was assessed to ascertain whether the data is parametric in order to identify the most appropriate statistical tests to use, with normal data being a central assumption in parametric testing. Normality was tested both graphically and numerically to counter-balance the sensitivity of statistical testing and the subjectivity of interpreting graphical charts (Field, 2018). Histograms for all variables were used to visually assess the distribution of the data as well as any skewness of the data. For each histogram, it is analysed that there is approximate normal distribution of the data with the presence of a 'bell curve' for each variable

and each combination of variables. Each histogram also shows a symmetric distribution, with no clear skewness of the data.

Boxplots were created to view the distribution of the data in more detail across three quartiles. To be considered as normally distributed data, the median line is represented as a solid line in the centre of the box, with two “whiskers” being of equal length. One of the key benefits of the boxplot over a histogram is the ability to be able to identify outliers. Outliers are analysed by SPSS as values which appear to be more than 1.5 box lengths from the lower or upper quartile of the box and are coded by a circle next to the case number of the potential corresponding outlier value. The starred cases are considered to be ‘extreme’ outliers by SPSS and are those which are more than three box lengths from the upper or lower levels of the box. The boxplots for all independent values reveal some potential outliers are present in the data. However, none of these case values are considered to be ‘extreme’ by SPSS.

Although further scrutiny of the data is needed to assess the potential impact of these outliers on the overall fit of the proposed research model (Rousseeuw and Hubert, 2011) caution needs to be taken before removing these values. This is particularly important to deliberate for this study which involves multivariate analysis as opposed to univariate analysis for which extreme value analysis to identify outliers is typically designed for (Filzmoser, Hron, and Clemens, 2012). With multivariate analysis, it is the relationship between the variables which is being studied rather than assessing the variable independently. With this in mind, the 1.5 box lengths cut off point may be

misleading and deleting the cases identified as 'outliers' could cause sample bias to occur when the outlier may be having little effect on the hypothesis testing (Brant, 1990). In the majority of cases with a relatively small sample, it can be observed that merely increasing the sample size will eliminate the outliers (Aggarwal, 2017).

Further graphical and numerical statistical testing is warranted to ascertain whether the outliers identified by the box plots needed to be removed or will not cause any distortion to the overall findings. To further investigate the normality of the data and the outliers identified, PP plots were produced for greater visual scrutiny. Taking into account the residual plots for the variables identified as comprising potential outliers, the residual dots appear to be spread relatively evenly along the zero line. There is evidence of some distortion however which needs to be analysed further via numerical statistical testing. The data can further be validated by the repetition of the Study 1 questionnaire with the Study 2 participants. This is further discussed in section 4.5.

Following the visual analysis of normality, with no extreme distribution of data being identified, further examination of skewness and kurtosis was conducted for each dependent variable (App 1 usage intention, App 2 usage intention and App 3 usage intention) in order to increase the validity of the results when assessing the normality of the data. All three dependent variables were normally distributed with skewness values within the range of -2 and +2 and kurtosis within the range of -3 and +3. This confirmed that the data was parametric and could therefore be analysed using parametric

statistical tests. Following this confirmation of validity, a mean score for the three apps was computed for further tests to be conducted.

To further assess the normality of the data, two further statistical tests were run within SPSS. The Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy was applied to measure the variance between the variables and whether the items would be suitable for factor analysis or structure detection. With the KMO score being above 0.5, structure detection is appropriate in order to determine any relationships between the different variables. The Bartlett test of Sphericity was applied to test the hypotheses by testing for occurrences of unequal variance. As the significance level was less than 0.05 then the hypotheses can be accepted.

Prior to assessing whether the data fits the proposed model, it was paramount to test the validity of the multiple measurement scales which were used to test the hypotheses for Study One. This involved testing each scale for internal validity and analysing whether each component of each of the measurement scales contributes to the overall construct.

Being a highly established and the most common empirically tested method for measuring brand personality within the field of marketing (Ana, Vinhas Da Silva and Laplaca, 2015, p.128), Aaker's Brand Personality Scale (1997) has a high level of internal consistency and has been applied across several different fields of research. Although Aaker's Brand Personality Scale (1997) has been previously used to measure self-concept (e.g., Kressman *et al.*, 2006, Banahene, 2017), it has not, to date, been used to measure perceived

brand personality of branded Smartphone applications. It was therefore necessary to analyse the internal consistency of the scale used in the context of measuring ideal self-concept and actual self-concept holistically across the five dimensions in addition to assessing the reliability of each item.

Cronbach's alpha was used to measure whether all items on the scale were consistent with the corresponding personality dimension that they were assigned as part of Aaker's scale development (1997). The results of the Cronbach's alpha confirm that, with the exception of dimension 5 'ruggedness', four of the five dimensions have a high level of internal consistency when measuring the ideal self. All five dimensions had a high level of internal consistency when measuring the actual self, as determined by the Cronbach's alpha results presented in table 4.4. This is consistent with previous research and the pilot study which found the 'ruggedness' dimension to be a point of discrepancy when tested cross-culturally. Furthermore, with Cronbach's Alpha of dimension five on the scale measuring ideal self-concept estimated to be close to an acceptable level of reliability of $>.65$ (Vaske, Beaman and Sponarski, 2017), the dimension was not removed from the data analysis to avoid causing disparity between the two measurement scales applied to measure the totality of self-concept.

Dimension	Cronbach's Alpha (ideal self-concept)	Cronbach Alpha (actual self-concept)
Sincerity	.825	.735
Excitement	.892	.882
Competence	.843	.857
Sophistication	.711	.830
Ruggedness	.635	.743

Table 4.4 Results of Cronbach's Alpha test for internal consistency when measuring ideal and actual self-concept on the same scale

With the research taking an exploratory approach, the differences between the Cronbach Alpha scores provide scope for later analysis. In light of this, each dimension on Aaker's scale (1997) was compared in relation to Cohen's d effect size in order to establish whether the difference dimensions were having a greater or lesser effect in the overall self-concept construct. Comparing the Cohen's d effect sizes, 0.2 – 0.49 is considered a small effect, 0.5-0.79 a medium effect and >0.8 a large effect (Cohen, 1989). Looking at table 4.5, dimension three (competence) had the greatest effect on self-concept, with dimension 1 (sincerity) and dimension 5 (ruggedness) only have a small effect.

Dimension	Cohen's d effect size (Mean/Std. Deviations)
Sincerity	0.29
Excitement	0.53
Competence	0.83
Sophistication	0.70
Ruggedness	0.39

Table 4.5 Cohen's d effect size for each dimension of Aaker's brand personality scale (1997) when measuring ideal and actual self-concept

To test the validity of measuring the ideal self and the actual self on separate scales, a Paired T-test was carried out to determine whether the mean data collected for the ideal self and the mean data collected for the actual self are statistically different. As the difference between all dimensions across the two measurement scales was statistically significant ($<.05$) a key finding is highlighted that there was a significant difference between the way in which consumers perceived their ideal self-concept and how they perceived their actual self-concept. This was paramount to be able to test the identified hypotheses, as well as providing clear direction for connective ethnography within Study Two.

4.3 Hypothesis testing

The following hypotheses were tested in Study One:

H1: Level of BESC positively moderates intended usage continuance of branded Smartphone applications

H2: Congruence between a consumer's actual self and perceived brand personality and a high level of BESC positively affects intended usage continuance of branded Smartphone applications, moderated by level of brand engagement in self-concept (BESC)

H3: Congruence between a consumer's ideal self and perceived brand personality and a high level of BESC positively affects intended usage

continuance of branded Smartphone applications, moderated by level of brand engagement in self-concept (BESC)

In order to accept the hypotheses, BESC score and congruence between a consumer's ideal or actual self needed to have a significant effect on the intended usage continuance of branded Smartphone applications (as measured by the ECM). In order to examine whether there is any relationship between the independent variables and the dependent variable, linear regression was conducted through SPSS.

4.3.1 Linear regression

Linear regression is used in order to predict the value of a dependent variable based on the value of the independent variables by measuring a linear relationship between the independent and dependent outputs. In order for linear regression to be conducted, the data needed to be tested for linearity by visually inspecting scatterplots of the independent variables, there needs to be no significant outliers and the data needs to visually show homoscedasticity along the line of best fit for the data. Normal distribution of the residuals also needed to be normally distributed (Field, 2018). Having met all of these assumptions, the data could be prepared for linear regression.

To prepare the data for linear regression to test whether the hypotheses could be accepted, brand self-congruence scores were computed according to Sirgy's (1982) traditional self-congruity formula for both the ideal and actual self. This resulted in each participant being given an ideal self congruent score

and an actual self congruent score. The congruent scores were measured alongside BESC scores to evaluate whether the combination of these scores had a statistically significant effect on the app usage intention score measured by the ECM.

A linear model was prepared for each dependent variable (app usage intention scores) to determine the value of each of the dependent variables in order to increase the validity of the research. A mean of the three intention scores was calculated to determine an overall effect size (figure 4.6). R^2 for the overall model was 15.1% with an adjusted R^2 of 13.5%. With the model showing a small effect according to Cohen (1988), the BESC score and self-congruence scores were found to have a statistically significant effect on the app usage intention score.

Model R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
				R Square Change	F Change	df1	df2	Sig. Change	
1	.389 ^a	.151	.56918	.151	9.374	3	158	.000	1.249

a. Predictors: (Constant), Total number of Congruence items ideal self; BESC Score, Total number of Congruence items actual self
b. Dependent Variable : App usage continuance intention

Table 4.6 Linear regression model summary – effect of ideal-self congruence, BESC and actual self-congruence on app usage continuance intention

In order to be able to test accept the hypotheses, it needed to be assessed whether the congruence score between the ideal self and perceived brand personality and/or the congruence score between the actual self and perceived brand personality, alongside the BESC score, had a significant effect on app usage continuance score. To predict a continuous dependent variable based on multiple independent variables, hierarchical regression was conducted. This allowed for the effect of the independent variables on the dependent variable to be measured in stages so that the variance of each element of the model could be observed. This in turn allowed for the overall fit of the model to be identified.

4.3.2 Hierarchical regression

Hierarchical Regression is described as a sub-section of multiple regression. The purpose of hierarchical regression is to determine whether an independent variable explains the variance caused to the dependent variable outside of the effect of the other independent variables. In this way, the overall effect of the independent variables on the dependent variables can be extracted so that the significance of each part of the model can be measured in respect of the other parts of the model.

The amount of variance between the different components of the model can be evaluated for its statistical significance based on R^2 (ΔR^2), whereby ΔR^2 corresponds to the change in variance to the dependent variable when an additional independent variable is added to the overall regression model.

To increase the validity of the research, hierarchical regression was carried out for the three usage intention scores. The model summary shows the percentage change in R^2 as a way to evaluate how much predictive power was added to the model by the addition of another variable. To gain an overall model fit for the data, hierarchical regression was carried out on the mean app usage score (table 4.7). Model One tested the variance to the overall app usage intention score based on BESC score, resulting in 7.9% of variance being attributed to level of BESC. Model Two saw an increase in variability to 13.7% when actual self congruence (a match between actual self-concept and perceived brand personality) was added to BESC score. Further variance is found with Model Three which found that BESC score, actual self congruence and ideal self congruence (a match between ideal self-concept and perceived brand personality) accounts for 17%. R^2 for the overall model was 17% with an adjusted R^2 of 15.4%; a small size effect according to Cohen (1988). This shows that with each additional variable that is added to the overall model, the predictive power of the independent variables statistically significantly increases. The statistical significance of this model was further explained by the ANOVA table which confirmed the addition of each variable was less than 0.05 ($p=.000$), and therefore a significant result was found at each stage and the hypotheses can therefore be accepted.

Model Summary ^d										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	Durbin-Watson
						F Change	df1	df2		
1	.287 ^a	.079	.073	1.50479	.079	13.725	1	160	.000	
2	.370 ^b	.137	.128	1.46116	.058	10.499	1	159	.001	
3	.413 ^c	.170	.164	1.43740	.039	6.300	1	158	.013	1.141

Table 4.7 Model summary for the hierarchical regression model for branded app usage intention

The co-efficients table (table 4.8) provided further analysis of the overall model to explore the individual impact each independent variable had on the dependent variable. Within model 3, the addition of the actual self congruence to the BESC score had no significant change effect on the independent variable. However, the addition of the ideal self congruence score to the BESC score and the actual self congruence score together had a significant effect on the predictive power of the model, showing a significant change in variance. This demonstrates the importance of studying both ideal and actual self congruence with the perceived brand personality of branded Smartphone app. Particular emphasis is placed on the ideal self as an important predictor of branded app usage continuance intention. Moreover, without the addition of the BESC score, ideal and actual self congruence were found to have no significant effect on app usage intention. BESC score is therefore acting as a moderator in the relationship between brand self-congruence and app usage continuance intention. These findings were added to the key considerations applied to Study Two as a result of the Study One data analysis, summarised in the succeeding sub-section.

Model	Coefficients									
1 (Constant)	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BESC Score	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2 (Constant)	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BESC Score	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Self self congruence	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3 (Constant)	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
BESC Score	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Self self congruence	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Actual self congruence	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

a. Dependent variable: App usage continuance intention

Table 4.8 Co-efficients for the mean app usage intention hierarchical regression model

4.4 Summary of main contributions of Study One findings to Study Two

As a result of the analysis conducted on the Study One questionnaire data and the acceptance of the three hypotheses which confirmed the positive relationship between BESC and self-congruence on app usage continuance intention, several key findings informed the direction of Study Two. This part of the research took a connective ethnographic approach to exploring the relationship between branded app usage continuance intention and actual branded app use. This is in line with research objectives four to six (figure 4.4), with particular emphasis placed on understanding the relationship between the variables measured in Study One on actual branded app usage.

RO4: To explore congruency between a consumer's actual self and perceived brand personality as a form of digital self-extension

RO5: To investigate consumers' perceptions of their brand relationships in relation to digital BESC and digital self-extension :

RO6: To advance knowledge within the area of elapsed brand relationships through the study of digital BESC and digital self-extension

Figure 4.4 Key considerations from Study One data analysis to inform the direction of Study Two

4.5 Study Two data analysis

To explore actual branded app usage, and the reasons for usage continuance or non-usage, Study 2 took a multi-phase approach, as discussed in Chapter 3. Thirty participants volunteered to take part in Study Two from a different

sample of Generation Z iPhone users aged 18 to 25 to those who participated in Study One. Phase One involved the participants completing the same quantitative questionnaire that was administered in Study One. The purpose of this was to collect quantifiable data for the three variables that were found in Study One to positively affect branded app usage intention, namely actual and ideal self-congruence, congruence between self-concept and perceived brand personality and level of BESC.

A separate sample was recruited so that the three-month digital ethnographic research period could commence immediately after the completion of the questionnaire during an initial set-up interview. A total of eighteen participants completed Phase One and progressed to the Phase Two semi-structured interview. Four participants were not selected to take part due to providing three social media apps as their favourite apps rather than three branded e-commerce apps. Eight participants withdrew from the study or did not complete the three-month research period.

The quantitative data obtained from Phase One of Study Two (the questionnaire data and app usage data) were coded manually to provide a context for Phase Two. The results from the semi-structured interviews, enhanced by projective techniques, were analysed through thematic analysis, following an adaptation of Pich and Dean's (2015) data analysis framework. The findings from Phase One and Phase Two of Study Two were further analysed as part of the triangulation of data, as presented in Section 4.4. This allowed for further cross-checking and validation of data as part of a rigorous

exploration of branded app usage based on app usage continuance and actual app usage.

4.5.1 Key findings from phase 1 of Study Two

The results which follow are presented according to the three independent variables tested in Study 1 – actual and ideal self-congruence, congruence between self-concept and perceived brand personality of favourite branded apps, and level of BESC. The dependent variable of app usage intention is presented as an overall percentage score for the likelihood of the participant continuing to use each of their three favourite branded apps, with a total of 54 branded apps being analysed. This data is then compared with the actual usage data that was collected by each participant using the iOS Screen Time feature on their personal Smartphone and emailed to the researcher on a weekly basis across the research period.

Questionnaire data was collected prior to the three-month ethnographic period following the completion of the same multi-scale questionnaire which was administered in Study One. Due to a smaller sample size, self-congruence was calculated manually by the researcher on a factor-by-factor basis by coding responses to perceived ideal personality characteristics and perceived actual self characteristics using Aaker's Brand Personality Scale (1997). Each participant's perceptions of their ideal self and actual self across the five dimensions were plotted, as can be seen in figure 4.5 for Participant A.

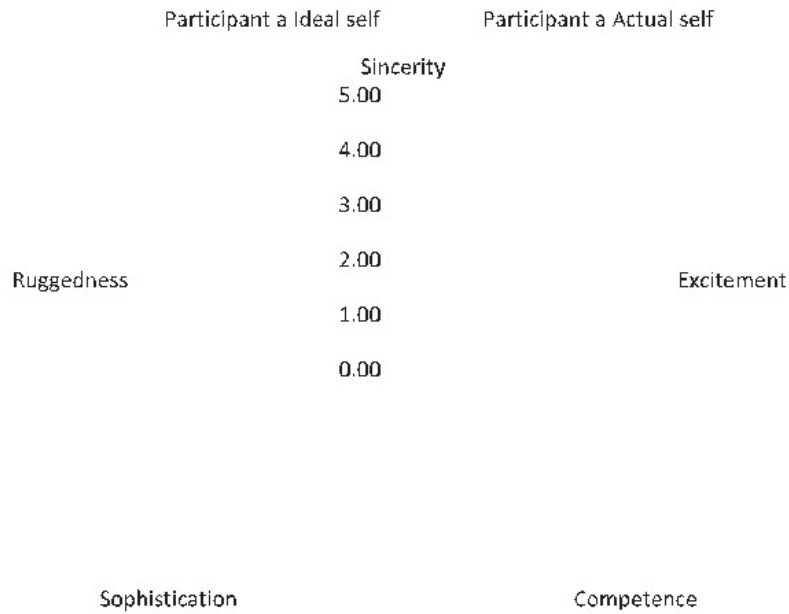


Figure 4.5 Participant A: Ideal self and actual self across Aaker's five brand personality dimensions (1997)

Due to a smaller sample size, self-congruence was calculated manually by the researcher on a factor-by-factor basis by coding responses to perceived ideal personality characteristics and perceived actual self characteristics using Aaker's Brand Personality Scale (1997). This is visualised for all participants in figure 4.6. From this chart it can be evidenced that the majority of participants recorded the 'sincerity' personality dimension as being most congruent between the actual and ideal self, and 'sophistication' as being the least congruence between the ideal and actual self. This is consistent with the Study One findings which found the 'sincerity' dimension to be most dominant personality attribution of the actual self.

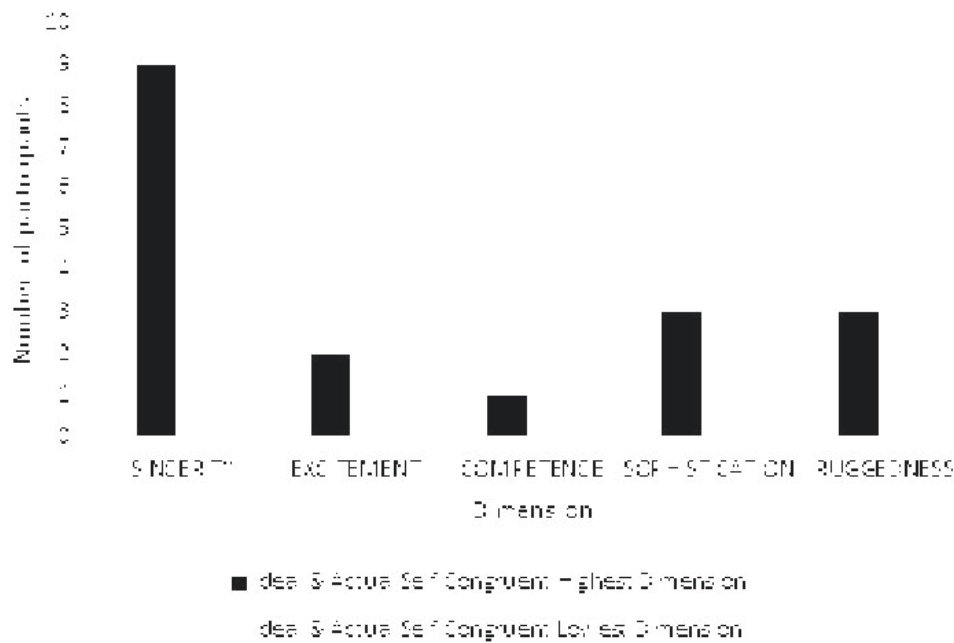


Figure 4.6 Ideal and actual self dimension congruence comparative

Levels of congruence between a participant’s ideal self and perceived brand personality of their favourite apps can be seen in figure 4.7. This can be directly compared with figure 4.8 which shows the actual self and perceived brand personality of favourite apps for all participants. Visually comparing these two-line graphs, it can be observed that for the majority of participants, there is high congruence between the ideal self and the participants’ favourite branded apps, with congruence being slightly lower between the third favourite branded app. Congruence between the actual self and perceived brand personality shows greater variation, with one of the three favourite branded apps being perceived as more congruent with the actual self than the other two apps. As predicted in Study One, this implies that participants view their favourite branded apps to be more closely aligned to their ideal self-concept than their actual self-concept. Further evidence of this can be seen from the cross-checking from the questionnaire for each participant’s

ideal and actual self congruence with the level of self-congruence each participant projected when presented with the self-congruence circles (Appendix L) at the end of the semi-structured interview (figure 4.9). This shows that the majority of participants positioned themselves within a similar range of self-congruence to that which was generated from the data analysis of Aaker's personality dimensions for the ideal and actual self in the questionnaire. This positively supports the use of the mixed-methods approach to obtaining the findings as both a robust data collection method as well as enhancing the validity of the results.

Plotting all three apps on the same graph further adds validity to the data set by visually recognising the similarities between the participants' three favourite branded apps. Participant Y had the highest actual self congruence score of 95% for all three apps. When plotted against the other 17 participants, this can be judged as an outlier. The data is further contextualised by considering these congruence scores in relation to the usage intention and app usage as well as the qualitative findings from the semi-structured interviews.

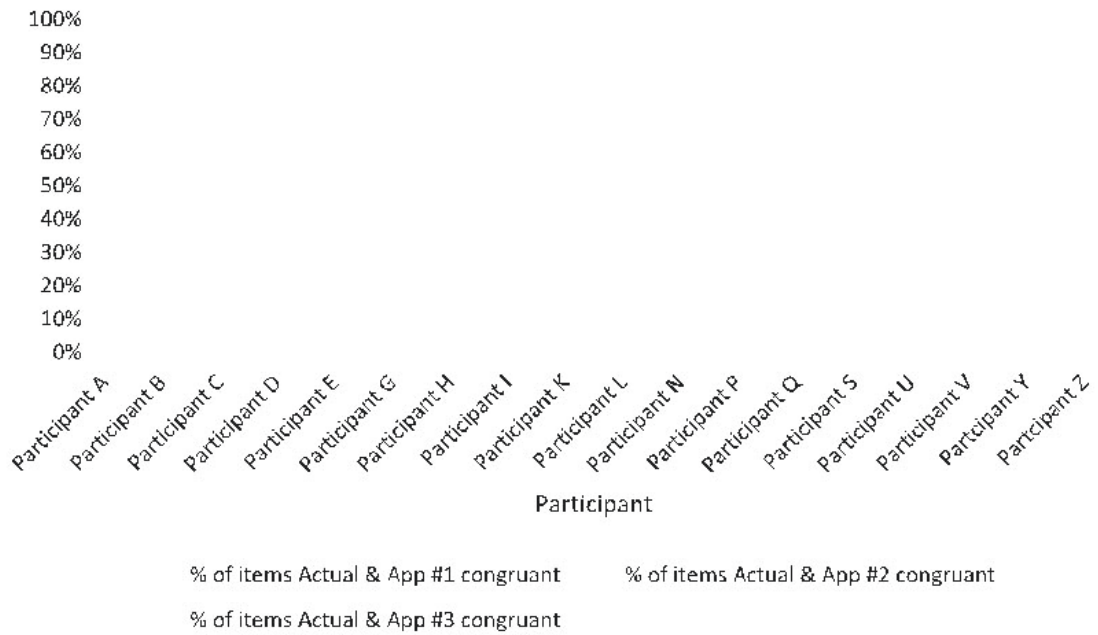


Figure 4.7 Percentage of congruence between the actual self and perceived brand personality for each participant’s three favourite branded apps

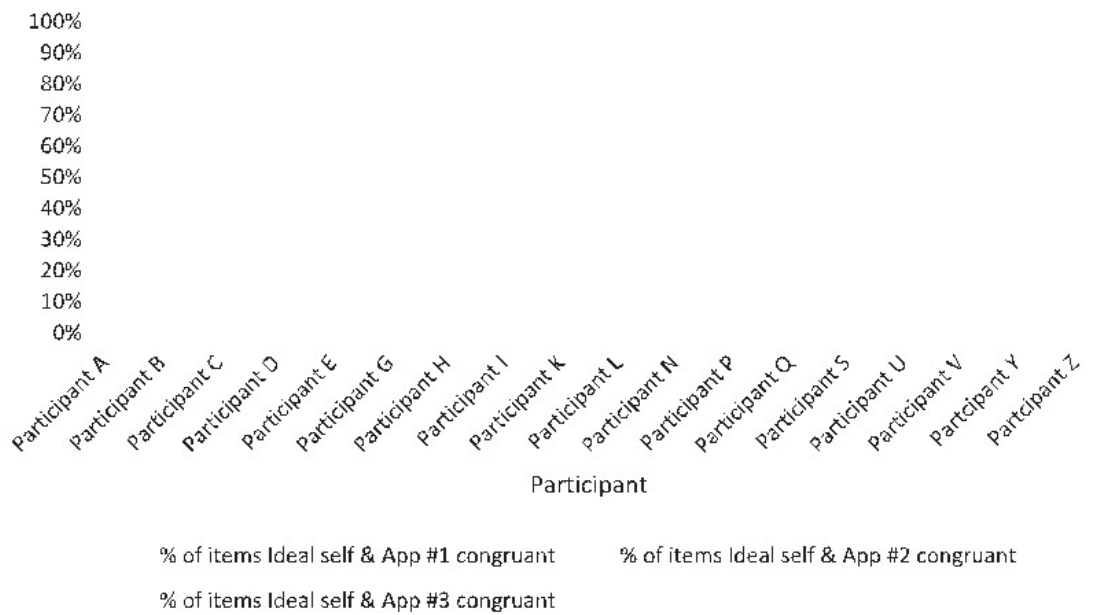


Figure 4.8 Percentage of congruence between the ideal self and perceived brand personality for each participant’s three favourite branded apps

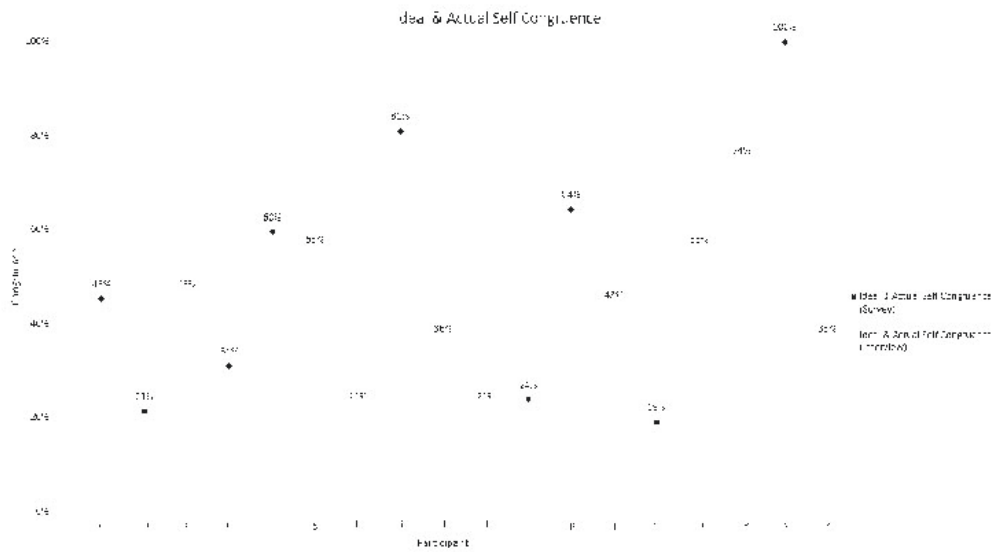


Figure 4.9 Comparison of self-congruence obtained via the questionnaire method and semi-structured interview technique

With Study One observing BESC level to positively impact on usage continuance intention, further analysis was conducted in Study Two to explore this effect when comparing usage intention with actual app usage. From the questionnaire data, a BESC score was calculated for each participant by computing an average of the BESC 7-point Likert scale items according to Sprott *et al.*'s BESC scale (2009). The BESC scores ranged from 1.56, a low level of BESC (Participant N), to 5.88, a high level of BESC (Participant E). The median BESC score was 4.09. This is similar to the range of BESC scores that measured in Study One, although the effect of BESC level was only studied in relation to usage intention within the first stage of the research.

Following the completion of the questionnaire, the Study Two participants began individual three-month research collection periods between 5th November 2019 and 27th February 2020, as part of the digital ethnographic

stage of this phase of the research study. On a weekly basis they were sent a notification from the iOS Screen Time feature informing them that their phone usage. Participants then took a screenshot of their complete weekly usage and emailed this to the researcher. At the end of the research period, the researcher calculated and confirmed with each participant, the number of weeks that the participant's three favourite branded apps were used based on the Screen Time data. An example of Participant N's Screen Time for Week 9 can be seen in figure 4.10, with two of their previously named favourite branded apps 'Wetherspoons' and 'Just Eat' circled to represent app usage for a period of 6 minutes for 'Wetherspoons' and 14 minutes for 'Just Eat' this week. This was coded as '1 week' for both of these favourite branded apps.

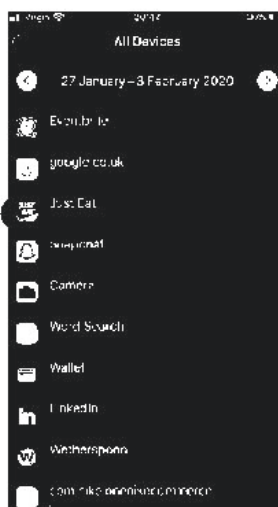


Figure 4.10 Example screenshot from iOS Screen Time of Participant N's usage data for Week 9

From the 18 participants' app usage data, 44 of 54 recorded favourite branded apps were used for at least one week out of the 12-week research period. Only 3 out of the 54 branded apps that participants deemed as their 'favourite branded app' in the questionnaire, were used every week during

the research period ('Barclays' for Participant B, 'Amazon' for Participant D and 'Ebay' for Participant G).

Despite the Study Two questionnaire findings indicating that there was app usage continuance intention for all of the 54 branded apps, 12 of the researched apps were not opened at all. Notably, this includes 'all three of Participant E's pre-determined favourite branded apps – 'Nike', 'Net a Porter' and 'Asos'. Figure 4.11 shows the usage continuance intention score for each app against the actual app usage in weeks, suggesting a weak positive correlation between the two variables. Taking the quantitative findings in isolation, this would suggest there is no significant relationship between app usage intention and continued app usage. However, although the Study One findings suggest that level of BESC, self-congruence and perceived brand personality characteristics significantly impact on app usage intention, these variables were yet to be analysed in relation to app usage. To understand app usage continuance, or lack of app usage, Phase Two therefore took a qualitative approach to gain a deeper insight into this observed difference.

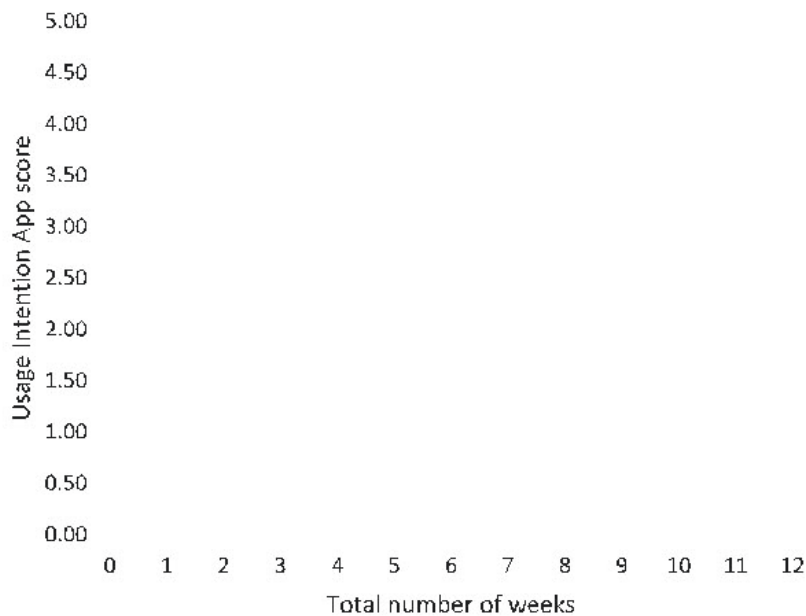


Figure 4.11 App usage continuance intention scores compared with actual app usage across a 12-week period

In summary, Phase One of Study Two confirmed a key finding from Study One that hypothesised ideal self congruence has a positive effect on app usage intention. Significantly however, level of BESC and self-congruence was not found to have a positive effect on actual app usage across all participants to gain further understanding of these findings, Phase 2 of Study Two applied semi-structured interviews to provide open-ended responses to questions concerning participants' app usage across the three-month research period and their perceptions of their digital brand engagement.

4.5.2 Key Findings from phase 2 of Study Two

The second phase of Study Two applied a qualitative research design to address Research Objective Five and Research Objective Six through the use of semi-structured interviews, and enhanced projective techniques:

Research Objective 5. To investigate consumers' perceptions of their digital brand relationships in self-identity construction

Research Objective 6. To advance knowledge within the area of elapsed brand relationships through the study of consumer brand disengagement in relation to non-usage of branded digital possessions

At the end of the three-month research period, each of the 18 participants took part in a 30–45-minute interview on the online secure platform Blackboard Collaborate Ultra. As a result of each participant starting their data collection period at different times, the interviews were conducted between 6th February 2020 and 3rd June 2020. With the connective ethnography taking place at different times, this meant that there were a number of variables that could have potentially impacted on app usage, including the Christmas period and New Year when people are typically off work for a period of time. Four of the participants (Participant B, Participant V, Participant Y and Participant Z) were studied during the lockdown period in the UK due to the Coronavirus Pandemic which resulted in people being asked to work from home from 23rd March unless they were Key Workers. To control for these variables, it was therefore important during the interviews the researcher acknowledged the time period in which each participant's data collection took place.

Each of the 18 online interviews were audio and video recorded, transcribed by the researcher and then inputted into the qualitative data software package NVivo to begin the analysis process in accordance with an adapted version of Pich and Dean's (2015) systematic framework which is detailed in

Chapter Three. Taking an explorative approach, the coarse-grained phase of analysis was conducted by identifying the key themes (categorised as 'nodes' within NVivo) across the transcripts for each part of the interviews in relation to three areas of conceptual analysis. In order to address Research Objective Five and Objective Six, branded app usage was assessed from the responses in the initial semi-structured questions for the first part of the interview, underpinned by, the findings of the literature in relation to reasons for continued app usage and reasons found for non-usage of branded apps. An example of a coded transcript for this part of the interview is provided in Appendix J.

From the data collected, key themes from across three categories are established in accordance with the research objectives and findings from Phase 1– reasons for continued usage, reasons for non-usage, reasons for deletion. The key themes identified in this initial stage analysis are then refined as part of the fine-grained phase of analysis to look closer at the data and re-assign the themes to create 'Parent nodes' with sub-themes ('Child nodes') under a more refined set of over-arching themes. The Parent and Child nodes generated in NVivo from the first part of the interview can be seen in Appendix M.

From here, individual participant profiles were created to capture the scope of the data for each participant. Appendix K provides an example of a participant profile. The key themes captured within the individual profiles are then cross-checked before a meta table is produced as an amalgamation of the individual participant profiles. From this table, the initial key themes

identified in the Coarse-Grained Phase are re-visited then reassembled into more general themes under the three conceptual areas for discussion within the triangulation section.

For the first part of the interview, participants were questioned in connection to the iOS Screen Time app usage data that they recorded and sent to the researcher on a weekly basis. Out of the eighteen participants who completed Phase One, six confirmed that the three apps they reported to be their favourite downloaded branded apps were still their favourite branded apps. This includes Participant E who reported no app usage for any of her favourite branded apps. Ten participants reported that two of the apps were still their favourites, one participant reported only one of the apps was still the favourite. Only one participant said that the three apps they previously stated were their favourite branded apps were all no longer their favourite branded apps. A total of three participants reported to have deleted one of their favourite branded apps prior to the three-month data collection period.

A number of questions at the beginning of the interviews addressed the usage data from the iOS Screen Time screenshots which revealed that the participants had, as they intended in the initial preliminary interview before the research period, continued to use their self-identified favourite branded apps. After discussing the reasons for this continuance in app usage with each participant, figure 4.12 presents the key themes that were identified and further sub-classified as reasons for continued branded app usage.

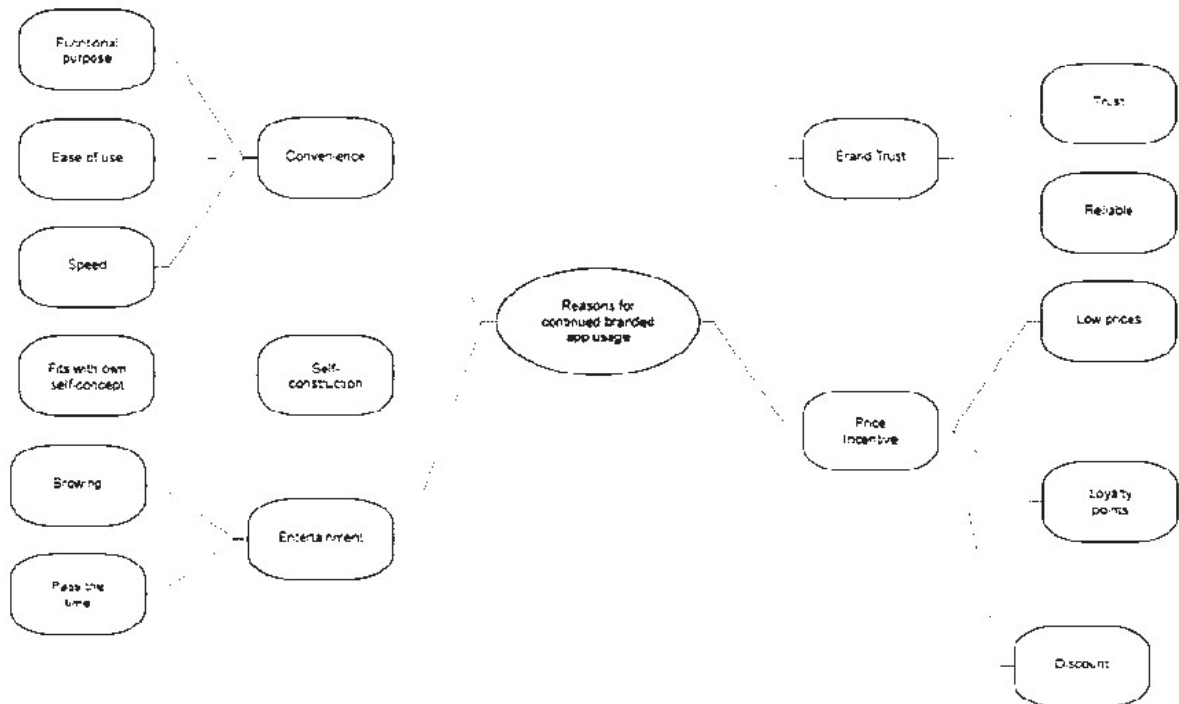


Figure 4.12 Reasons for continued branded app usage

The most given reason for continuing to use a branded app was for the convenience that the app provides. This was provided by ten out of the eighteen participants and was expressed in terms of functional convenience – ‘*you could reserve seats on this app*’ (Participant K, app 1) - as well as being able to order quickly in comparison to purchasing through a website – ‘*having an app’s great because it kind of cuts down time online*’ (Participant H). Linked to this, four participants stated that they continued to use their favourite branded app due to the perceived ease of use, with ‘easy to browse’, ‘easy to purchase’ and ‘easy to track deliveries’ being further sub-categories under this key theme. Participant H also highlighted a psychological difference between purchasing from a branded app opposed to the brand’s website:

'cuz they have an app it does make it more dangerous cuz I'm just gonna spend loads of money really quickly. I'm like it doesn't count if I use my thumb.' (Participant H, app 1)

Participant E counter-acts this however, by stating that the app *'does make it a lot easier but I still need the laptop to do the last payment bit.'* When questioned further on this, Participant E disclosed the lack of trust that she has making payments through apps, preferring to enter cards details via a laptop instead on the brand's website.

Convenience was also noted as a reason for inconsistency of use across the three months, with several of the participants noting the main reason for opening the app was for an irregular functional purpose such as booking onto gym class (Participant N, app 1), checking finances and making payments (Participant A, app 3, Participant B app 1, Participant C, app 2) or for ordering food and drink (Participant B, app 3, Participant H, app 3, Participant N, app 2). This reason was also given by some participants as an explanation for why this app was downloaded and used more than other similar apps:

'I'd say most the time I use the Just Eat app because that does have most of the takeaways on there so unless an app that comes along that makes it easier, which I don't think there will be, I'll probably still use that.' (Participant N, app 3)

Five participants referred to discounts or lower prices being a reason for continuing to use their favourite branded app. Sub-themes include perceiving

the brand to be good value for money, receiving a discount for using the app and access to loyalty points, as noted by Participant B:

'I wouldn't necessarily use like bookings.com or anyone else like that because I'm halfway through my loyalty scheme already with hotels.com' (Participant B, app 3).

Participant G reported using apps to see which products are on offer and then using the click and collect service to complete the purchase in-store, stating that *'They have an option where you can click and collect so I would probably use that option because I can still buy in store, they just have a lot more offers online'* (Participant G, app 1).

Nearly all of the participants referred to brand trust being a key reason why they continued to use their favourite branded apps. Some participants even reported to overlook some of the perceived faults with the app because they were satisfied with the brand itself:

'I'm not sure that the app is that great, like there's things in the app that I would improve like little technical things...but it's definitely the best service so maybe not so much the app but like the website and the whole business in itself' (Participant E, app 3).

Brand trust often over-lapped with other reasons for continued use, such as low price and reliability of the app:

'I quite like the company and their whole brand message and everything and I find it a bit cheaper than the other brands and more reliable I think, mostly it's about the reliability' (Participant H, app 1).

Linked to the underlying theme of BESC identified as significant in Study One, three out of the eighteen participants referenced directly that they continue using branded apps because the brand is linked to their own self-identity. Participant G described how he discovered the *Boohoo* app on Instagram through a social media influencer and was drawn to the brand because of the connection he felt between himself and that particular influencer:

'I hadn't really heard of Boohoo and then I started to you know like have an interest in it because he (the social influencer) would post like what he was wearing and people say I look like him... that was the main way that I discovered the brand and found that there was an app and have kept looking on there ever since.' (Participant G)

A further reason for continuing to use favourite branded apps was for entertainment, with the sub-themes being continued app usage because they enjoyed browsing through the products/services or to pass the time. Participant B and Participant K reported to continue using their favourite app for holiday inspiration. Seven participants described their app usage continuance as a way to overcome boredom or to 'pass the time.' A number of participants alluded to browsing through products/services on their favourite branded apps to the pastime of 'window shopping', such as during times when they could not afford to buy items:

'I can't buy anything but at least I can think about it and save items to my wish list' (participant H).

'I like to look at pretty things, it's like window shopping on the app' (Participant Z).

Participant Z also referred to this practice of online browsing as a way to avoid impulsive purchases:

'I try to avoid impulsive purchases so if I do like something I just you know I click on the heart and I like it and then I leave it for a bit and then usually what happens is by the time I come back to it to buy it it's sold out which is a bit disappointing because it's sold but at the same time makes me happy because I'm not spending' (Participant Z, app 1).

Browsing was also evident for the five participants whose research period was during part of the UK's national lockdown due to the Coronavirus pandemic:

'I can't go shopping but I can look' (Participant Y).

'I have spent less on clothing but more on yarn for my new crochet hobby...More time on the grocery store apps.' (Participant Z)

Participant V described browsing through fashion apps as a 'hobby', adding '*I don't buy much but I just like browsing.*' When Participant V was asked if he would consider an app that he had not heard of before to browse, he responded '*if I saw it advertised somewhere or if someone like told me about and recommended it to me then yeah.*'

The first part of the interview also investigated reasons for why the participants did not continue to use some of their favourite branded apps despite the usage intention scores indicating that participants intended to continue using all of the fifty-four branded apps. Reasons for non-usage are presented in figure 4.13. Ten out of the eighteen participants reported to have not used at least one of the apps which they have previously described as their favourite branded apps. The non-used apps remained on the participants' phones throughout the three-month research period. Participant E did not use any of the three branded apps, yet still reported them to be her favourite branded apps.

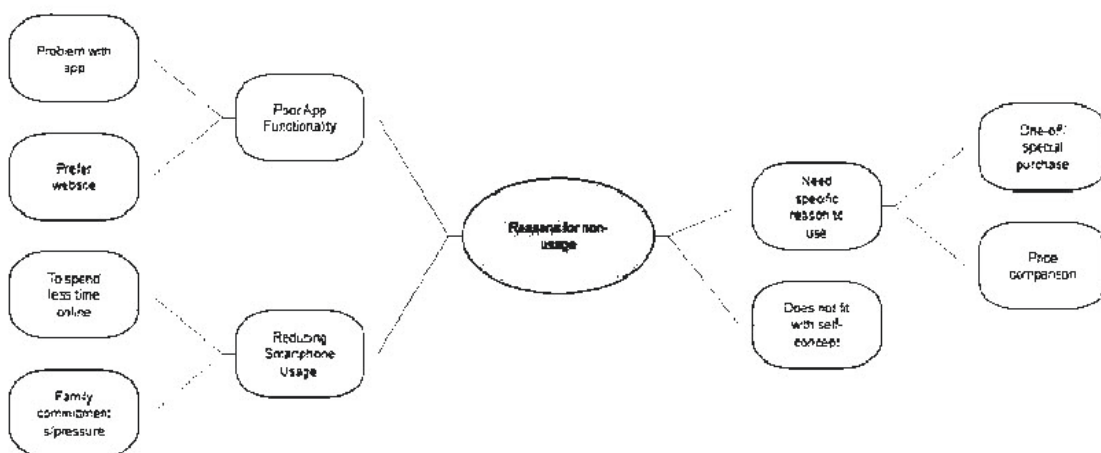


Figure 4.13 Reasons for non-usage of branded apps (Source: Author, 2020)

Poor app functionality was given as one reason for why participants stopped using one of their favourite apps, although they did not delete the app. This was either due to a fault with the app itself – *‘I think unless I’m looking for something specific it’s kind of a hard app to browse because there’s so much stuff on there and obviously it’s all different sizes and it’s not a very good app to filter down to’* (Participant N) - or preferring the brand’s website – *‘I prefer my laptop, it’s a little bit bigger, you wanna have a closer look at it...I’ve had a few things arrive recently and I was like nope not happening, they’ve gone straight back’* (Participant H).

Some participants reported that their current circumstances meant that the app was not needed at the time. Participants attributed this to the app having a specific function or being used for a specific purpose. Participant G only ordered from the *‘Ebay’* app once in Week 1 when he was looking for a Halloween outfit that he did not think he would be able to find easily anywhere else. Once this purchase was complete, he reported that he did not need to use the app any more during the research period.

Some participants reported to not use their favourite branded apps due to making a conscious effort to reduce the amount of time they spent on their Smartphone. For some of the participants this was a personal choice – *‘I had to cut back because I was spending too long on there’* (Participant E) – whilst for others, a reported reduction in phone usage was due to family commitments, particularly those whose research period went over the Christmas break.

Participant Q noted that they have a strong brand relationship with *Amazon* but at this time the app was not used regularly on their phone:

"I do like the app...a few times I've been in a bookstore and I've checked the app just in case the books on there are cheaper...I don't use Amazon Prime at all but I am very fond of Amazon, I've been using it pretty much all my life."

For the five lockdown participants, participants reported that the lack of stores being open and inability to travel as being a reason for non-usage. Participant H stated that she intended to use the app more to book a holiday over the Easter period, but the Coronavirus outbreak meant she could not travel, and she therefore stopped using the app. Participant V stated that he did not do as much online shopping because although he would previously browse the app, he would complete the purchase in the physical store, which was not possible with the closure of retail stores in the UK at the time. Participant Y commented that he had '*done some shopping on Amazon*' but that mostly his use of branded apps was down because he was waiting to go back to the stores – '*I have not been anywhere...I am literally ready to go to H and M and buy some shoes.*'

Participant Z responded that she stopped using the Boots app as '*the problem with the Boots app is when the virus hit they closed down a lot of app features.*'

A common response for keeping un-used apps on the phone rather than deleting them was *'just in case.'* The two sub-themes found in this category were due to brand loyalty, for a specific future purchase, or in case sales promotions became available. Participant B did not want to delete the app and risk losing the loyalty points she had acquired on the app. Participant G stated *'I get sent their email promotions so if they have a good sale then I will browse and have a look on the app again'*. Participant E reported *'I don't see any reason why I would delete them as I do like the brand. I'm not sure how much I would use them right but I think when I do need something they're always great to have.'*

Participant I noted that she had not used the Forever 21 fashion app over the research period but she was still keeping it in case for future purchases – *'I used to look in the past at that app and think oh that's a cute dress, save it and never buy it. Just a waste of time and now that I don't have as much time I realize that I just keep it there but I don't use it unless have to buy something and specifically want to get from the app but it's not that frequent'*

Participant G reported to download a new branded app because he perceived the brand to be *'very cheap and good value for money'*. He stated however conflicting views over whether the app would be useful, highlighting that he had not purchased from the app yet due to concerns over delivery times:

'I also downloaded Alibaba the wholesaler app...it's just very cheap and good value for money but I haven't purchased anything because I know they have extremely long waiting times for product and obviously when

you're spending money you don't always want to wait...I haven't used it yet but I'm I know people who have used before and they say it's reliable so I sort of trust them that it would be a good app'

A total of three participants stated that they stopped using their favourite branded app because they felt it did not fit with their self-concept, but made the decision to keep the app on their phone rather than delete it. This relates directly to a key finding from Study One that self-brand congruence positively affects branded app usage continuance.

'I don't really use the Nike app but it's a trendy brand so I keep it on there.' (Participant E, app 1).

'Depop to be fair I don't really use anymore, I've sort of gone off it a little bit, I think I just went through a phase where I wanted to try and be stylish and cool last summer and I sort of don't really care anymore, it's not really me.' (Participant Q, app 1).

Overall, participants gave a number of reasons for keeping one of their branded apps on their phones despite stopping using that app during the research period. In relation to BESC, a perceived fit with the self was given as one reason for not deleting the brand. Others noted that this fit was only for a particular amount of time, whilst participants with a low level of BESC were not found to keep un-used apps on their phone.

Reasons given for deleting a branded app during the three months that were observed, are categorised by theme in figure 4.14.

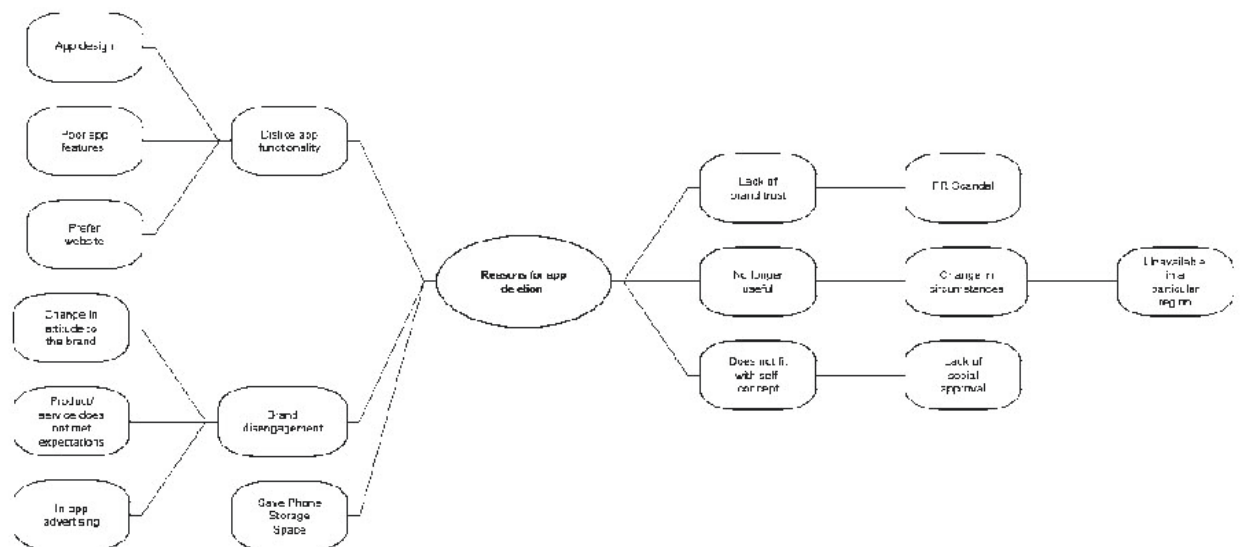


Figure 4.14 Reasons for deleting a branded app (Source: Author, 2020)

Lack of brand trust was one reason given for deleting a branded app. Participant A discussed the effect of a recent PR scandal which led to her not being able to trust the brand and subsequently deleting the app. This app deletion was anticipated prior to the three-month period, despite her continuing to name this as her favourite:

Participant A: *Do you remember how I told you (during the initial set up interview) that I might not use it after the whole scandal happened? So yeah, I did not like the lack of integrity so yeah I wouldn't say it's my favourite anymore.*

Interviewer: *Do you still have the app on your phone or did you delete it?*

Participant A: *Yeah I deleted it after the first week. I lost trust in them.*

Some participants stated that they deleted one of their favourite branded apps due to poor app functionality or design – *'I don't find it a very attractive app to swipe to scroll through...it's kind of like it's presented a bit jumble sale like I don't find the organization very appealing unless I'm actually looking for something specifically.'* (Participant N).

Other participants reported to deleting one of their favourite branded apps as they had now become disengaged with the brand. Sub-themes here included a change in attitude towards the brand or because the app failed to meet their expectations. Others reported a change in circumstances (such as going back to work after the Christmas holiday) meant that they had a '*phone clean up*' and deleted several apps at once whilst they deemed to be of less use now. Participant A reported deleting their favourite branded app on their phone and downloading the app to her iPad so as it preserves her iPhone for social media apps only.

Further probing into the use of branded apps, broadened understanding of reasons for deletion. Some participants reported to delete a branded app that was not one of their three favourite branded apps during the three-month research period. Participant H noted that they deleted the *Boohoo* app because of a dislike for the brand's clothes and 'the app was annoying'. Participant S stated that they deleted the *Superdrug* app because of perceived poor app functionality.

One interesting phenomenon which emerged was a repetitive cycle of deleting apps and then re-downloading them again at a later date, using them and then deleting them again. Participant C described using the *Boots* app in Week 1 but then deleting it to save phone storage space. However, she points out *'I'll probably download it again when the stores are open (after lockdown) and I can top up my loyalty points.'* Participant B further reasoned that she views apps as disposable if they did not have personal details saved:

'If I've had to put my details in it my logins and stuff and passwords then it's harder to delete...also if it keeps track of my loyalty points. Otherwise though, if it is of no use to me then I'll just delete it.'
(Participant B).

Participant N discussed her tentative relationship with the *depop* second-hand buying and selling app which she continues to class as one of her favourite branded apps despite frequently deleting it and re-downloading the app at a later date:

'there's been like times where I haven't really been shopping or haven't really been looking for something in particular so I'll just get rid of it...then there'll be a time where I'm looking for something and I really want it and I'll be looking for it everywhere then I'll be like oh I'll just download depop again and have a look on there and I've yeah I've done that a few times in the past few months as well as in the past few years as well, that's just how it's been with that app.' (Participant N).

Participant N also noted a similar relationship with a food waste app which she reports the location features are currently unavailable in the area where she lives so she deleted it but has it back on her phone again to check. She says *'I think I'll probably just end up taking it off again yeah and then download it again.'*

Localisation was also identified by a South African native as a further reason as the app was of no use when studying in the UK so was deleted but then re-downloaded when back in South Africa. Participant B reported deleting restaurant apps then re-downloading them when they visit the restaurant again.

The practice of deleting and then later re-downloading branded apps presents an interesting offset to the generalised themes surrounding the deletion of branded apps in relation to poor functionality, brand disengagement or no longer being of use to the participant. Often this decision was linked to positive perceptions of the brand, as well as the feeling that the brand or the app itself was part of the participants' self-concept. For participants with a low BESIC, it was fleeting functional value which led to the app being re-installed and then deleted.

Within the second half of the semi-structured interviews, an understanding is gained of the participants' perceptions of the value they derive from their brand relationships; a core contribution to knowledge. Each participant was presented with a pre-designed scene to include personified brand people of

their three favourite brands attributed to their favourite apps. Participants were first asked if they could describe how it would make them feel being in a room with the personified brand people of their favourite branded apps. The parent and child nodes identified as a result of the Coarse Grain and Fine Grain phases of the NVivo analysis visualise the key themes that emerged from this analysis and show that participants used positive language to describe their feelings of being in the room with 33 out of 54 brand occurrences. Feelings of apprehension or negativity concerning being in the room with the pre-determined brand metaphorical people was found in 21 instances.

Negative feelings tended to be expressed as a result of the participants feeling as if they did not belong in the same room as the brands. When asked how she would feel being in a room with Amazon, Barclays and Beauty Bay, Participant A expressed:

'I'd feel weird because there's like they're really known brands and I would describe them as high-class brands, all of them so it would make me feel a little excluded that I don't fit in the group.'

Participant G also expressed feelings of intimidation:

'I'd feel small and overwhelmed really because of the fact they are all so successful, I'd just be intimidated really by them.'

Feelings of apprehension concerning being in the room with the personified brands were also expressed:

'I wouldn't know what to do with myself.' (Participant C).

'I wouldn't talk to them unless they talked to me.' (Participant S)

Participant U was wary of the personified 'Wish' brand person, stating that she would worry *'he might stalk me like he does online'*, in reference to the amount of social media targeted advertising she receives from the brand.

Participants expressed feelings of positivity around being in the room with the pre-determined brands in relation to feeling comfortable or by revealing feelings of respect, excitement or awe for the brands.

Participant E expressed:

'I think (I would feel) comfortable because I would imagine a very different persona for each of them and I think that I feel they represent something that's familiar to me and that's maybe a part of me and my character so I think that I would be able to mould and get along with all of them.' (Participant E)

Likewise, Participant H rejoiced at being able to socialise with the personified brands:

'I'm having a great time like one of them is getting me drunk, the other one's giving me stuff and the other ones making me beautiful with loads of makeup so I'm having a great time.' (Participant H)

Participant N responded that she felt *'happy'*, adding *'we all like similar interests...might provide me with something that I want.'*

Based on the findings from the literature review chapter on the importance of perceived brand value within brand relationships, participants were asked what they might talk to the 'brand people' about in the constructed room in order to ascertain the perceived functional, emotional or social benefits of their brand relationships. The majority of participants, 34 out of 54 possible instances, expressed functional brand value from their brand relationships. Some participants discussed functional needs being met through their interactions with the brands in relation to tangible benefits such as receiving discounts or free gifts. Others were interested in gaining insights into the function of the brands themselves, such as how they had come to be successful or why they had decided to abandon social media.

Participant Q responded:

'I'd feel like I am dealing with very successful people...they are part of something that's very successful and innovative and definitely something that I'd be interested in hearing all three viewpoints on.'

Participant N was interested in getting personal advice from *Pure Gym*:

'I would just try and get some free personal training on the sly to be honest. I would probably just talk to them about what annoys me at

gym, ways to improve my like my workout plans, form, I'd probably just talk to them like they're my personal trainer'

Some participants expressed social needs to be met by the brand people. Participant Z projected familiarity with her favourite branded apps, describing well-known chemist *Boots* like her "mum" and online fashion store *ASOS* like her "best friend" - *'you know if you have injured yourself your mum would magically have everything.'* When asked what she would talk to *Boots* about, she responded *'like life general, it would just be kind of comforting, maybe complain about what's going on in my life.'*

Participants also discussed the symbolic emotional benefits of their brand encounters, relating to how the brands fit with their overall identity. Participant L spoke about her unused second-hand buying app *'Shpock'*, discussing her want to express her charitable nature through her brand relationship:

'I'd plan how I could work with them in the future to help make a difference with reducing single use.'

Participant S did not want to talk to any of the brands and said she would feel *'weird'* being in a room with the personified brand people. When prompted to explore this further, she stated:

'I'm not really close to brands. Usually most of them will have like a customer service Twitter account so I can go on there if I need to talk to them and that sort of makes it feel more personal cuz they'll be

responding specifically to me but I don't see the apps themselves like that really, it's more about talking to them over social media if I have to.'

Further emotional benefits were drawn out by asking the participants who they would want to take a selfie with and post on social media. Nine participants opted to take a selfie with a brand which they expressed would be seen as impressive to their social media followers.

Participant Q reasoned that she chose fashion brand *depop*:

'to appear more cool...you know it's a bit edgy and people use it and you know a lot of people like it...I'm interested in them but not a lot...a lot of influencers often pop up on depop account... I like the idea itself more than absolutely a passion for fashion.' (Participant Q).

Participant H also chose to take a selfie with the brand that she perceived as the 'most cool.' Participant G opted to take a selfie with *Amazon* because *'their sort of stature...if I was to post with them I think it would be a lot more impressive (than with the other two brands).'*

Some participants wanted to take a selfie with the brand who they had the most respect for. Participant A showed greater favour for brand loyalty over social approval through her reasons for choosing *Amazon* over *Beauty Bay* for a selfie to post on social media:

'I know if I took a picture with Beauty Bay and posted it, it would get more attention but because I already have good customer relations with Amazon, I would like to post a picture and appreciate them for all they've done because then they would also know that as a customer I appreciate what they're doing...and encourage them to do it more.'

Participant V opted to take a selfie with ASOS because *'that is the brand I shop with the most and it fits with me as a person most.'*

Participant Z projected both functional and emotional brand values from her brand relationship with ASOS, choosing ASOS as the brand she would like to take a selfie with:

'because she would tell me how to pose correctly and everything and get some social media tips...Actually now that I think about ASOS is kind of like my best friend because her mom works in the fashion industry.'

In contrast, some participants confirmed that they did not want to take a selfie with any of the brands. Participant C's reason for this was because she likes to keep brands off her social media feed. Participant Y said he did not want to be in a selfie with any of the brands because he was only interested in social media now rather than having a brand relationship.

Participant N was 'torn' between the three brands, opting to want to take a selfie with all three brands despite the perceived differences in brand personality:

'I think the first thing that popped in my head was probably Wetherspoons because they're very social and normally if I put a picture up on Instagram it's in some kind of social scenario...I would also want to take a selfie with Pure Gym as well because they'd probably physically impressive so they would probably come out quite well in the picture and I would come out quite good as well...I'm quite torn, I'd want to try get all three of us in but we'll see. Get Pure Gym over to the dark side and get them in on the pictures.'

Participant B said she did not want to take a selfie with any of the brands on social media, except perhaps taking a picture with the CEO of Barclays and posting this on LinkedIn to show their followers that they were successful. Participant E said she would need to see who she felt most comfortable with before taking a selfie with one of the three brands.

To gain further understanding of the impact of brand trust on the participants' brand relationships, participants were prompted to discuss who out of the three brands they would most trust with a secret. Some participants also took this opportunity to discuss the brands that they would not trust with a secret.

Linking to the high competence attributed to *Amazon* from Study One, *Amazon* was the most likely brand perceived to keep a secret. The main

reason for this cited by participants was that the brands already had their personal details – *'if I can already trust them with my card details and with my habits...I can trust them with my information as well'*(Participant Y). Participant B also referred to *Amazon* as the most trustworthy, discussing that *'they have a whole team dedicated to technology'* and the negative impact that a data leak could have on their reputation. In contrast to this, Participant H expressed a distrust in *Amazon*, describing the *Amazon* Alexa AI device as *'dirty'* for *'listening in'* to her conversations.

The majority of participants expressed they would trust a brand with a secret because it holds certain perceived personality characteristics. Participant E chose designer fashion retailer *Net-a-Porter* who she describes as *'more mature...more grown-up so less gossipy'* than other brands. Participant H chose pub chain *Wetherspoons* because *'drunk friends are the best friends...and also they don't have social media so they're not telling anyone.'* In contrast to this, Participant N shared a distrust in *Wetherspoons*, preferring *Pure Gym*:

'I think Pure Gym they'd probably be the most likely person for me to have a serious conversation with so I feel like I'd be able to trust them quicker than someone who I just I'm able to have a laugh with kind of thing because that's what probably what Wetherspoons would be, they'd just be someone I'd have a joke and a giggle with but I wouldn't know whether I could trust them with the secret because they might not take life seriously enough.'

To gain insights into how reliable the brands are viewed in comparison to each other, participants were asked who the most likely brand would be to help them out at 4am. Two main answers were given here in relation to the practical help that a brand could provide, or participants attributed reliability to the perceived brand personality. Participant Q refers to the size of the organisation, asserting that the large size means that they are *'more adequately placed to deal with any problems that may arise.'* Other participants referred to the '24-hour presence' of the brand, reasoning that this makes the brand better positioned to help early in the morning. Participant N constructed a situation whereby she may need physical help and therefore *'Pure Gym'* was deemed the most reliable as *'they are the physically fittest out of the three so if I was in physical trouble then there's not really any competition.'*

Some participants took this opportunity to discuss brands that they perceive as being less reliable. Participant H referred to *Beauty Bay* as not caring about their customers. Participant Q referred to *depop's* popularity, saying they will *'probably be triple-booked...I think they will probably have somewhere more important to go.'*

The role of emotional and functional brand value is contextualised within the following section. Taking into account data collected from all stages of the research, triangulation was conducted to collate the main findings from the research in response to the research objectives. Section 4.7 presents the triangulation of data sets, leading to five predicted outcomes of branded app usage.

4.6 Triangulation of all data sets

Evidence for app usage continuance or reasons for this app usage continuance cannot be ascertained from the questionnaire alone. By conjoining the data analysis from Study Two, a more in-depth understanding of app usage continuance intention and actual app usage can be gained. Bringing together usage intention data with usage continuance findings, enables greater analysis to be conducted across the participant profiles by contextualising the reasons for continuing to use the app, as well as non-usage, in relation to the research objectives.

The findings from the projective techniques can be further triangulated with the findings from Study One and Study Two by drawing on the key themes that were extracted, and conceptualising these across the complete metatable. This provides a more in-depth insight into digital brand relationships by highlighting the main brand value that consumers attribute to their favourite brands through branded apps. If the data from Participant E, who has the highest level of BESC, is compared with Participant N, who has the lowest level of BESC, it can be inferred from table 4.7 that Participant N's branded app usage is higher than Participant E's, with Participant E recording no app usage data for her three favourite branded apps. Analysing this data in isolation would suggest that a high level of BESC is not correlated with a high app usage, which contradicts the usage intention findings from Study One. However, by adding the qualitative findings to the quantitative

analysis, understanding can be gained as the reasons for Participant N's continued usage and Participant E's non-usage.

From this, it can be analysed that Participant N utilises her favourite branded apps for the functional value that they provide - being able to book a gym class through the *Pure Gym* app, buying drinks through the *Wetherspoons* app and ordering take-away food through the *Just Eat* app. In contrast to this, Participant E attributes her lack of app usage being because rather than serving a regular functional purpose, her three branded apps are used for special occasions or one-off purposes. Notably, Participant E additionally attributed an emotional brand value in relation to her three favourite branded apps. When asked what she would talk to each of the brands in the room scenario, rather than gaining advice from the brands, as noted by Participant N, Participant E wanted to have a conversation with the brands '*about everyday things.*' The answers to the selfie question can also be placed into context here. Whilst Participant N does acknowledge that the brand *Pure Gym* would be impressive to take a selfie with, she opted in the end to want all three brands in the picture with her, suggesting she does not value one brand over the other for social approval. Participant E is also torn between choosing from all three brands but makes a decision that it will be the brand she 'gets on best with' that is the brand who she is photographed with to share the image on social media.

Participant	BESC (x/7)	Application	App Name	Usage Intention App (x/5)	App usage Intention (%)	App usage (no. of weeks (x/12))
Participant E	5.88	App 1	Nike	4.00	80%	0
Participant E	5.88	App 2	Net a Porter	3.93	79%	0
Participant E	5.88	App 3	ASOS	3.93	79%	0
Participant N	1.56	App 1	Pure Gym	4.53	91%	9
Participant N	1.56	App 2	Wetherspoons	4.13	83%	5
Participant N	1.56	App 3	Just Eat	3.47	69%	8

Table 4.9 Comparison of Participant with highest BESC (Participant E) with Participant with lowest BESC (Participant N) for app usage intention and actual app usage

This can be further explored in relation to self-congruence, and perceived brand personality characteristics of the branded apps. The questionnaire data highlights a correlation between ideal self-concept and app usage continuance intention. By examining the points at which the ideal self personality characteristics correlate with the perceived brand traits, further understanding can be gained about the participants' app usage through analysis of their responses to the interview questions. BESC level is also a significant factor to be explored and one which Study Two highlighted to differentiate the participants and the brand value that they place upon their favourite branded apps.

Cross-referencing the participant profiles, 50% of the participants own at least one branded app which they are keeping on their phone due to emotional brand value in the form of self-extension as a move towards achieving ideal self-congruence. This emotional brand value is expressed in differing variations based on the participants' responses to the interview questions and projective tasks. By owning the branded app, emotional value is transferred in respect to the feelings the participant attributes to their own self-congruence. This is found to be particularly true of fashion-based branded apps where perceived brand personality traits can be closely matched to the actual or ideal self depending on how congruent the app was measured to be as part of the questionnaire findings. By exploring this degree of perceived congruence, it can be gauged whether the participant is likely to use that app in the future, keep the app on their phone un-used or used infrequently, or delete the app depending on the amount of functional brand value the consumer has attributed to their branded app, and their BESC level.

Combining the data from both Study One and Study Two, the researcher has identified five outcomes in relation to branded app usage intention and actual app usage. The moderating factor impacting on whether branded apps are used relates to brand congruence or, when there is a lack of BESC, the perceived functional brand value of the app. Deletion of the branded app is mediated by a change in the emotional brand value that the consumer attributes to the app, changes to the self-concept or a perception that the app has little or no functional brand value. The five outcomes are presented below, with reference to example participant profiles to illustrate the key

differences found between them. A visualisation of the Researcher's found outcomes of branded app usage can be seen in figure 4.15.

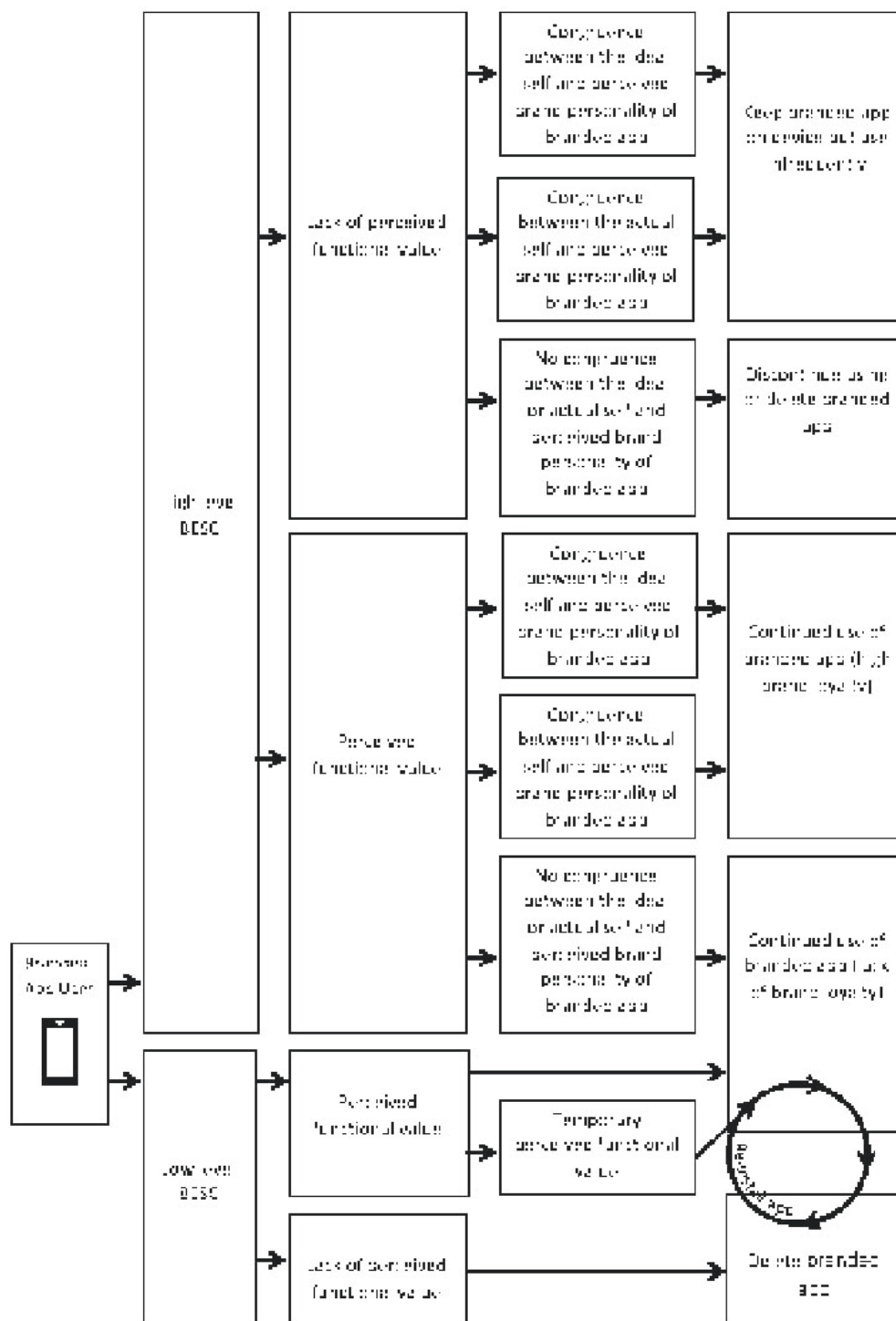


Figure 4.15 Branded App usage outcomes (Source: Author, 2020)

Predicted outcomes of branded app usage:

1) A consumer with a high level of BESC is likely to continue to use their branded app if there is a perceived functional brand value and a degree of congruence between the perceived brand personality characteristics and the ideal or actual self. This would result in them taking the route highlighted in red in figure 4.16.

Example: Participant H and the *Beauty Bay* app

The questionnaire results indicate that Participant H has a high level of BESC and a high app usage continuance score towards the *Beauty Bay* app. Participant H's participant profile (appendix N) confirms that the *Beauty Bay* app was used by the participant throughout the research period. The amalgamation of data enables the researcher to understand how Participant H views the brand *Beauty Bay* and the reasons for why she continues to use the app. Overall, the questionnaire findings show that the brand *Beauty Bay* is 52% congruent with Participant H's ideal self and 43% congruent with Participant H's actual self. This is supported by the qualitative findings in which Participant H describes the brand as closer to her ideal self – '*cool*', '*fierce*', '*the real deal*'. Participant H's actual self dominant personality dimension is '*excitement*' whereas her ideal self dominant dimension is '*sophistication*'. When entertaining the room scenario, Participant H projects emotional value onto the brand person, stating that if she were to meet them

in the hypothetical room, they would be *'making me beautiful.'* This desire to move towards her ideal self-concept is further echoed by the thoughts she voices surrounding her ideal person projection, Cara Delevingne, who she views as *'cool', 'chatty' and 'funny'*. Although Participant H admits to being *'funny'*, she describes herself as being *'far from cool'* and *'not in a similar basket'* as her ideal self projective. Moreover, in the final part of the interview, Participant H perceives her level of self-congruence to be low, supporting the low measurement of congruence between the ideal and actual self that was measured via the questionnaire at only 21. With this in mind, it can be inferred that the emotional value gained from the *Beauty Bay* app is high, with much excitement being discussed around the potential of being in the same room as the brand. The qualitative data further confirms that functional brand value is also present, with the app being used for purchasing and browsing behaviour.

2) A consumer with a high level of BESC is likely to continue to use their branded app if there is a perceived functional brand value and a degree of congruence between the perceived brand personality characteristics and the ideal or actual self. This would result in them taking route highlighted in green in figure 4.16.

Example: Participant E and the *Net-a-Porter* app

From the questionnaire results, Participant E has a high level of BESC and a high usage intention continuance for the designer fashion app *Net-a-Porter*, suggesting she is likely to continue using the branded app. As can be seen

from Participant E's profile (appendix O), the app usage data confirms that the *Net-a-Porter* app was not used at all during the research period. The reasons for this non-usage are contextualised by the qualitative responses, confirming that Participant E attributes little function value to this app, only opening it for occasional purchases, such as finding an outfit for special events. The emotional brand value that Participant E attributes to the *Net-a-Porter* app can be ascertained by drawing on the quantitative questionnaire findings when considering the way in which Participant E speaks about the brand during the interview and projective tasks. The perceived brand characteristics discussed as an '*elegant*', '*posh*' and '*sophisticated*' brand person who drinks champagne in the room scenario task can be placed within the context of Participant E's ideal and actual self results from the questionnaire. The participant profile shows that the participant's highest dimension score is '*sophistication*' for both the ideal and actual self. This links to her choice of Fred Rogers as their ideal person, an American television personality who is known for his sophisticated style and formidable nature as a Presbyterian minister. The congruence between Participant E's ideal and actual self in relation to the '*sophistication*' dimension is supported further by the final part of the interview in which Participant E confirms self-acceptance and self-congruence, as discussed in section 5.6. Bringing the data together, despite the non-usage reported through the app usage data, it can be suggested that the mere presence of the *Net-a-Porter* app on Participant E's phone enables her to gain emotional brand value through the perception that the brand fits with her actual and ideal self which she currently views as being close to one another.

3) A consumer with high BESC is likely to discontinue or delete their downloaded branded app if there is no perceived functional brand value and no congruence between the perceived brand personality characteristics and the ideal and actual self. This is shown in yellow on figure 4.16.

Example: Participant A and the *Beauty Bay* app

Looking at the questionnaire results alone, the Beauty Bay app has a high usage intention score and Participant A has a high level of BESC, suggesting that this would be an app which the consumer continued to use throughout the usage period. However, referring to the app usage data, as seen on Participant A's participant profile (see appendix P), the Beauty Bay app was deleted after one week. This can be understood by bringing together all phases of the research. The questionnaire findings show that Participant A's dominant personality dimension are 'competence' for the ideal self and 'sincerity' for the actual self (Aaker, 1997). The self-congruence analysis as an outcome of the questionnaire further shows that the largest difference between the ideal and actual self is within the 'competence' dimension. On the contrary, and in stark contrast to Participant H, fashion brand Beauty Bay is described by Participant A during the interview room scenario as '*untrustworthy*', '*unreliable*' and '*false*'. Although Participant A can see the social brand value attached to Beauty Bay – '*I know if I took a picture with Beauty Bay and posted it, it would get attention*' – this is not important to her. The importance of brand trust and integrity emerges as a key theme throughout the interview as was analysed as a key mediating factor leading

to the app being deleted. Furthermore, no functional value was attributed to this app as the participant found a new app to purchase make-up from.

4) A consumer with a low level of BESC is likely to continue to use their branded app if there is perceived functional brand value, regardless of the perceived brand characteristics being congruent with the ideal or actual self. They will delete the app at times when the functional value is lacking and re-install when high functional brand value is envisaged. This is shown by the pink route on figure 4.16.

Example: Participant N and the *Wetherspoons* App

As discussed previously, Participant N has the lowest BESC score of all of the participants, and attributes functional value to all three of her favourite branded apps which are used continuously throughout the research period (appendix Q). To understand this in greater depth, findings from all stages of the research are combined and analysed in relation to each other. Participant N has a high usage continuance score for the '*Wetherspoons*' app and this is transferred into actual app usage, as confirmed from the digital ethnographic data collection. However, although Participant N appreciates the *Wetherspoons* brand, it is evidenced that this is due to the functional value that it provides rather than any emotional brand value. At each stage of the interview, Participant N refers to the practicalities behind the brand rather than associating it with particular personality characteristics which she feels are close to her ideal or actual self. In the room scenario for example, when asked what the personified brand person would drink, she responds with the

answer 'if they're smart, they'll have a pitcher because then we can get two for twelve quid. I'm really sharing my knowledge of Wetherspoons right now.'

Reasons for this apparent disconnect with the brand's personality can be ascertained from the latter half of the interview during Participant N's reflections on her ideal self, as projected on to her mother. Participant N does not feel brands are an important part of her mother's or her own self-concept – *'she's not very brand orientated...she doesn't see the point in spending a lot of money on clothes and that kind of thing. She's not she's not a massively materialistic person...I we are quite similar in that sense.'* – and confirms that her apps are there for a functional purpose – *'they literally help me do something functional, not necessarily to buy anything.'*

5) A consumer with a low level of BESC is likely to discontinue using or delete their branded app if there is no perceived functional brand value, regardless of the perceived brand characteristics being congruent with the ideal or actual self. The purple route on figure 4.16 depicts this outcome.

Example: Participant Z and the 'Boots' app

Participant Z has a low BESC score and low congruence score with the *Boots* app, yet a mid-range usage intention score to continue using the app. Participant Z's usage data shows that this app is used regularly throughout the research period for its functional purpose – *'I like to order the essentials through the app'* – but the interview data confirms that this is no longer the participant's favourite app due to poor app functionality features, despite there still being appreciation for the brand – *'I do like Boots but I don't think I will be using it (the app) anymore, I much prefer ordering through the*

website. The app just has too many glitches.' Although Participant Z can see the value in self extension through fashion apps, there was little evidence from the qualitative findings that this is something that is important to her. Furthermore, Participant Z was least certain out of all of the participants of her own self-congruence, viewing the *Boots* app as a comfort, with a clear functional role – *'It's like my mum...always there in emergencies'* – rather than being used for self-extension purposes.

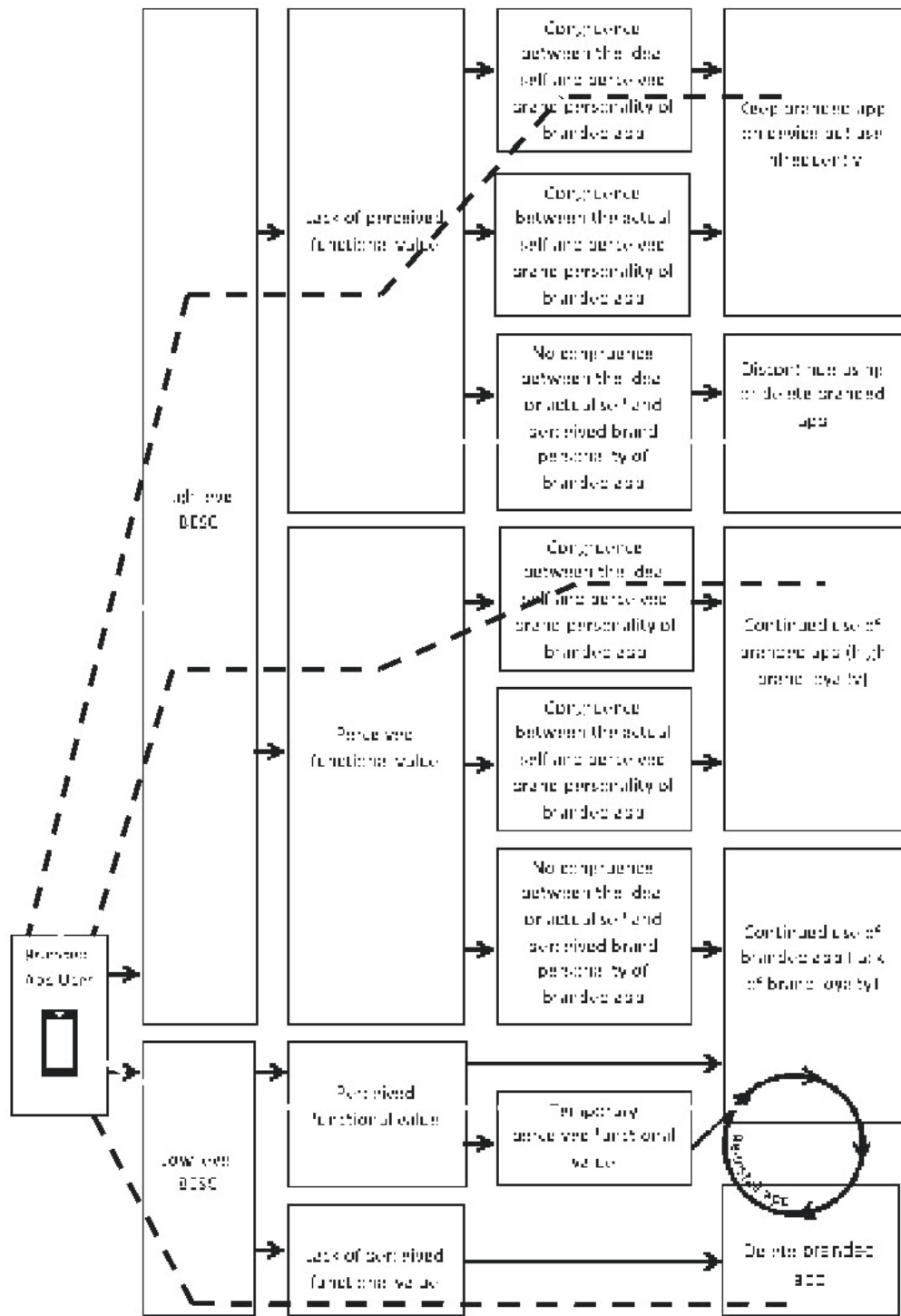


Figure 4.16 Example routes of branded app usage (Source: Author, 2020)

4.7 Chapter summary

This chapter presented the triangulated findings from Study One, which took a quantitative cross-sectional questionnaire design, and the mixed-methods,

multiphase research carried out in Study Two. Following tests of normality, validity, reliability and linearity, linear regression and hierarchical regression were performed via SPSS. The findings from the hierarchical regression show that congruence between the ideal self and perceived brand personality when combined with high BESC score and congruence between the actual self and perceived brand personality significantly affect the app usage intention score.

The qualitative phase of the research was analysed using an adapted version of Pich and Dean's systematic analysis framework (2015). This resulted in the emergence of key themes and associated sub-themes, which were subsequently presented alongside the quantitative findings to form individual participant profiles as part of an in-depth exploration into the reasons for branded app usage and non-usage. After each phase of the research was analysed individually, all data sets were amalgamated as part of the triangulation stage of the analysis, following a cross-checking process and validation of the data. In response to the research objectives, five outcomes of branded app usage were presented in relation to the impact of BESC level, self-congruence, and perceived brand value on continued app usage. The following chapter discusses the findings in the context of the existing literature, and the implications of the research in terms of the theoretical contributions that are made.

Chapter 5 Discussion

5.1 Overview of the chapter

The previous chapter took an interpretivist, explorative approach to analysing the findings from two research studies. Although branded app intention and usage continues to be a growing area of research, previous research is largely quantitative in nature, with this study being one of the few to take a mixed-methods approach (Mondal and Chakrabarti, 2019). The aim of this chapter is to provide a critical discussion of the findings in the context of current academic research, and to provide theoretical insight into the main contributions of this thesis.

Whilst current research acknowledges there to be a distinct difference in the way that consumers use digital possessions to extend the self (Belk, 2014a; Belk, 2014b), the literature review highlights a clear gap in research which addresses the relationship between intention to use and continued usage of branded apps as a form of digital brand engagement. Consumer perceptions of digital brand relationships, moderated by BESC, are also lacking (Giakoumaki and Krepapa, 2020). This research places self-congruity theory and BESC into a digital context, highlighting the key differences between offline and online brand engagement.

This chapter provides a coherent break down (figure 5.1) of the key observations of the research which make up the final conceptual model (figure 5.3). The model brings together the contextualised findings from both studies to connect branded app usage continuance intention, with the found

outcomes of digital brand engagement with branded apps (see figure 4.15). The areas highlighted in blue on figure 5.1 add to the theoretical constructs found through the application of the expectancy confirmation model (ECM) to explain the determinants of branded app usage continuance. The findings confirm that this is moderated by level of brand engagement in self-concept (BESC) (highlighted in green on figure 5.1), leading to five categories of branded app usage outcomes (as shown in full in figure 4.15). Each of the conceptual areas which make up the final conceptual model contribute to overall theoretical understanding of the continued usage of branded apps are discussed in the following sub-sections.

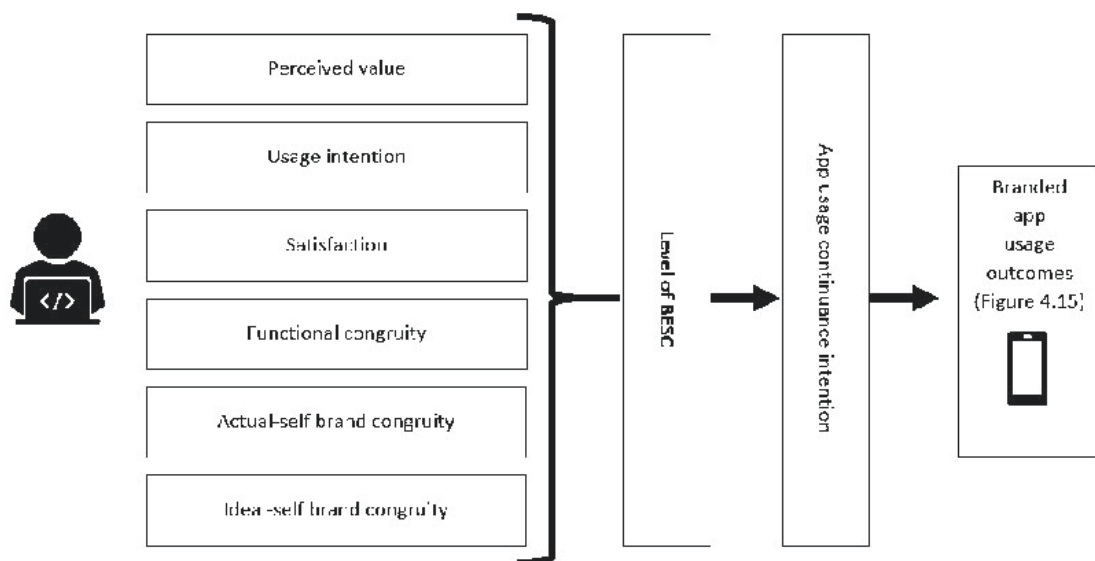


Figure 5.1 Breakdown of the final conceptual model of the determinants and outcomes of digital brand engagement with branded Smartphone applications (Source: Author, 2020).

Firstly, in section 5.2, discursive insights firmly position the relationship between self-congruity theory (the areas highlighted in blue on figure 5.1) and BESC to the use of digital possessions to extend the digital self by

providing a contemporary adaptation to Sirgy's (1982) seminal theory. This is followed by Section 5.3 which foregrounds a major contribution of this thesis to extend current academic thinking around the consequences of a lack of BESC and the importance of functional brand value (as shown in figure 5.1 as 'functional congruity').

Section 5.4 discusses the branded app usage outcomes (shown in yellow on figure 5.1 and expanded in figure 4.15) in response to calls for further research into brand engagement with branded digital possessions by extending Watkins' (2015) findings which underpin digital consumption, to branded apps. This is followed by section 5.5 which discusses the importance of brand trust within digital brand engagement to re-confirm the applicability of the ECM variables (shown in blue on the final conceptual model in figure 5.1) to branded app usage intention. Section 5.6 adds considerable knowledge to the area of disengagement with branded digital possessions; a further outcome presented in figure 5.1. This was highlighted in the literature review as being an area of research in its infancy in urgent need of further research (Denegri-Knott *et al.*, 2020) in order to understand the totality of branded app ownership. This is followed by section 5.7 which discusses an additional finding of this research. The chapter is summarised by setting out the final conceptual framework which provides a holistic understanding of branded app adoption and continued usage as a form of digital brand engagement.

5.2 Extending the digital self through engagement with branded digital possessions

A key contribution of this thesis is its focus on consumers' use of digital possessions to extend the self. Whilst a plethora of research has been conducted into possessions and the extended self in an offline context, prior research into the fragmented 'ownership' of digital branded possessions is limited (Bardhi and Eckhardt, 2017). This is despite there being substantial differences between how online identities are expressed in comparison to offline expressions (Trub, 2017; Michikyan, 2020; Hollenbaugh, 2021). To this end, the research fulfils a clear call within the literature to move beyond comparing digital possessions with material possessions to examining consumer usage of digital possessions in their natural environment (Denegri-Knott *et al.*, 2012) through the application of connective ethnography.

Of high importance to the contributions of this thesis is Hill and Carrillat's (2020) research which evidences that continued use of branded apps results in higher levels of BESC. To the author's knowledge, this is the only other longitudinal study of experimental design to apply BESC in a digital context. This increases the construct validity of BESC by observing the effects over a period of time. It should be noted however, that this research was not based on the participant's individual favourite apps, rather following a selection of branded apps following initial consensus by the participants. This raises an issue over the validity of the nature of the brand interactions, perhaps suggesting the increase in BESC could be the result of researcher bias. This was accounted for to some extent however, with a control group being given

an unbranded app to engage with for a four-week period. Significantly, BESC was also found to impact on what is coined 'brand personality rub-off' (ibid, p.2). From this perspective, it was observed that the perceived brand personality of the branded app was transferred to the consumer over the four-week research period. This highlights the role of the branded app as a form of digital extension, driven by the brand itself. This will be further contextualised in relation to the findings of this thesis in the sub-sections that follow. Self-congruity theory provides a firm foundation on which to base the direction of the research, drawing on previous arguments that consumers are motivated to strive for self-congruence (Sirgy, 1982). From here, the findings on ideal and actual self-brand congruence are discussed within a contemporary marketing context, positioning the theory of BESC within a digital framework to understand the implications of digital self-extension on digital brand engagement.

5.2.1 Implications of the findings in relation to BESC and self-congruity theory

This research places the theory of BESC into a digital context through the study of the affect of brand self-congruence on continued app usage. Triangulation of the results concurs with the findings of Spratt *et al.* (2009) that the tendency to include brands as part of the self is not universal to all consumers, resulting in five predicted outcomes of branded app usage (as presented in Chapter Four). Based on this, the results can be directly mapped to the theoretical perspectives of Sirgy (1982) who put forward four self-brand relationship paradigms. Significantly, the findings extend research into

self-congruity by presenting key differences within these congruity states in relation to branded digital possessions, depending on a consumer's level of BESC. This is discussed in the following sub-sections by critically appraising each of the observed outcomes of branded app usage in the context of self-congruity theory (figure 5.2).



Figure 5.2 Self-image/product-image congruity states (Sirgy, 1982)

5.2.2 Positive self-congruity

The study observed that those who had the strongest intention to continue to use their branded apps were those who showed positive self-congruity with their digital possessions. Consumption of branded goods allows for the perceived brand image of the product to be transferred to the consumer in attempt to extend the self (Belk, 1988). When this perceived brand image matches the consumer's self-image, this is regarded as positive self-congruity

(Sirgy, 1982). Within this research, positive self-congruity was displayed by participants who have a high level of BESC, positive product image by recognising the functional value of their branded app, and a degree of congruence between the perceived brand personality characteristics and the ideal and actual self. This resulted in the app being continually used and a high intention to continue using the app in the future. The findings support previous research which confirms positive self-congruity to be the strongest determinant of purchase motivation, from both an offline (e.g., Sirgy 1982; 1985; Lee and Lee, 2015) and online perspective (e.g., Davis and Lang, 2013; Badrinarayanan *et al.*, 2014; Koo *et al.*, 2014; Li and Fang, 2019).

Positive self-congruity can be further understood by distinguishing between ideal and actual self-congruence and low and high levels of BESC, evoking a key contribution of this research. Study One evidences that ideal-self-concept has a significant effect on branded app usage continuance intention. This supports previous research findings which demonstrate the moderating effect of ideal congruence on attachment to branded apps (Yang, 2016; Japutra *et al.*, 2018). Extending the work of Yang (2016), these findings highlight that the strength of the ideal-self congruence on continued app usage intention is moderated by the consumer's level of BESC. This contradicts the findings of Koo *et al.* (2014) who found actual self-congruence to positively impact on the formation of positive brand attitudes to a brand's website. This contradiction can be explained in the consideration of a branded app as a digital possession downloaded to a consumer's personal device rather than a service-based website over which the consumer has no perceived ownership and limited control (Zeithaml *et al.*, 2000). The presence of a brand's icon on

the consumer's device is found to symbolise a self-brand connection, particularly to those with a high level of BESC. This is synonymous with previous research into digital possessions which foregrounds access-based consumption and personal identification with digital objects (Watkins *et al.*, 2015) as opposed to legally 'owning' them.

With the moderating effect of BESC, it is acknowledged that each participant views his or her digital possessions differently. One explanation for this arises from cross-comparison of the participant profiles. Notably, the participants who had a strong intention to use the app had a gap between how they want to be perceived in terms of "competence" and how "competent" the brand was perceived to be. This suggests a strong desire for participants to utilise a reliable branded app to help them to be more competent in their everyday lives. This was particularly evident with those who viewed the actual self as possessing less competent personality traits than their ideal self. This reflects previous applications of Aaker's brand personality scale (1997) which found the 'competence' dimension to be the most prevalent (e.g., Banahene, 2017). Through this confirmation, this research adds to a body of literature which rejects the view that human personality traits cannot be attributed to brands (Azoulay and Kapferer, 2003). Coincidentally, the research provides further empirical support for the application of brand personality measures.

Significantly, this research demonstrates that considering app usage intention measurements alone is unreliable. An important objective of this research was to add to previous quantitative survey-based methodology by observing the relationship between predicted brand attachment on actual app usage.

Although the questionnaire findings indicate app usage intention continuance to be high for all branded apps studied, the app usage data does not reflect this. A highly important outcome of the research is that positive self-congruity can be understood not only resulting in measurable continued brand engagement, but also through a branded app remaining on the user's phone unused or used infrequently, and through the practice of deleting and then later re-installing the branded app. This is later discussed in more detail in Section 5.4, bridging research between positive in-congruity and the non-usage of digital possessions.

Another major contribution of this research is in its theoretical implications within the area of branded digital possessions which contradict previous assertions in line with Goffman's theory (1956) that self-brand connections must be shared in order to be meaningful. The results show positive self-congruity occurred despite the branded apps remaining personal to the consumers on their own device. Furthermore, the research findings demonstrate that purchasing from a branded app is not necessary for participants with a high level of BESC, the mere presence of the app can result in greater feelings of brand self-congruence. This was found to be particularly prevalent with the ownership of fashion-based brand apps. Several participants chose a fashion branded app as one of their favourites, although this was not necessarily opened frequently during the three-month period or at all. This is consistent with Jain and Ismail (2018) who evidence that in a digital context, when consumers are attempting to portray their ideal selves through luxury consumption, apps are being used to evaluate and compare luxury products, although the final purchase may be made in store.

In contrast with Fang (2017) however, who proposes that branded apps present a promising opportunity to reach consumers and influence repurchase and continuous intention through constant interaction with the brand, the research found that continuous interaction with the app is not needed to secure the intention to continue using the branded app. This corresponds with previous research into BESC which found that those with a higher level of BESC in comparison with those with a lower level of BESC showed stronger brand loyalty (Spratt *et al.*, 2009; Norouzi and Beigi, 2019; Ismail *et al.*, 2020), increased emotional brand attachment (Yang, 2016; Guevremont and Grohmann's, 2016; Li and Fang, 2019) and greater brand engagement (Banahene, 2017; Giakoumaki and Krepapa, 2020). However, level of BESC alone was not found to be a determinant of branded app usage continuance. It was found that if the perceived brand image of the app is not congruent with the consumer's self-concept, this resulted in positive self-incongruity, impacting on the user's lack of desire to want to continue using that app if it does not fit with their view of their self, regardless of their tendency to include brands as part of their self-concept.

5.2.3 Positive self-incongruity

The research evidences that positive self-incongruity was prevalent through the continued usage of branded Smartphone apps. This was attributed to consumers with a high level of BESC and positive product image by recognising the functional value of their branded app. However, in contrast to those exhibiting positive congruity, there was a lack of congruence

between the perceived brand personality characteristics of the app and their ideal and actual self. With self-congruence being identified as a driver for app usage continuance from Study 1, positive self in-congruity occurred when there was a change in the consumer's self-concept, resulting in the consumer choosing to stop using or deleting the app. Participant K for example noted that they downloaded the ASOS app last summer because they went through a phase of 'wanting to be cool' but several months later they deemed this to be less important to their ideal self-image; the app was no longer required for the maintenance of their self-concept and was subsequently deleted.

This supports research into the malleable self that acknowledges that individuals adapt their self-concept (Markus and Kunda, 1986) and consumptive behaviour (Aaker, 1999; Ahuvia, 2005) in response to changes in their social environment. Traditionally, this could be thought of in relation to a consumer adapting which brands they wore at work in contrast to the clothing they wore outside of the workplace, mediated by actual fashion self-congruity, ideal fashion self-congruity, or ideal social fashion self-congruity (Anand and Kaur, 2018). In contrast, the digital malleable self is intangible and characterised by both its stability and variability (Jin, 2012). This allows for numerous online opportunities to enhance, construct or alter the self, as well as present multiple versions of the self (Epps, 2014). Brand engagement in the digital environment is therefore evidenced to be fluid, reflecting a 'liquid relationship' with digital possessions (Bardhi *et al.* 2012). In this way, consumers seek to form short-term attachments with brands to fulfil their self-congruence needs presently being met in the moment (Bardhi and Eckhardt, 2017).

Value can also be gained by positioning the results in line with Giakoumaki and Krepapa's (2020) research which research into the moderating role of the message source. Acknowledging that the social media environment provides consumers with high BESC to express themselves more freely, the researchers studied the symbolic nature of engagement with three Instagram posts from luxury brands. This was taken from the perspective of three proposed moderating factors to engagement with the branded post, influenced by levels of BESC – the brand itself, social media influencers and other internet users. In line with the previously discussed findings in the context of branded apps, Giakoumaki and Krepapa (2020) found that consumers with a high level of BESC showed greater engagement with branded social media posts than those with a lower level of BESC. However, in contrast to previous research (Sprott *et al.*, 2009; Guèvremont *et al.*, 2016; Norouzi and Beigi, 2019, Panigyrakis *et al.*, 2019), the findings indicate that the relationship between the brand and the consumer was weaker in relation to social media engagement when the post was shared by the brand rather than another social media user. This was also found to be the case with social media influencers having less of an effect on BESC compared with other internet users. This is supported by Nyadzayo *et al.* (2020) who found social media marketing (SMM) activities to be a key driver of BESC as a result of value co-creation whereby the consumer has an influence over their brand interactions. The researchers attribute this to greater levels of emotional attachment to a brand as a result of BESC, driving increased brand loyalty and positive word of mouth (WOM). This echoes previous applications of the BESC scale within the digital environment which found self-expressive brands

to be positively associated with brand love and increased likelihood of positive WOM (Leventhal *et al.*, 2014). A key limitation of the two studies discussed above however, is that they are focused on luxury brands. The researcher raises a particular concern with Giakoumaki, and Krepapa's research (2020) which involved testing pre-selected luxury brands from Interbrand's Best Global Brands 2018 list (Interbrand, 2018). This presents validity issues as the BESC scale was developed on the basis of measuring consumer engagement with favourite brands (Sprott *et al.*, 2009). If the brands tested were not those that the participants would choose as being part of their self-concept (and therefore their favourite brands), then brand engagement is arguably likely to be superficial. This is further problematic with distinct differences previously being found between the consumption of luxury and non-luxury goods (Shao, Grace and Ross, 2019).

The findings of this thesis provide evidence that the online environment adds a further complexity to CBE because consumers are more exposed to other users who can have an impact on their brand engagement choices. Yet, the results evidence that for the participants with a high level of BESC, incongruity between the perceived brand image and the consumer's sense of self over-rides the perceived functional value of the app, resulting in non-usage or deletion of the app. This highlights the fragility of digital brand relationships, particularly when there is a lack of hedonic value attributed. In light of this, the following sections discuss the implications of negative self-incongruity and negative self-congruity on digital brand engagement.

5.2.4 Negative self-incongruity

A key contribution of this research is in the area of negative self-congruity and digital consumptive behaviour. Negative self-incongruity was expressed by participants who have a high level of BESC, negative product image as a result of their perception that there is little or no functional value to their branded app, and, significantly, a degree of congruence between the perceived brand personality characteristics and the ideal and actual self. Contrary to research that negative self-congruity leads to brand disengagement for fear of self-abasement (Sirgy 1982; Torelli *et al.*, 2012; Liu *et al.*, 2018), app users were found likely to keep the app on their phone and maintain a positive sense of brand attachment. This occurred despite only using the app infrequently or not at all. Moreover, there are explicit implications of the findings which contradict previous research that self-congruity has a positive impact on functional congruity and that brand loyalty is achieved as a result of product involvement, perceived relationship quality and functional congruity (Kressman *et al.*, 2006). In the case of branded apps, self-congruity between the consumer and the perceived personality characteristics of the brand has been found to result in the branded app acting as a way for the consumer to maintain a sense of congruence between the ideal or actual self. Just having the app on their phone therefore helps consumers to feel more at ease with their sense of self, increasing their self-esteem. Furthermore, the results demonstrate that customer-brand identification significantly influences a consumer's brand resilience to negate negative brand product image perceptions when they are exposed to the positive evaluations of other customers (Augusto, Godinho and Torres, 2019).

This highlights the role of positive eWOM, particularly from app store reviews, as highlighted within the study's findings, on not only influencing whether a consumer downloads a branded app but also whether they are likely to keep that app on their phone despite initially perceiving it to have little functional value to them. This is an area of further research however with initial findings into the effectiveness of reviews to reflect app features correctly (Lin, Change, Shen and Lin, 2018) conflicting with recent research into the ineffectiveness of eWOM due to rising consumer scepticism surrounding the validity of online reviews (Xiao, Myung and Carpenter, 2016; Ahmad and Sun, 2018; Nam, Baker, Ahmad and Goo, 2020).

The theoretical implications of the findings in relation to negative self incongruity can be further contextualised in respect to an additional contribution within branded digital possessions which contradicts previous assertions in line with Goffman's theory (1956) that self-brand connections must be shared in order to be meaningful. Despite the importance of the individual self being mirrored (Turkle, 1995), extended (Belk, 1998) or disinhibited (Suler, 2012) within the digital space, there is a strong tendency within the current literature for the digital self to be referred to in the context of the social self, with researchers being concerned with how the self is portrayed to others in an online context (Rifkin *et al.*, 2020). Less is known about the extent to which consumers desire to extend the self on a private basis through inconspicuous digital consumption. The findings address this gap in knowledge by demonstrating the significance of self-congruence amongst consumers with a high BESC, despite self-brand connections not being shared with others. In this way, downloading a branded app can be

viewed as inconspicuous consumption, with an observed outcome of possession of the app being for identity-affirming purposes (Denegri-Knott *et al.*, 2020). This reflects the change in consumer behaviour that has occurred following a 'digital fusion' (Sheth and Solomon, 2014) between 'offline' and 'online' identities, particularly amongst Gen Z who are considered to be 'digital natives' (Smith, 2019).

Contrary to recent research, the findings evidence that digital brand engagement is not just about sustained purchase behaviour or motivations for brand interactivity. Parallels can be drawn here with McClure and Seock's research (2020) which found that involvement with a brand's social media page resulted in consumer exhibiting a more positive attitude towards the brand but did not influence future purchase intention. This reinforces the argument that the mere presence of the app on a consumer's phone can fulfil identity-signalling needs without the consumer having to make the purchase. The majority of participants confirmed that they intended to continue to use the branded app in the future if they had a high level of BESC, despite not using one or more of their self-declared favourite branded app during the three-month research period.

5.2.5 Negative self- congruity

The findings demonstrate negative incongruity occurred amongst participants who had a high BESC level, negative product image because they did not recognise the functional value of the app, and no congruence between the self and the perceived brand characteristics. This resulted in the consumer

discontinuing using or deleting the app. A comparison between negative self-congruity and negative self-incongruity can be made in the case of Participant A and the Beauty Bay app and Participant H with the same branded app. The impact of the Beauty Bay PR scandal on Participant A's decision to delete the Beauty Bay app provides evidence of the need to avoid a negatively valued product. However, in comparison to Sirgy's (1982) argument that negative self-congruity leads to brand disengagement to avoid public humiliation, in the context of the personal branded apps, it can be argued that this is a case of self-preservation by a consumer not associating themselves with perceived negative brand personality traits. This supports the research of Epstein (1992) who put forward the notion of self-congruity and consumption being linked to the coherence of a 'personal conceptual system' and a desire to maintain a sense of self.

This is further supported by Islam *et al.* (2020) who cite symbolic incongruity and functional incongruity as a key determinant to brand app hate. This can further be understood when comparing levels of self-esteem holistically across all data sets. Comparing the two participants who had the Beauty Bay app on their phone which Participant A subsequently deleted and Participant H continued to use, the level of perceived self-congruence is the same (pictorial b), yet the qualitative evidence suggests Participant A had a higher self-esteem and was a lot more confident about their actual self and achieving their ideal self than Participant H. Whilst Participant A deleted the app, Participant H continued to engage with the app despite referring to the brand as 'bitches' and claiming that the brand 'really does not care' about their consumers. Previous research suggests that negative self-congruity does not

lead to brand avoidance if the consumer is motivated to avoid inconsistency between the way in which they view the brand personality and their own self-concept (Sirgy, 1982; Higgins, 1987). In this way, the act of retaining the Beauty Bay app could be viewed as a form of self-discrepancy to gain a sense of control over their fragile sense of self. The need to retain the app is further heightened by the perceived hedonic value that Participant H attributes to the brand (Liao *et al.*, 2017). For Participant A however, no functional or symbolic self-congruity was expressed and the participant showed distrust and hate towards the brand because of the way in which they felt the brand behaved in a crisis. This adds to the CBE literature by providing robust evidence of the antecedents and outcomes of brand disengagement across a three-month period, responding to calls for longitudinal research in this area (Rosado-Pinto and Loureiro, 2020).

Furthermore, by taking an ethnographic approach, the researcher observed and contextualised the moment consumers 'detached' from a brand in order to avoid psychological harm (Kressmann *et al.*, 2006). This research thus directly addresses the concern raised by Bowden *et al.* (2015) that 'conceptualisations of relationship ending have been largely speculative' (p.775). An important contribution is made as a result of triangulation of data. Any "speculations" from the quantitative survey data concerning app usage intention and actual app usage were identified through the app usage collection period. The qualitative data additionally provided in-depth understanding of brand disengagement from an individual and collective perspective. This was an area previously undefined due to a lack of mixed-methods research.

Overall, the findings discussed above highlight that app usage outcomes amongst participants with a high level of BESC can be predicted according to Sirgy's stages of product/self-congruity (1982). However, the research has highlighted a core difference in relation to product/self-congruity state and purchase intention to those presented by Sirgy in his seminal paper (1982). This emphasises the fundamental need for digital brand engagement to be explored further, particularly in the area of brand engagement with digital branded possessions.

Having discussed the implications of the findings corresponding to self-congruity theory and participants with a high level of BESC, the following section addresses the findings analysed from participants with a low level of BESC and the role of functional-congruity in digital brand engagement, which was found to be a further key determinant of branded app usage continuance.

5.3 Implications of the findings in relation to lack of BESC and functional congruity

It was observed that if a consumer had a low level of BESC, branded app usage was closely mediated by functional congruity as opposed to self-brand congruity. This adds to the current literature by foregrounding the functional and utilitarian aspects of a branded app as a result of consumers taking a logical, rational approach to product choice (Delgado-Ballester and Fernandez Sabiote, 2015) rather than focusing on the symbolic, self-congruity factors that can be attributed to perceptions of brand personality (Aaker, 1997). This research extends previous findings by evidencing differences in brand

engagement across a period of three months dependent on a consumer's tendency to include brands as part of their self-concept. Participants who had a low level of BESC, regardless of the perceived brand characteristics being congruent with the ideal or actual self, were observed to only continue using a branded app if they were satisfied that the app met their expectations in relation to its perceived functional brand value (positive functional congruity). Those who had a low BESC level and a lack of functional congruity, discontinued or deleted the app regardless of the level of self-brand congruity between their self-concept and the perceived brand characteristics of the app. To date, this is the first time that attention has been paid to consumers with a lower level of BESC in relation to branded app usage. The research outcomes therefore provide new knowledge to supplement the growing body of research which was systematically reviewed in section 2.6. Applying each of the researcher's found conditions allows for branded app usage continuance to be discussed in its entirety to broaden theoretical understanding of digital brand engagement.

The research findings provide empirical evidence in support of Park and Yoo (2016) that self-congruity has little effect on predicting brand engagement with consumers with a low level of BESC. As previously highlighted, the usage continuance scores for each participant are of limited value when placed outside of their everyday usage context as high app usage continuance scores were measured for most of the participants in Study One and all participants in Study Two. This is likely to be due to the research concentrating on the participants' self-defined favourite brands which the participants were likely to have felt a high degree of brand attachment and loyalty (Japutra *et al.*,

2018). As a result of the digital ethnographic phase and the semi-structured interviews, functional congruity was found to be a strong mediating variable on branded app usage continuance.

Positive functional congruity resulted in continued use of branded apps across the three-month period as a form of cognitive brand engagement. These findings support those of Jumaan *et al.* (2020) and Shin and Back (2020) who argue cognitive absorption (CA) as the most robust predictor of app usage. In relation to 'absorption', rational investment in the branded apps resulted in engagement in the functional attributes of the app rather than identifying with the brand itself. However, two distinct attitudes emerged as a result of attention paid, with a divide being observed between those who enjoyed 'passing the time' engaging with their branded apps and those who were negatively impacted by their app engagement. For those participants who judged their app absorption to be negatively impacting on them and 'wasting their time', this led to a want to discontinue using the app, often deleting the app, even if they recognised the value of the brand itself. This supports Shin and Back's findings (2020) by evidencing that brand attachment does not always mediate cognitive brand engagement within the context of branded app usage. Consumers with a low level of BESC were not using their digital possession for self-extension and this therefore did not provide a significant motivation to continue using the app. This research extends previous findings by highlighting that rather than being constituted as brand disengagement, the decision to stop using apps was also found to be as a result of avoiding mobile phone dependency. This supports preceding research which found technology-dependency to be extremely common amongst generation Z

(Titilope, 2014; Olufadi, 2015; Basu *et al.*, 2018), with known unwanted consequences such as poor sleep quality (Sahin *et al.*, 2013; Ibrahim *et al.*, 2018) and reduced academic performance (Nayak, 2018; Ibrahim *et al.*, 2018). Reasons for discontinuing with branded apps are explored further in section 5.6.1.

One alternative perspective to explain functional congruity is that digital possessions act as a consumer mind extension. In this way, the app becomes a hybrid between the consumer and the consumptive practice that the app is replacing (Denegri-Knott *et al.*, 2015; Jenkins and Denegri-Knott, 2017), rather than being a separate entity. For example, the Pure Gym app was found to represent a link between the consumer and the gym by providing a digital solution for booking exercise classes. The app then became a cognitive resource that helped the consumer to be more efficient. This relationship however rests on perceived usefulness and ease of use (Jenkins and Denefri-Knott, 2017). Without this, it can be argued that the app is no longer needed. Alternative research however presents the moderating role of the ideal self in motivating consumers to engage with fitness apps (Hardey, 2019). Both perspectives are bridged within the findings of this thesis when the functional role of the app fits with the self-concept, represented by the brand embodying that activity. Pure Gym as a brand was identified as conflicting with Participant E's other two favourite branded apps as these were associated with high calorie intake (Wetherspoons and Just Eat), yet Participant E desired for their ideal self to be fit and healthy. Indeed, one key reason that Participant E cited for not having achieved self-congruence was due to self-proclaimed body confidence issues. In this way, it was observed that the Pure

Gym app was being used as a way to move towards the ideal self through a 'marriage of convenience' (Fritz *et al.*, 2014) due to the app's functional benefits rather than the perceived personality characteristics of the brand. This can be expanded upon by highlighting the superfluous nature of brand identification from participants with a low BESC. In the above example, the participant admitted that her engagement with Pure Gym was only because this was the closest gym to her house. Similarly, 'Just Eat' was described to be the participant's favourite delivery app because it was the only delivery app available in her area which delivered food from her favourite take-away restaurants. The participant reasoned that as long as the 'Just Eat' app continued to deliver from her favourite take-aways then she would continue to use the app. This confirms the role of functional congruity in the continuance of branded apps.

The findings discussed above in the preceding sections provide tangible comparative evidence of Ismail *et al.*'s (2020) categorisation of Gen Z consumers. Value consciousness (VC) in this context can be considered in relation to the functional brand value that the consumer attributes to their branded app. In line with Ismail *et al.* (*ibid*), the 'dedicated' consumers were found to be those with the highest level of VC and BESC and showed the most brand loyalty. However, a point of discrepancy is raised in the definition of a 'switcher'. The findings contrast with Ismail's *et al.* (2020) assertion that those with a high level of VC and a low level of BESC show a lack of brand loyalty and are therefore most likely to switch brands. As discussed above, functional congruity was found to mediate branded app continuance and therefore consumers considered under the 'prospective' category with a low

level of VC and a low level of BESC are argued to be more likely to switch brands. The extent to which branded app usage continuance can be understood as a form of digital brand engagement is discussed in the following section. This is followed by highlighting a further contribution in relation to the previously identified neglected area of research into discontinuous use of branded apps.

5.4 Digital brand engagement with digital branded possessions

A major contribution to the literature is made as a result of the qualitative phase of the research which provides comprehensive understanding of consumers' perspectives of digital extension through digital branded possessions. Projective techniques were applied to delve into consumers' deep-seated and unconscious perceptions of their digital brand relationships. In doing so, knowledge is added to the area of branded digital possessions by exploring the extent to which branded apps are used for digital extension. A key original outcome of this is that the findings confirm and extend the three ontological characteristics of digital consumption put forward by Watkins (2015), namely 'transience', fluidity' and 'instability.'

The connective ethnographic period confirmed a transient relationship that participants have with their branded apps, presenting a wide range of usage times across the individual research periods. Most of the studied apps remained on the participants' phones but were only accessed for a brief amount of time within any one day, if at all. The interviews confirmed that app notifications did not increase engagement, with some participants

reflecting that an increase in app notifications would lead to them deleting the app as they found this to be intrusive. This contrasts with a recent systematic literature review into app notifications (Wolhllledbe, 2020) which found that app notifications increased user engagement with the app and led to habitual behaviour. Support is given however in relation to the annoyance felt by consumers when app notifications are perceived to be too frequent and result in a disruption to the user experience (Ramaswamy and Liew, 2014; Patel and Zaveri, 2018). This highlights the importance of a clear balance between consumer and brand interaction with the app (Wang and Gutierrez, 2018), with support for tailored app notifications that provide self-monitoring (Bidagaddi at al, 2018). In contrast to previous research, app notifications were not found to increase purchase behaviour (Costacurta, 2019) or brand loyalty (Fang, 2019; van Heerde *et al.*, 2019). It is acknowledged however, that further research is needed to better understand the role of app notifications, particularly from a long-term digital brand engagement perspective.

In terms of fluidity, interesting findings were found that support the assumption that digital possessions, in contrast to many physical possessions, are accessed from multiple locations and in differing forms (Watkins, 2015). This was found to be particularly the case with purchase behaviour, with some participants preferring to go to the brand's website rather than the app to complete a purchase due to greater trust in a brand's website (Hahn and Kim, 2009; Jones and Kim, 2010; Chang *et al.*, 2018; Chi, 2018). Two participants preferred accessing the website on a laptop or tablet for browsing due to a larger screen size. This is consistent with previous

findings that consumers generally prefer shopping on a laptop in comparison to a Smartphone (Holmes *et al.*, 2014; Groß, 2015). This is further supported by more recent research (Boardman and McCoormick, 2018) which found that Gen Z consumers do not partake in multi-channel shopping behaviour. In this way, the findings contrast with those of Roy (2017) who argues consumers are likely to switch from accessing a brand's website on a laptop to using the app if they perceive it to be useful and easy to use. On the contrary, some participants noted shifting their m-commerce apps to their iPad to keep their mobile phone purely for social media use or app-based games. This furthermore supports the findings of Mehra *et al.* (2020) who also noted different preferences for laptops or smartphones across their samples. The implications of these findings for brands are that branded apps and brand websites serve to form different consumer behaviour functions. Crucially, BESC is found to be a driver for both, as confirmed by the literature review findings into BESC and website interactivity and the results of this thesis in relation to branded apps.

The concept of 'instability' is confirmed by the research due to branded apps requiring a degree of input from both external factors (such as internet network connectivity) and internal factors (such as passwords or log in details) to be accessed (Watkins, 2015). The implications of this are that apps, as a form of digital possession, are open to third-party alterations, such as from brands themselves or other users. This shifts the concept of 'ownership' to reflect a move away from physical, stable materialist objects (Belk, 2014a). Referring back to the concept of liquid consumption, this lack of stability can be viewed as liberating, especially if individuals do not want a

relationship with brands (Bardhi and Eckhardy, 2017). This view was shared amongst the participants with a low level of BESC who freely discussed the practice of deleting and then re-downloading a branded app when later needed (see section 6.6.2). The findings also provide evidence of increased brand engagement with brands perceived to be 'competent' (Aaker, 1997) due to their assumed capability to reduce instability through increased cybersecurity measures. This ultimately resulted in increased brand trust which has been evidenced as a key determinant of continued usage of branded apps (Poromatikul *et al.*, 2019) and brand loyalty (Lee and Lee, 2019). A lack of brand trust led to a consumer either stopping using an app or deleting it. The importance of brand trust is positioned in its conceptual context in the following section.

5.5 The importance of brand trust

An emerging theme was that of brand trust. It was important to consider the impact of brand trust in relation to Gen Z as research into brand attachment within this age group is limited (Riivits-Arkonsuo and Leppiman, 2015). This research adds to this body of knowledge by providing empirical evidence of different levels of brand trust in relation to whether the participant was prepared to download an app from an unknown brand, depended on recommendations or reviews before downloading an app, or were comfortable purchasing from the app. The majority of participants expressed that they tended to download a branded app from a brand that they were already familiar with. This concurs with research which emphasises that brand familiarity positively influences brand trust because consumers are better

able to process brand messages that they understand as a result of repeated exposure (Delgado-Ballester *et al.*, 2012). However, some participants said that they were happy to try a branded app from an unknown brand. Within this circumstance, app store reviews and friend and family recommendations were found to influence the decision of whether the app was downloaded. One further reason put forward was in relation to trusting the Apple App Store to only be including apps that were secure and trustworthy, emphasising the need for there to be brand trust at an operating level. This supports Botos and Almadi's (2017) findings that Apple is a popular brand amongst Generation Z due to a perception of high brand quality, uniqueness of the brand and a robust operating system overall. Future areas of research would need to consider varying levels of brand trust between the different operating systems as this study only included those using an iOS operating system, supported by Apple Inc.

This research further confirms that E-trust (brand trust in an online environment) is crucial to establishing brand relationships to facilitate online transactions due to the absence of a physical salesperson (Khan and Rahman, 2016) and tangible assets (Thomas *et al.*, 2018) mediating perceptions of brand trust. In relation to in-app purchases, this study observed that whilst some participants were happy to purchase via the app itself, others preferred to move to a laptop to complete the purchase. The move from the app to the brand's website highlights that it is not the brand that the participants do not trust, it is a lack of trust in the application software itself. This supports previous research (Chin *et al.*, 2018; Degirmenci, 2020) which highlighted concern from consumers around downloading apps for fear of the app

obtaining their personal details and the consequences of malware. The findings highlight that lack of brand trust can be overcome when consumers attribute positive associations with brands (Kang and Sharma, 2012). Perceived trustworthy brand personality characteristics were found to be a key driver of brand trust, particularly in light of app usage in comparison to app adoption when the branded app was less familiar and therefore there was a perceived greater risk to engage with the app (McClean *et al.*, 2020). In support of the findings of Kim *et al.* (2013) and Banahene (2017), Study Two highlighted that the 'Competence' dimension from Aaker's brand personality framework (1997) had the most effect on whether consumers trusted the brand, particularly when the participants showed a high degree of congruence between their ideal and actual self within this dimension.

This can be further attributed to source credibility whereby consumers trust that the branded app contains reliable and secure information that enables them to cognitively engage with the app (Lee, 2018). This view is shared by Fang (2019) who denotes brand competence to 'value-in-use' (VIU), based on service dominant logic (SDL). From this perspective, consumer decision-making to download apps is considered in relation to co-creation and interactivity of the app (Lemmink *et al.*, 2019). The research of this thesis disagrees however that it is the interactivity between the user and the brand via the app which leads to value-in-experience and greater app usage. The findings indicate that the branded app does not even have to be opened for the user to gain hedonic value from the mere presence of the app on their personal device. This heavily relates back to Belk's theory of possessions and the extended self (1988) as the branded app can be considered part of the

consumer's self-concept, particularly when the consumer has a high level of BESC. This thus reinforces the value of the research to theoretical advancement in the area of digital self-extension.

The projective techniques focused around brand trust also identified that participants were willing to trust a brand who already held confidential information about them and those who they perceived to have proficient cybersecurity. For some, using the app for purchases was convenient and efficient as the storing of details helped to shorten the purchase time. Some participants further reflected on the perceived benefits of being able to complete purchases by not putting any details in at all and completing the transaction through thumb or face recognition technology. This is in support of recent findings that trust in online transactions has greatly increased amongst the younger generation (Yang *et al.*, 2015). This is explained in the literature as resulting from Gen Z growing up as 'digital natives' and therefore being proficient users of technology (Herrando *et al.*, 2019; Kesharwani, 2020), as well as the tendency to voice any brand trust issues they have through social media (Gunarathne *et al.*, 2017). However, trust in app functionality and security was not shared by all participants, as discussed in relation to functional congruence. Lack of brand trust was additionally found to impact on participants discontinuing app usage or deleting the app from their personal device. This, along with other antecedents of non-usage of branded apps, is discussed in the following section in relation to digital brand disengagement.

5.6 Digital brand disengagement

A major contribution of this research is in the area of unused and deleted branded apps, which the literature review identified as a fundamental gap in this field of study (Islam *et al.*, 2020). Although there is growing research into the adoption and continued use of branded apps (Mondal, and Chakrabarti, 2020), without taking a holistic observation of the lifecycle of the app, the app cannot be studied as a form of long-term brand engagement. This is a particularly important area to study from a digital brand engagement perspective, as branding in a digital context is considered 'slippery and difficult to disentangle' (Rowley and Edmundson-Bird, 2013, p.63). Through acknowledging the significance of lack of engagement with digital brand possessions, key learnings can be gained to develop future digital brand engagement strategies.

5.6.1 Non-usage of branded apps

Despite all participants showing high app usage continuance intention for their favourite branded apps, app usage data confirmed that none of the participants showed continued engagement with all three of their favourite branded apps throughout the three-month research period. A number of themes concerning reasons for non-usage of branded apps were ascertained, which will be discussed and placed within their theoretical constructs under the categorises of 'Lack of perceived usefulness', 'Poor app functionality', 'Reducing Smartphone use' and 'No perceived self-brand congruence'. This adds concrete evidence to the notion of a transient relationship with branded digital possessions (Wakins, 2015). Furthermore, substantial contributions to knowledge are made in the area of non-usage of branded apps.

5.6.1a Lack of perceived usefulness

The most commonly cited reason for participants discontinuing their use of a branded app was because they did not find it useful anymore. Perceived usefulness is accepted in the literature as a core factor mediating app adoption (Jin, 2016; Kim, Yoon and Han, 2016), as measured by researchers adopting both the TAM model (Davis, 1989) (e.g., Roy, 2017; Malik *et al.*, 2017; Mclean, 2018) and the ECM model (Bhattacharjee, 1995) (e.g., Hsu and Lin, 2015; Chiu *et al.*, 2020; Jumaan *et al.*, 2020). Perceived usefulness is categorised by users' perceptions of the expected benefits of the app (Jumaan *et al.*, 2020). The findings provide empirical evidence in support of Stocchi *et al.* (2019) that consumers will have a higher perception of usefulness and ease of use if they view the branded app to be protective of their privacy, customisable and task-fit. By researching the effect of BESC on continued app usage, greater understanding as to why consumers take the so-called 'recognition path' over the 'evaluative path' (ibid) is provided and importantly, the predicted effect of this on long-term brand engagement through the branded app is contributed. The branded apps that were used the most often were those that had a specific functional purpose, such as booking a gym class or paying for food, as well as large corporate brands such as Amazon which all participants trusted highly, perceived to be highly 'competent' on the brand personality scale, and used frequently for general purchases across multiple e-commerce categories. Participants further reflected on their branded apps no longer being useful because they served a one-off function, such as for a price comparison or to activate a special offer

by downloading the app. From this perspective, branded apps were viewed as disposable or single use by the consumer. It could also be that the branded app failed to meet expectations on its continued usefulness. When an app is free, there is also no pressure on the consumer to continue to use the app in order to 'get their monies worth.' This supports research into app deletion in general (Ickin *et al.* 2017; Park *et al.*, 2018), which argues lack of usefulness as being the main reason for deleting an app. Importantly to extend cross-sectional intention data, the findings from this research have also demonstrated a clear link between intention to continue using a branded app based on perceived usefulness and the effects of lack of functional value on branded app usage continuance.

As highlighted in the literature, linked to perceived usefulness is perceived ease of use, a further driver of app adoption that has been found to have a significant effect on whether an app is intended to be continuously accessed. Under this framework, poor app functionality is assessed in the following subsection.

5.6.1b Poor app functionality

This research found poor app functionality to be the second most common reason for non-usage of apps, following a lack of perceived usefulness. From a technological acceptance position, this limitation can be positioned under the 'perceived ease of use' factor which has been found to strongly influence technology adoption (Davis, 1989) and app usage continuance (Kim *et al.*, 2014; Sang *et al.*, 2016). In support of previous research, app functionality

was found to significantly impact on overall app satisfaction, evidencing this as a key determinant of branded app loyalty intention (Chatterjee and Ghatak, 2014; Erwanti *et al.*, 2018). Participants identified problems with particular app features failing to work correctly or being removed from the app, poor app design, or it was judged that the brand's website was easier to navigate and purchase from. This supports the findings of Niros *et al.* (2019) who evidence app design as being the most influential antecedent of app satisfaction, alongside emotional attachment. The findings further confirm those of Kim and Yu (2016) that the sensory experience of the app is insignificant, with all of the participants noting problems with specific app functionality features rather than the look of the app itself. In support of previous affirmations, the app features were found to support particular task-related functions, particularly for consumers with a low BESC, rather than being used because they were aesthetically pleasing. This concurs with previous findings that Gen Z consumers prefer to access a brand's website via a laptop for efficiency or visit a physical store to complete a purchase, despite apps being deemed to be a more attractive technological platform (Nurhudatiana *et al.*, 2018). With the research focusing on Smartphone apps rather than apps downloaded to a tablet, further knowledge was additionally gained into the thoughts of Gen Z in relation to addictive Smartphone behaviour.

5.6.1c Reducing Smartphone use

Time and place were variably seen to impact on branded app use, with phone usage being unacceptable in certain situations or at certain times of the day. The participants cited returning home from university, seasonal changes to working patterns (such as taking annual leave during the period between Christmas and New Year), and the UK lockdown period due to the coronavirus pandemic, as reasons for different access patterns. This is consistent with evidence from Mobile Phone network EE who recorded nearly double the amount of usage amongst communication apps and fitness tracking apps, whilst transport apps such as Uber continued to decrease during the full UK lockdown period (Ali, 2020). Online shopping also increased during this time (Intel, 2020), although this was anticipated to decrease with many of the participants noting the importance of physical stores when making their purchase choices, for completing payment or collection of items. This is supported by Vojvodic (2019) whose systematic review of Gen Z's consumer behaviour highlights a preference amongst this generation to visit and purchase within brick and mortar stores as opposed to online shopping. Priporas *et al.* (2017) emphasise however the importance of smart technologies, such as apps, to assist Gen Z consumers with making informed purchase choices. Further research concentrating on the impact of the pandemic on m-commerce and retail stores is needed to gain a contemporary understanding of the implications of the closure of physical stores on consumer behaviour. Further longitudinal research will also identify whether any short-term adaptation to browsing and purchasing behaviour is sustained.

Some participants consciously chose to stop using their branded apps (and apps in general) during the research period in order to reduce their smartphone usage. This was attributed to two main reasons – to engage more with people away from technology, or to reduce the risk of smartphone dependency. It is noted that Gen Z is the generation who has had more information easily accessible to them than other generation (Lissitsa and Kol, 2019). However, research suggests that Gen Z's reliance on technology is attributed to a need for social connectivity rather than browsing or purchasing online (Yildirim and Correia, 2015). This is supported by participants who discussed a self-imposed ban on social media, with some even going to the extent of deleting social networking apps to avoid temptation. The findings extend the work of Hughes and Burke (2018) who reported a high intention amongst Gen Z to restrict smartphone use in the bedroom in an attempt to reduce anxiety, improve wellbeing, build on personal relationships or to enjoy other activities as opposed to 'wasting time' on a Smartphone.

In regards to branded m-commerce apps, a minority of participants reported a reduction in branded app use to curb online spending. Evidence here is more commonly reported in relation to perceived excessive use of a branded app being seen as pointless. This could have been more prominent during the research period as the participants were recording their weekly app usage which they may not have previously viewed or considered. The interviews confirmed however that none of the participants reported to adapt their app usage as a consequence of viewing their app usage data. On the contrary, some participants showed complete nonchalance towards how long they were spending on their branded apps, seeing it as a 'hobby' or 'an enjoyable way

to pass the time'. The consequences of dependency on digital possessions is a limited area of research however, despite a growing body of evidence that problematic Smartphone use leads to a range of negative outcomes, as discussed in section 5.3.

5.6.1d No perceived self-brand congruence

The hierarchical regression model predicted that self-brand congruence has a statistically significant effect on a consumer's intention to continue using their favourite branded apps. This was further supported by the finding that a perceived difference between a consumer's self-concept and brand personality of the app, influenced an individual's decision to discontinue app usage, particularly with participants with a high level BESC. Stopping using a branded app could be considered brand disengagement, with CBE defined in the literature as 'the level of a customer's cognitive, emotional and behavioural investment in specific brand interactions' (Hollebeek, 2011). However, this was not found to be the case with all of Study Two participants who stopped using their branded apps during the research period or indeed, such as with Participant E, did not use them at all. Although the app usage data confirmed no behavioural investment, and in some cases lack of cognitive investment in the app, the qualitative findings suggested that the emotional investment in the brand as a form of self-congruence was enough for some participants to keep the app on their phone despite not using it frequently. The difference shown in brand engagement with used and non-used apps can be understood through the application of Graffigna and Gambetti's (2015) theoretical framework as an extension of CBE (figure 2.6). The app usage continuance findings support Graffigna and Gambetti (ibid)

that consumers develop relationships with brands to different intensities. It was evidenced that participants with a high BESC entered the 'friendship' phase of CBE once they developed an emotional bond with their branded app as a result of brand trust and self-brand congruence. Some participants even referred to their favourite brand to be 'like my best friend' or 'like my mum'. The 'intimacy' phase was reached by participants who showed commitment to the brand and valued the functional attributes of the app as part of their daily lives. The projective techniques provided deep-seated evidence of this, with some participants showing great excitement to be in the same personified room as their favourite brand. They wanted to get to know the brand more and learn not just about functional brand value but also the inner workings of the brand and how they could be a part of the brand's success. The third and most intense phase of CBE can be considered in relation to participants who showed an extremely strong commitment to forming a 'symbiotic relationship' with a brand (ibid). This was found to be most common with the Amazon brand. The Amazon m-commerce app was found to be the app with the highest app usage intention score from Study One, and from Study Two, the most used app across the three-month period out of all of the branded apps and every user who owned the Amazon app anticipated using the app in the long-term future and talked positively about the brand in comparison to other favourite branded apps.

However, this framework can only be applied to participants with a high BESC level, positioning BESC as a key moderator to a consumer being able to humanise a brand as a lifelong companion. This does however provide a reason for participants with a high BESC to keep an app on their phone if they

had already established at least a 'friendship' with the brand of their branded app as a result of being able to envisage possible selves through ownership of the app and self-extension (Belk, 1988; Belk 2014a; Belk, 2014b). In contrast to this, participants with a low level of BESC, were found to delete branded apps that were no longer of any use or value to them, despite any self-brand congruence being observed. This is discussed further in the following section which details reasons for why consumers delete branded apps.

5.6.2 Deletion of branded apps

This research adds valuable knowledge to current understanding of the reasons why consumers delete branded apps. This is not just from the perspective of digital brand engagement, but also in terms of the consequences of disposal of "owned" possessions, both intangible and tangible. One consequence of having Apple's automatic deletion feature turned on is that users no longer need to engage with a cognitive process to organise their apps. This contrasts with Park *et al.*'s (2018) finding that the process of deleting an app carries an emotional burden which raises a user's anxiety levels. When a user has the offloading feature turned on, it can be argued that a decision has been made to manually delete an app for its immediate removal, with a lack of care for the usage data that is stored within the app. The findings confirm however, that this type of decision-making is not always the case and cannot be judged as a form of brand disengagement in all cases of deletion. To this end, a distinction is made in relation to apps

being deleted due to 'app hate' (Islam *et al.*, 2020), and branded apps that are deleted, with the intention to later re-install the app; a quintessential finding which to the researcher's knowledge is yet to be cited in the academic literature.

5.6.2a Branded app deletion and the concept of app hate

A major contribution to the literature is made in relation to digital brand disengagement through the deletion of branded digital possessions. Following the researchers' review of the literature which informed the direction of study within this thesis, the concept of 'App hate' emerged as the first conceptualisation of brand avoidance in relation to branded apps (Islam *et al.*, 2020). Based on Lee *et al.*'s brand avoidance theory (2009), Islam *et al.* (2020) identify within their conceptual framework a number of variables that influence app hate which they define as anti-consumption of smartphone apps. In the context of this thesis, online symbolic avoidance refers to incongruity whereby a consumer consciously avoids associating themselves with a brand who they perceive to have brand characteristics which are inconsistent with their own (Sirgy, 1989). Whilst the findings indicate that this does lead to a consumer discontinuing using the branded app, this was found to only be relevant to those who had a high level of BESC. In agreement with Islam *et al.* (2020), this research also confirms that consumers stop using a branded app if they have a lack of brand trust and are not satisfied with the relational value that the app alludes, resulting in a lack of commitment towards the brand, hence the lack of app usage. As described previously, lack of brand trust was found to be a particular point of contention

which participants referred to when reflecting on branded app deletion. Moral avoidance as conceptualised by Islam *et al.* (ibid) in the context of anti-hegemony and country of origin, was not found to be relevant to non-usage or deletion of branded apps in this research. However, this is not to say that this was not a confounding factor because it was not observed or measured.

Brand value was additionally highlighted as a key determinant of app usage continuance and consequently non-usage was found to be related to deficit value avoidance, particularly in terms of a lack of functionality congruity (resulting in lack of perceived usefulness) and low service quality. This supports the findings of Ickin *et al.* (2017) who evidence 'perceived uselessness' as key reason for why consumers uninstall apps. In contrast to Islam *et al.* (2020), poor aesthetics were not found to lead to app usage avoidance (or 'app hate'), as discussed in the previous section.

Overall, withstanding the 'moral avoidance' variable, the app hate conceptual model is a good fit with the findings of this thesis, providing a valuable possible extension to the model to test the effect of app hate on app deletion as a further dependent variable. This is suggested in addition to app hate being found to have an effect on negative word of mouth within this study, although no app switching behaviour was observed. Future research would need to test the validity of this proposed model as an adaptation to Islam *et al.*'s (2020) conceptual framework for the gap in the literature in relation to branded app deletion to be further explored. Level of BESC must also be considered as key differences were observed in relation to those with a high level of BESC and those with a low level of BESC that impacted on whether a

consumer deleted their branded app or if it remained on their Smartphone. A third outcome of non-usage was also observed in which a participant deleted an app but then later re-installed the app. This is discussed in the following section and conceptualised by its theoretical position as a core contribution of this thesis.

5.6.2b The process of deleting and then later re-installing branded apps

The dissemination of knowledge of the observed practice of consumers with a low level of BESC uninstalling and then re-installing branded apps provides a fundamental contribution to the area of digital disengagement. Although there is limited previous research into the reasons why a consumer would uninstall a branded app (Rahmati and Zhong, 2013; Ickin *et al.*, 2017; Islam *et al.*, 2020), no empirical evidence shares the findings of this research as an alternative perspective to digital brand disengagement. This highlights the value of the methodological approach to be able to extend previous findings by taking a connective ethnographic approach that focuses on actual app usage rather than merely intended usage. The qualitative findings furthermore provide additional contributions to the literature by contextualising reasons for non-usage and deletion.

The practice of deleting and then later re-installing apps can be closely related to the findings previously discussed in connection with functional congruity. With consumers with low BESC showing a lack of preference towards the symbolic nature of the brand of their app, despite levels of self-congruence, the main reason to continue using an app was attributed to the app's

functional value. If the app did not meet the participant's expectations surrounding the functional brand value at that time, then functional incongruity was observed (Sirgy, 1999), resulting in the app being unused or deleted. Contrary to the brand engagement literature citing this as brand disengagement due to an apparent lack in behavioural, cognitive and affective commitment (Hollbeck, 2011), the app was later installed when it was needed, placing emphasis on the perceived functional brand value of the app once again. This supports evidence presented by Choi, Yang and Sparks (2019) who found through their qualitative research that users of travel apps deleted the application when they were no longer needed but intended to re-download the app if they were to need them again, such as with destination-specific apps.

The practice of deleting and then later re-installing apps can be understood by referring back to the conceptualisations of the digital self and digital consumptive practices. The disposable nature of gaming apps has received considerably more attention than branded apps, with research suggesting games are replaced by newer games (Rahmati and Zhong, 2013) rather than being re-installed. The fact that some participants later re-install their same favourite branded app, shows a degree of brand loyalty, led by a utilitarian need. This adds further evidence to Sarkar and Sarkar's (2019) argument that users who are information-seekers are motivated by achieving a task-orientated goal by re-downloading an app they already trust to perform. This provides longitudinal evidence of the high category involvement from information seeking users beyond that of the first download, highlighting the disposable, yet potentially circular, nature of the lifecycle of the utilitarian

branded app. In this way, brand trust and self-brand congruence act as moderators for the branded app being re-installed later when a utilitarian need is present. It can therefore be observed that digital brand engagement is fragile (Junaid *et al.*, 2019), yet representative of the instability of the digital self which is constantly adapting to a dematerialised (Epps, 2014; Belk 2013; 2014a; 2014b) and disembodied hybrid world (Zhao, 2005; 2006; Šimůnková, 2019).

5.7 Additional finding: The significance of the 'wish list'

As put forward by Šimůnková (2019) through the application of hybrid technologies, such as apps in this instance, digital identities migrate to the physical space. In contrast to physical possessions which are openly being displayed to consumers' social connections, this research contributes findings to the area of internal, psychological forms of self-congruence. Building on Belk's arguments surrounding the formation of the digital self (2013; 2014a; 2014a; 2016), Šimůnková presents the term 'hybrid consumer extension' (2019, p.48), a process by which virtual identities co-exist with physical 'offline' identities. This notion was frequently discussed in the interviews in relation to browsing and adding items to wish lists; resulting in a contribution to the literature unanticipated by the researcher. The practice of saving items to a Wishlist so that they can be thought about and potentially purchased later supports the findings of Knott and Molesworth (Eds.) (2013) who acknowledge the use of the Wishlist as a non-human agent of desire, one which is task-orientated and managed by the consumer as an extension of their cognitive mind. However, beyond purchase intention, the Wishlist was

found to also manage self-congruence, with participants speaking about adding items as a way to boost self-confidence. They may not have gone on to purchase these items but having the option available helped to build up self-esteem, an important part of self-congruence, as discussed in the literature review (Rogers, 1959). This coincides with a further unanticipated practice that was discussed in the interviews, particularly with the participants researched during the UK lockdown period, involving apps being paralleled with 'window shopping' and technology being used to unleash inner desires (Kozinets *et al.*, 2017). This practice contradicts previous research that usage intention to use branded app increases purchase intention (Bellman *et al.*, 2011; Hsu and Lin, 2015; Liao *et al.*, 2015), yet provides an area ripe for research as a possible further antecedent toward digital brand engagement and brand loyalty.

5.8 Chapter summary

This chapter discussed the findings that emerged from triangulation of the results from two studies, by placing them within the theoretical perspectives foregrounded within the literature review and subsequent more recent secondary research following the analysis of the results. To address the distinct lack of research into digital brand engagement and digital possessions to extend the self, this research took a longitudinal multi-phase, mixed-methods approach to observe the use of branded apps within their natural environment. By studying app usage across a three-month period, a key observation was made that challenges the reliability of previous research which measured branded app usage continuance intention via a quantitative

cross-sectional survey design. With the totality of the research findings indicating that actual app usage changes over time, depending on perceived emotional and functional brand value, and is not representative of usage continuance intention, the value of the innovative research design of this study is evident. Brand disengagement has also been discussed, bringing to the foreground limitations of current research to examine the identified outcomes of non-usage of branded digital possessions. The observed disposable nature of branded apps further evidences the need for different marketing strategies to be deployed to achieve brand loyalty, driven by brands orchestrating high levels of emotional and functional brand value. Having discussed these findings, the final conceptual model is presented in figure 5.3.

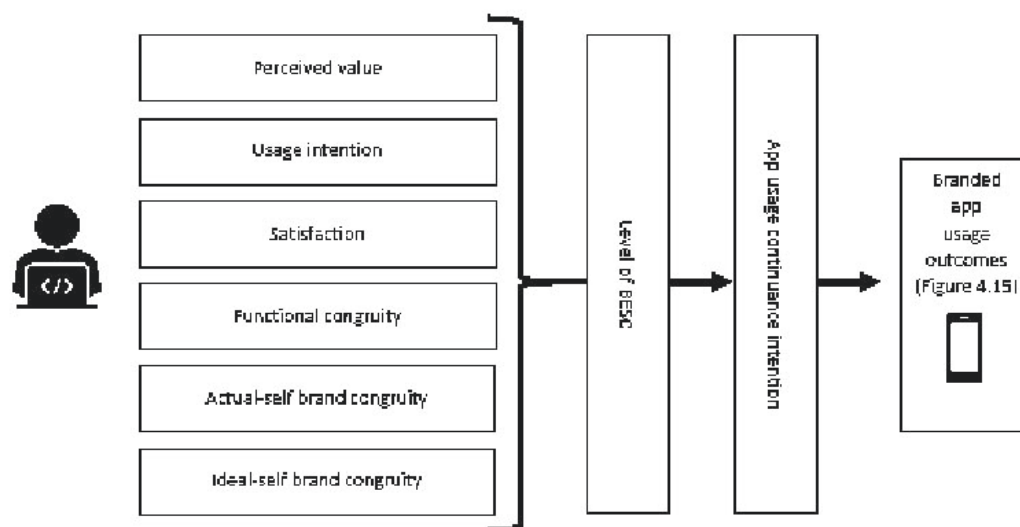


Figure 5.3 Final conceptual model of the determinants and outcomes of digital brand engagement with branded Smartphone applications (Source: Author, 2020).

The following chapter addresses the research objectives in order to draw conclusions and summarise the key theoretical and managerial implications

of the research. The core limitations are also explored, with future areas of research highlighted to address the contextual boundaries of this thesis.

Chapter 6 Conclusion

6.1 Overview of the chapter

The previous chapter discussed the main findings in relation to the current literature and the gaps in understanding that were addressed by this research. This final chapter positions those findings by presenting the research conclusions in relation to the research objectives. This is followed by a summary of the main theoretical and methodological contributions to extend current knowledge in the area of digital consumer brand engagement. Further contributions to knowledge are discussed by highlighting the managerial implications of the research findings.

The second half of this chapter discusses the limitations of the research, drawing on the methodological constraints and the boundaries of the thesis. Following this, recommendations for further research are made to advance understanding within the field of study. The chapter is concluded with the researcher reflecting on the importance of the dissemination of knowledge acquired throughout the development of this thesis.

6.2 Addressing the research objectives

The aim of this doctoral research was to extend current knowledge in the area of digital consumer brand engagement (CBE) through a holistic exploration of the continued usage of digital branded possessions. The research objectives arose from the identification of significant gaps in the literature regarding current understanding of BESC from a digital branding perspective. This includes a gap in understanding of the role of BESC as part of digital self-extension and self-brand congruence. The area of elapsed brand relationships was also acknowledged as needing further consideration and contextualisation. This sub-section re-addresses each of the research objectives sequentially to draw conclusions from the research findings in direct response to the recognised research gaps:

Research Objective 1. To critically analyse existing academic literature to clarify the theoretical position of brand engagement in self-concept (BESC) within the context of digital consumer brand engagement theory

Research Objective 2. To examine whether there is a relationship between the digital extended self and brand engagement in self-concept (BESC)

Research Objective 3. To explore congruency between a consumer's ideal self and perceived brand personality as a form of digital self-extension

Research Objective 4. To explore congruency between a consumer's actual self and perceived brand personality as a form of digital self-extension

Research Objective 5. To investigate consumers' perceptions of their brand relationships in relation to digital BESC and digital self-extension

Research Objective 6. To advance knowledge within the area of elapsed brand relationships through the study of BESC and digital self-extension

6.2.1 Research objective 1

Research objective 1. To critically analyse existing academic literature to clarify the theoretical position of brand engagement in self-concept (BESC) within the context of digital consumer brand engagement theory

By taking a cross-disciplined approach, current understanding is extended by evidencing a need for brands to explore differences between online and offline self-presentations. This was found to be particularly important following discrepancies between research evidencing that the digital self is synonymous with the actual self in contrast to other research which found the ideal self or the social self to be important to consumers seeking to find self-congruence through their digital brand engagement behaviours. By adopting BESC as the main underpinning theory, a systematic approach to appraising the implications of this concept could be conducted. Following this review (section 2.4.3), the theory of self-concept was contextualised through the notion that not all consumers view brands as an important part of their self-concept. The research aligns with previous findings that consumers with a high level of BESC show a high level of brand loyalty through continued brand engagement with branded Smartphone applications. With consumers with a low level of

BESC, the research amplifies the role of functional brand value within digital brand engagement.

With research applying BESC to a digital brand context in its infancy, this led to the emergence of five subsequent research objectives to fulfil the identified gaps in the literature. As discussed in the subsequent sub-sections, by addressing each of these research objectives, a substantial contribution to the area of BESC has been made. By this study triangulating quantitative and qualitative data, the theoretical position of BESC is further cemented within the CBE literature. This study adds to a growing area of research by providing empirical, robust evidence that builds on previous research into the role of the self-concept in brand engagement. Further to this, by highlighting a lack of research in this area, the originality of this research is strongly foregrounded.

6.2.2 Research objective 2

Research objective 2. To examine whether there is a relationship between the digital extended self and brand engagement in self-concept (BESC)

This research confirms that BESC, congruence between the actual self and perceived brand personality of branded apps and congruence between the ideal self and perceived brand personality traits have a significant statistical effect ($R^2 = 15.1\%$) on usage continuance intention. By measuring the role of BESC in this way, it is clear that the intention to continue engaging with branded apps can be attributed to a consumer's tendency to include brands

as part of their self-concept. However, in contrast to previous research, this was found to not just be a case of high BESC leading to one outcome and low BESC leading to another. The findings extend previous evidence of the moderating role of BESC by breaking down the self-concept into the actual and ideal self.

6.2.3 Research objective 3

Research objective 3. To explore congruency between a consumer's ideal self and perceived brand personality as a form of digital self-extension

In line with previous applications of Aaker's brand personality scale (1997), adjustments were made to measure perceived brand personality of branded apps against perception of the ideal and actual self. This highlights that digital self-extension depends on certain perceived personality traits being present in order for usage continuance to be reached (figure 6.1). In the case of ideal-self congruence for Generation Z, this was attributed mainly to the 'competence' dimension of the new scale. For those with a high level of BESC, importance was placed on owning branded apps which were perceived to fit mostly closely with the person that they desired to be. Specifically, it was confirmed that the personality traits 'reliable', 'secure', 'confident', 'successful' and 'leader' desired the most in relation to the ideal self. Consumers with a tendency to include brands as part of their self-concept, are therefore downloading branded apps from brands who they perceive to hold these particular traits and thus provide a route towards ideal self-congruence. The qualitative findings support this by presenting the

importance of reliability and brand trust in the establishment and longevity of digital brand relationships. This is further discussed within section 6.5 which presents the managerial implications of the findings.



Figure 6.1 Adaptation of brand personality scale for branded apps (Source: Author, 2020)

6.2.4 Research objective 4

Research objective 4. To explore congruency between a consumer's actual self and perceived brand personality as a form of digital self-extension

Applying the adapted brand personality scale for digital possessions (figure 6.1) to actual self-congruence, the 'sincerity' dimension was most prominent for Generation Z. The trait 'sentimental' moved from dimension one of Aaker's scale and the trait 'spirited' from dimension two of Aaker's scale to dimension four of the new scale which was subsequently re-named 'Charming'. This reflects changes in terminology when Aaker's original scale (ibid) is applied in a UK, digital context with a sample of Generation Z iPhone users. The resulting dimension one traits are therefore comprised of the important perceived brand personality attributes that this population under study looks for in their digital branded possessions when striving for actual-self congruence – 'down-earth', 'honest', 'sincere' and 'real.' The managerial implications of this are discussed in section 6.5.

By adopting the ECM model to measure usage continuance intention, key learnings could also be gained identifying the significance of expectation confirmation, functional brand value and customer satisfaction in respect to branded apps. This ensured the direction of the second study was grounded in quantitative evidence. Further contributions were thus made by exploring the reasons behind usage continuance intention and their relevance to actual brand app usage. The conclusions that are drawn from Research objectives 5 and 6 extend current understanding as a result of the connective ethnographic approach to observing branded app usage over a period of three months.

6.2.5 Research objective 5

Research objective 5. To investigate consumers' perceptions of their brand relationships in relation to digital BESC and digital self-extension

The questionnaire confirmed that self-brand congruence has an impact on continued brand engagement with consumers with high level of BESC. Emotional brand value was derived from feelings that not only provide evidence of self-extension through engagement with digital possessions, but also evidence ideal self-congruence being a prominent reason to maintain brand connections. Consumers who included brands as part of their self-concept, were found to be drawn to downloading and continuing to keep apps on their phone who they perceived to fit with the person that they wanted to be (their 'ideal self'). In this way, the presence of favourite branded apps on the individual's smartphones increased levels of self-esteem. By establishing a digital brand relationship with a brand who aligned with the ideal self, those with a high level of BESC reported to feel excitement and an increased sense of competency.

Actual self-congruence was found to be important with consumers with a lower level of BESC. These individuals showed less affirmation for including brands as part of their self-concept and placed greater emphasis on the functional brand value of the branded app. This provides anecdotal evidence in support of the quantitative findings that self-brand congruence and BESC

significantly impact on app usage continuance intention. In this case, self-extension occurred as a result of the consumer utilising the perceived functional benefits of the app to re-enforce their own capabilities. Establishing a digital brand relationship was unimportant; conversations concentrated on what the participant was able to achieve as a result of owning the app rather than indicating there was any emotional brand attachment.

Functional brand value was found to be of less significance to consumers with a high level of BESC because of the perceived congruence between themselves and the brand that is presented through the app. Importantly, this cannot only be measured through actual app usage data. Consumers with a high level of BESC, the app did not have to be used regularly or at all for there to be strong brand attachment. The projections of brand personality highlighted that the majority of the brands whose apps were deemed to be 'favourites', were trusted and respected because of their perceived competence, reliability and success. Surprisingly, lack of brand trust resulted in the app being deleted when the consumer had a low level of BESC, but not always in cases where consumers had a high level of BESC. Although there was an awareness of lack of trust, the perceived ideal self-congruence between the brand and the consumer was enough for some to keep the app on their phone. Conclusions concerning brand disengagement were drawn in response to Research Objective 6.

6.2.6 Research objective 6

Research objective 6. To advance knowledge within the area of elapsed brand relationships through the study of BESC and digital self-extension

The findings highlight that brand engagement cannot be quantified through the collection of app usage data alone. Based on the holistic understanding gained from the study of a small sample of Generation Z iPhone users, a lack of app usage was not found to constitute brand disengagement. As a consequence of this conceptualisation of branded app usage, key adaptations to initial understanding of app hate have therefore been made. Firstly, consumers with a higher level of BESC are more likely to delete an app that is not consistent with their self-concept than consumers with a lower level of BESC. Secondly, consumers with a lower level of BESC were more likely than consumers with a higher level of BESC to delete a branded app from their phone rather than keep the app on their device 'just in case'. This suggests that there is an additional determinant of brand disengagement which takes into account the observed practice that consumers download and delete apps and then later re-install apps when needed (for functional or symbolic reasons). For brands, this raises an important consideration that the deletion of a branded app does not always equate to brand disengagement. In contrast to previous research that brand hate leads to switching behaviour and negative WOM (Jain and Sharm, 2019; Islam *et al.*, 2020), the findings propose that brands can recover from disengagement with digital branded possessions. This is explored further in section 6.5 following a more in-depth discussion of the main theoretical and methodological contributions.

6.3 Theoretical contributions

Taking a cross-discipline, interpretative perspective to understand digital brand engagement, this research contributes theoretically by:

1. Extending current understanding of the role of BESC in digital brand engagement by studying the relationship between the adoption and continued usage of branded apps.
2. Highlighting the significance of the ideal self in self-brand congruence from a digital perspective.
3. Establishing the role of BESC in digital brand disengagement by identifying underlying brand attachment to unused branded apps.
4. Conceptualising five outcomes of digital brand engagement with branded apps

6.3.1 Extending current understanding of the role of BESC in digital brand engagement

This thesis provides evidence of digital self-extension through the psychological ownership of branded apps. By combining for the first time the BESC scale (Spratt *et al.*, 2009) with Aaker's brand personality scale (1997) and the ECM (Bhattacharjee 2001), BESC is firmly established as a moderating role in the establishment and continuation of digital brand engagement. This is contextualised by adapting Aaker's brand personality scale (1997) to be statistically relevant to measuring the perceived brand

personality traits of branded apps. This is particularly relevant to Gen Z consumers within the UK, with the previous rhetoric being updated following the reduction of items and dimension shifts to reflect contemporary perspectives of brand personality in this context. Consequently, a valuable addition is made to the brand personality research literature in which a distinct lack of attention to the digital environment was previously identified.

6.3.2 Highlighting the significance of the ideal self in self-brand congruence from a digital perspective

The research demonstrates the importance of ideal self-congruence in the digital environment. The accepted hypotheses build on previous research into consumer engagement with social media brand pages by focusing on personal rather than social motivations for self-brand congruence. Consumers who view brands as part of who they are, were found to be seeking digital brand relationships with brands who they perceive to be similar to the person they would like to be. The more that the brand personality was perceived to be closer to the consumer's ideal self, the greater the opportunity for long-term brand engagement. For a proportion of the small sample studied across the research period, an internalised sense of satisfaction from owning the branded app as a private digital possession was reflected upon rather than meaning coming from expressions of the self in a social context (Goffman, 1959). As online and offline environments continue to merge, this demonstrates the potential for BESC to continue to be explored with future technological innovations which enable brands to get closer to consumers through digital self-extension. By aligning with the ideal self outside of a

consumer's social and physical offline environments, digital possessions could provide a way for an individual to increase their self-esteem as they strive to achieve self-congruence.

6.3.3 Extending the role of BESC in digital brand disengagement by identifying underlying brand attachment to unused branded apps.

Crucially, this research suggests that some consumers with a high level of BESC are inclined to maintain relationships with brands who they deem as congruent with their self-concept even if there is a lack of perceived functional value with the branded app. In this way, brand attachment may contextually negate the disposable nature of digital possessions (Watkins, 2015), with this research taking initial steps to respond to calls for more longitudinal research into branded app usage. Through the amalgamation of data across two research studies, a holistic overview of digital brand engagement is established which reveals not only the drivers of CBE in a digital context, but also the determinants, which includes the practice of deleting and then later re-installing branded apps if there is sufficient perceived functional or symbolic brand value.

6.3.4 Conceptualising five outcomes of digital brand engagement with branded apps

The overall encompassing theoretical contribution of this thesis is the establishment of five anticipated outcomes of engagement with branded apps (figure 4.15). The resulting conceptual model (figure 5.3) supplements

understanding of BESC within digital self-extension, foregrounding the importance of continuous research into the inner workings of the self-concept as technology continues to evolve and changes the mirror of self-presentation and self-preservation.

6.4 Methodological contributions

The methodological contributions arise from the research being the first to take a mixed-methods, multi-phased approach to explore how consumers use digital branded possessions to extend the (digital) self. No other study has been found that brings together quantitative and qualitative data from a three-month connective ethnographic study of branded app use. What is ultimately provided is a robust exploration of intention to continue using and actual continued usage of branded apps, enhanced by qualitative understanding of consumer perceptions of their digital brand relationships. This methodological approach provided a valid opportunity to explore what participants intended to do in comparison with their actual usage and reasons for their resulting behaviour.

Through the application of projective techniques and a rigorous approach to analysis using Pich and Dean's (2015) systematic framework, extensive, multi-layered conclusions could be drawn from the findings. This provides an in-depth understanding of the value of projective techniques as part of a semi-structured interviewed approach, to support and justify prior collected quantitative data. The research methodology is therefore heralded as an example of an innovative research approach to add to a growing network of

creative academic research within the area of marketing which utilises a range of visual and written stimuli.

6.5 Managerial implications

This research provides insights into ways that Marketing practitioners can utilise branded digital possessions to connect with Gen Z consumers and generate engagement. The managerial implications (summarised in figure 6.2) can be applied to guide the development of branded Smartphone applications, as well as providing contemporary perspectives of the role of digital possessions in everyday contexts.

Implications for brands:

- A brand personality made up of reliable, competent, successful and sincere traits will enable stronger connections with Gen Z consumers
- Brand trust is highly important for the download and retention of branded apps

Implications for brands:

- Some consumers gain emotional value from the mere presence of having a branded app on their Smartphone
- Some consumers engage with a cycle of downloading, deleting and re-installing apps when the perceived emotional or functional value of the app is needed. Incentives to break this cycle are needed for continuous digital brand engagement.

Implications for brands:

- App fixes should be resolved to maintain perceptions of emotional and functional brand value and to avoid negative WOM
- Clear links should be made between the app and the brand's other marketing channels

Figure 6.2 Summary of the managerial implications (Source: Author, 2021)

Firstly, this research has found that the concept of brand personality is still relevant in a digital context. The effort that is exerted to create a brand personality is recognised by and resonates with Gen Z consumers. The participants reported to download branded Smartphone applications from brands that they perceive to be competent, reliable, sincere and successful. This was particularly evident with consumers which tend to include brands as

part of their self-concept and were striving to be a more competent person. The findings show that identification of personal aspirations of the brand's target segments will allow for closer relationships to be formed in a digital environment. Sincerity was also found to be important to consumers in a digital context. Most of the consumers interviewed reported that they needed to be able to trust a brand to download and keep a branded app on their phone. This emphasises the importance of the brand being perceived to be reliable, especially in respect to concerns raised with privacy and data protection.

Secondly, discursive insights indicate that the lack of branded app usage does not always constitute brand disengagement. The findings highlight that some consumers who tend to include brands as part of their self-concept, derive emotional brand value from the mere presence of the branded app on their Smartphone. The implications of this finding are that data analytics which show a lack of use cannot indisputably be taken at face-value as evidence for lack of brand engagement. Branded digital possessions in this way can potentially be viewed as a further touch point with favourite brands to reinforce self-brand connections, leading to a fruitful area of further research within the context of the digital self. The research provides clear outcomes of engagement with digital branded possessions which are not shared with others. Through personalised marketing communications and app notifications, brand engagement can be maintained, particularly when supplemented by sales promotions. This is particularly important when a lack of engagement with the branded app is recorded, although the app has not been deleted from the consumer's Smartphone.

The research further classified a group of consumers who download branded apps for their functional value rather than any perceived emotional benefits. Importantly, in this case, branded apps are viewed as disposable. Consumers within this category of branded app users, download an app for a specific purpose (such as ordering food) and then subsequently delete the app when it is no longer needed. However, this does not always result in disengagement from the brand. These consumers will later re-install the app when a functional need is again identified, positioning them in a cycle of app download, app deletion, app re-install. The significance of this is that for brand engagement to be achieved, an incentive needs to be implemented to break the cycle. Loyalty programmes, sales promotions and wish lists were found to have an impact on app retention, with some consumers citing these initiatives alone as a reason to keep the app on their Smartphone.

Finally, the functional and emotional value of the app should be promoted, and app fixes promptly resolved to avoid disengagement and negative WOM. It is vital that a consumer trusts the brand in order to continue engaging with the app and to strengthen the digital brand relationship. An individual is most likely to disengage with a brand that they do not trust, even if they view the brand has congruence with themselves. When an app has been deleted, communicating the value of owning the digital possession can lead to the app being re-installed (as described in the previous paragraph). This is particularly important if the app user does not currently view the brand as part of their self-identity. Clear links between the app and the brand's other online and offline channels should be provided to communicate the benefits

of integration, particularly amongst Gen Z consumers who were found to be less likely to engage with omni-channel purchase behaviour.

6.6 Limitations

This research concentrated on exploring how Gen Z (18-25 years old) iPhone users utilise branded apps as part of digital self-extension. Focusing on such a specific population limits the research in terms of its generalisability (Etikan *et al.*, 2016), coupled with the small sample size. Furthermore, despite clear justification for ensuring that all participants run the iOS platform, a question can be raised over whether Android users from the same population would have produced similar results. With no prior research to draw upon and the research taking a predominately qualitative methodological approach however, this limitation is accepted. Qualitative research by its very nature tends to be more explorative (Bell *et al.*, 2018) and the representativeness of the sample is regarded as less of a concern than a purely deductive quantitative approach. From this perspective, the researcher placed emphasis on the in-depth understanding that could be gained from a smaller, stratified sample rather than drawing more generic conclusions from a larger more representative sample. A larger sample however would have increased the validity of the results by allowing for more precise comparisons between the two research samples.

Taking a more qualitative approach to addressing the research objectives additionally presents a potential limitation in the analysis of the triangulated findings. Interview data and the findings established from projective

techniques, is deemed to be subjective and open to researcher bias (Donoghue, 2000). To alleviate this, the researcher adopted a robust method of analysis through Pich and Dean's (2015) established analytical framework. Furthermore, the researcher gained considerable support in the development of the research design from the Academy of Marketing Doctoral Colloquium contributors. Following this and the pilot study findings, the methodology was adapted accordingly and robust methods of validation of the scales were established prior to the qualitative phase of the research. Within-method triangulation of data further reduced the limitations posed by the interview data analysis by increasing the credibility of the research through cross-validation of data (Hussein, 2015) collected across all research phases. Triangulation also enabled the researcher to increase confidence in the data by providing a clearer understanding of the holistic engagement with digital possessions, in line with the research objectives.

In consideration of the limited research in the area of BESC in a digital context, the research approach taken is further justified to establish clear areas for future research, as discussed in the following sub-section.

6.7 Areas for future research

A number of areas of future research emerged that are considered outside of the scope of the study. It would be useful to gain more understanding of the role of app reviews and social media influencers on long term brand engagement. Whilst this research identified that there were influences outside of the brand itself impacting on whether a consumer downloaded a

branded app or not, the impact of this on increased levels of brand engagement was not fully conceptualised. This raises an interesting focus on whether consumers perceive their self-brand connections to be mediated by others' personality traits that are similar to their ideal or actual self, or perceived brand personality traits. Examining this in greater depth will extend understanding of the triologue between the consumer, the brand and the social environment in which the former two interrelation factors sit within. Whilst there is a growing amount of research into this relationship from a social media perspective, much more attention is needed in relation to branded digital possessions.

An additional recommendation for future research is to explore the detrimental effects of BESC on psychological wellbeing. A number of the participants within the second research study reported a desire to want to reduce their Smartphone usage as they felt this was a 'waste of time' or causing financial burden. The lockdown participants in particular discussed increased amount of time spent on m-commerce apps, particularly those with a higher level of BESC. Further research is needed in relation to branded app addiction and the associated negative implications of this.

Further addressing the limitations, future research should aim to replicate the study with other generations of Smartphone users. This would allow for observations to be made in relation to how other age groups utilise digital possessions to extend the self, as well as establishing levels of BESC amongst the wider population. Increasing the sample size would also validate the findings further by cross-referencing the quantitative and qualitative data

with the establishment of a greater and more diverse number of participant profiles.

6.8 Chapter summary

This chapter has presented the main conclusions drawn from the research. The key theoretical and methodological contributions were discussed, as well as foregrounding the managerial implications of the research. Further to this, the limitations of the research were acknowledged and linked to recommendations for future research in the area of BESC and engagement with branded digital possessions.

When the development of this thesis began in 2015, the lack of attention to digital brand engagement and the use of digital possessions to extend the self was striking. Over the past six years, there has been significant growth in this area of research, particularly in relation to branded apps, yet clear gaps in the academic literature still remain. The researcher has contributed to the development of understanding through continuous engagement with the dissemination of knowledge throughout the research process (Appendix R) as well as establishing future networking and collaboration opportunities. From the beginning, an innovative methodological approach was taken to address the research objectives and this has resulted in rich, multi-faceted data from which to draw the conclusions from. As the divide between 'offline' and 'online' environments continuously merge, brands are increasingly presented with new ways to establish consumer brand relationships. This thesis has provided deep insight into what this means in relation to

consumers including brands as part of their self-concept, and this knowledge is sure to become progressively more important as reliance on digital brand engagement intensifies.

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Appendices

Appendix A: Systematic review of BESC literature

Author(s) (year of publication)	Context	Major Findings	Research method
Sprott <i>et al.</i> (2009)	Created the BESC scale as a generalised measure of the level of tendency a consumer has for incorporating brands as part of their self-concept	<ul style="list-style-type: none"> - Increased levels of BESC result in increased tendency to include favourite brands as part of the self-concept. - Consumers with high level of BESC are more likely to adopt new products from their favourite brands. 	Quantitative survey Laboratory photo elicitation experiment
Reinecke <i>et al.</i> (2011)	Tested the BESC scale across different demographic groups	<ul style="list-style-type: none"> - BESC found to be unrelated to gender and level of education but decreased with age. - BESC level found to increase with household income level increase. 	Quantitative survey
Goldsmith <i>et al.</i> (2012a)	Explored the link between BESC, material and status consumption.	<ul style="list-style-type: none"> - Positive relationship found between materialism and BESC. - Consumers with higher level of BESC found to enjoy shopping more than consumers with a lower level of BESC. 	Quantitative survey
Goldsmith <i>et al.</i> (2012b)	Examined the motivators of market mavenism in a retail environment	<ul style="list-style-type: none"> - Status consumption indirectly affects market mavenism tendency through BESC 	Quantitative survey
Flynn <i>et al.</i> (2013)	Cross-cultural study of the relationship between cultural differences and materialism and brand engagement	<ul style="list-style-type: none"> - Results suggest U.S consumers report a higher level of BESC than Korean consumers 	Quantitative survey

Cavanagh and Forestell (2013)	Investigated whether female consumers are influenced by food branding information	<ul style="list-style-type: none"> - Brand names significantly influence flavour perceptions, but no differentiation dependent on level of BESC was made. - Consumers with higher level of BESC more likely to 'friend' a brand on Facebook. 	Laboratory experiment
Pentina <i>et al.</i> (2013)	BESC applied as part of investigation into the drivers and outcomes of brand relationships on social media networking sites		Quantitative survey
Goldsmith <i>et al.</i> (2014)	Examined the relationship between brand engagement and frugality	<ul style="list-style-type: none"> - Highly materialistic consumers have higher BESC. - Brands still viewed as important to consumers, despite frugality. 	Quantitative survey
Leventhal <i>al.</i> (2014)	Explored consumer attitudes to self-expressive brands on social media through Facebook "likes"	<ul style="list-style-type: none"> - "Liked" brands on Facebook found to be self-expressive brands. - Consumers who engage with self-expressive brand more like to offer positive WOM and accept brand failures. 	Quantitative survey
Goldsmith <i>et al.</i> (2015)	A cross-cultural application of the BESC scale to examine the relationship between BESC and consumer innovativeness	<ul style="list-style-type: none"> - Consumers with a high level of BESC found to be more innovative than those with a lower level of BESC. 	Quantitative survey
Borges <i>et al.</i> (2016)	Studied the relationships between brand engagement, confidence and overall brand attitude as antecedents for brand love	<ul style="list-style-type: none"> - Strong relationship found between BESC and confidence as antecedents of brand love with functional brands. 	Quantitative survey
Singh (2016)	Explored the relationship between BESC and materialism with consumer shopping behaviour	<ul style="list-style-type: none"> - Consumers with high level of BESC showed greater amount of enjoyment for shopping. - Women found to have a higher level of BESC and high motivation towards shopping than men. 	Quantitative survey
Guèvremont and Grohmann, (2016)	Studied the development of emotional attachment towards authentic brands	<ul style="list-style-type: none"> - Consumers with a high level of BESC found to show a greater amount of emotional brand attachment to authentic brands. 	Two laboratory experiments

Kelley and Alden (2016)	Explored online brand community identity through brand website interactivity	- BESC found to be a mediator of website interactivity.	Quantitative survey
Flynn <i>et al.</i> (2016)	Investigated the influence of materialism on shopping intensity and amount of spending, mediated by BESC, mavenism and status consumption	- Consumers with a higher level of BESC favour shopping and spending more than those with a lower level of BESC. - BESC confirmed to positively influence mavenism.	Quantitative survey
Razmus <i>et al.</i> (2017)	Measured the drivers of BESC	- Positive relationship between extrinsic aspirations and BESC. - Intrinsic aspirations found to be negatively linked with BESC.	Quantitative survey
Banahene, (2017)	Investigated the relationship between brand personality and BESC on brand engagement with private universities	- The competence, sophistication and excitement dimensions of Aaker's (1997) brand personality scale found to have significant effects on self-concept and brand engagement.	Quantitative survey
Liu <i>et al.</i> (2018)	Compared consumer preference for national and private brands	- Consumers with higher levels of BESC preferred national rather than private brands. - Consumers with higher levels of BESC prefer national brands less when there is a perceived threat to their self-concept.	Quantitative survey
Liu, and Minton (2018)	Examined religious consumption through the context of BESC	- Consumers with a high level of BESC believed they would be valued more highly by a religious brand than those with a lower level of BESC.	Quantitative survey Laboratory experiment
Jiménez-Castillo and Sánchez-Fernández (2019)	Measured the power of digital influencers on consumer perceptions towards brands based on BESC.	- BESC found to increase the amount of brand value that a consumer attributes to a brand, mediated by digital influencers.	Quantitative survey
Razmus and Laguna (2019)	Researched the construct validity of BESC from a global perspective.	- BESC scale found to have good internal consistency ($\alpha = .95$) and construct validity.	Quantitative survey

Mazzoli <i>et al.</i> (2019)	Applied self-determination theory to explain the psychological drivers and outcomes of BESC with cosplayers	<ul style="list-style-type: none"> - BESC scale found to be an appropriate measure of consumers' tendency to include brands as part of their self-concept. - Higher levels of extrinsic personal aspirations found to lead to higher levels of BESC, results in greater brand loyalty and brand advocacy. - Personal aspirations found to have an indirect effect on brand loyalty and brand advocacy, mediated by BESC. 	Quantitative survey
Terason <i>et al.</i> (2019)	Explored the extent to which BESC can be considered a function of materialistic values	<ul style="list-style-type: none"> - Six materialistic values (appealing appearance, acquisition centrality, social recognition, defining success) found to predict BESC. 	Quantitative survey
Rehman <i>et al.</i> (2019)	Investigated the mediating effect of status consumption on BESC and materialism.	<ul style="list-style-type: none"> - The relationship between materialism and BESC is mediated by status consumption. 	Quantitative survey
Norouzi and Beigi (2019)	Examined the influence of BESC on brand engagement on Instagram	<ul style="list-style-type: none"> - Higher levels of BESC lead to higher levels of brand loyalty on Instagram. 	Quantitative survey
Lee and Hsieh (2019)	Explored the role of emoticons through the application of management theory.	<ul style="list-style-type: none"> - The cuteness of an emoticon was found to be a driver of perceived playfulness and brand engagement in self-concept. 	Quantitative surveys
Panigyrakis <i>et al.</i> (2019)	Studied the effect of BESC on self-brand connections on social media platforms	<ul style="list-style-type: none"> - Within a social media context, BESC found to moderate the effect of self-brand connections on brand attachment. 	Quantitative survey
Giakoumaki, and Krepapa (2020)	Examined whether engagement with a branded social media post is directly affected by levels of BESC	<ul style="list-style-type: none"> - Positive relationship between BESC and engagement with branded social media posts. - Posts from users sources increase the effect of BESC on post engagement, compared with posts from branded sources (e.g., brand, influencers). 	Laboratory experiment
Ismail <i>et al.</i> (2020)	Measured the relationship between BESC, value consciousness (VC) and brand	<ul style="list-style-type: none"> - BESC plays a mediating role in the relationship between value consciousness and brand loyalty among Gen Z consumers. 	Quantitative survey

		loyalty among Generation Z consumers.		
Nyadzayo <i>et al.</i> (2020)	<i>et</i>	Explored drivers and outcomes of BESC in relation to luxury fashion brands	<ul style="list-style-type: none"> - BESC found to be driven by social media marketing and value co-creation. - Brand image found not to be a driver of BESC. - BESC found to significantly impact brand loyalty and positive WOM. 	Quantitative survey
Rasmus <i>et al.</i> (2020)		Explored cross-cultural comparisons of the adoption of BESC scale.	<ul style="list-style-type: none"> - Cross-cultural differences found across Europe, with Polish consumers scoring higher on the BESC scale than individuals in Austria and Italy. 	Quantitative survey
McManus <i>et al.</i> (2020)	<i>et</i>	Examined whether there is a relationship between having a 'fixed mindset', BESC and brand favourability	<ul style="list-style-type: none"> - Greater levels of having a fixed mindset predicts greater tendency to include brand as part of the self-concept. 	Quantitative survey
Hill and Carrillat, 2020		Studied the effect of continued use of branded smartphone applications on levels of BESC.	<ul style="list-style-type: none"> - Continued usage of branded apps enhances consumers' level of BESC. 	Longitudinal experimental design

Appendix B: Copy of questionnaire

Your Smartphone Apps and You_Copy of Survey

Page 1: Consent Form

Participant Information

Study Title: What do your Smartphone Applications say about you?

Research team: The lead researcher is Samantha Reed, a doctoral student at the University of Northampton. The supervisory team consists of Dr. Kathleen Mortimer (Kathleen.Mortimer@northampton.ac.uk) and Dr. Angela Rushton (Angela.Rushton@Northampton.ac.uk) from the University of Northampton.

Requirements

To participate in this questionnaire, you are required to

- Currently own a Smartphone
- Be 18-25 years of age
- Currently live in the United Kingdom

What the study involves: This questionnaire has been designed to measure Smartphone users' relationships with their branded e-commerce (shopping) Smartphone Applications. This includes any Smartphone Application that you have downloaded to your Smartphone which aims to engage the consumer with its branded products or services which can be purchased, such as 'Top Shop', 'Nike', 'Coca Cola', 'Amazon', 'Asda'. **This does not include social networking applications.** The questionnaire consists of several parts to measure attitudes to the self, perceived brand personality and Smartphone Application usage. Please complete this questionnaire online. The questionnaire should take approximately 15-20 minutes to complete.

Withdrawing from the study: Participating in this research is voluntary. Whilst all of the questions are compulsory, you can stop at any time. You can withdraw from the study by emailing the lead researcher your questionnaire response ID number that is provided at

the end of the questionnaire, economic etc. questionnaires will be removed.

Data storage: All information you provide is confidential and will remain anonymous. The data will only be used in an anonymous form for future academic purposes, including the researcher's PhD thesis, conference papers and academic journal articles, and will be securely stored on the University of Northampton's repository system.

Contact the researcher:

Samantha Reac

The University of Northampton

University Drive

Northampton

NN1 5PH

s.reac@northampton.ac.uk

I. By completing this questionnaire, you are providing consent to take part in the research and are agreeing to the following statements: I have read and understood the Participant Information above. I understand that my participation is voluntary and I can stop completing the questionnaire at any time. I understand that my research data will be kept confidential but may be used in an anonymous format within academic conference papers and academic journal articles in the future. I consent to my data being stored and archived on the University of Northampton's secure repository. **False**

Yes

Page 2: Personality Characteristics

2. Please rate the **personality characteristics** below on how much **you want to be like** that word. There are no right or wrong answers so please answer as honestly as you can. 1= I definitely do not want to be this. 2 = I do not want to be this. 3 = Neutral. 4 = I want to be this. 5 = I definitely want to be this. **You will need to select one box per row.**

	1= I definitely do not want to be this	2 = I do not want to be this	3 = Neutral	4 = I want to be this	5 = I definitely want to be this
Down-to-earth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family orientated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small-town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Honest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sincere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Real	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wholesome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Original	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheerful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sentimental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friendly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Daring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trendy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exciting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spirited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cool	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Young	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Imaginative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unique	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Up-to-date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Independent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contemporary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reliable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hard-working	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intelligent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Successful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upper class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glamorous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good-looking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feminine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smooth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoorsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Masculine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Western	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rugged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Please rate how you **currently** see your **personality characteristics**. There are no right or wrong answers so please answer as honestly as you can. 1= This is definitely not me. 2 = This is not me. 3 = Neutral. 4 = This is me. 5 = This is definitely me You will need to select one box per row.

Please don't select more than 1 answer(s) per row.

	1= This is definitely not me	2 = This is not me	3 = Neutral	4 = This is me	5 = This is definitely me
Down-to-earth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family orientated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small-town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Honest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sincere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Real	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wholesome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Original	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cheerful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sentimental	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friendly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Daring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trendy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exciting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spirited	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cool	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Young	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Imaginative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unique	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Up-to-date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Independent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contemporary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reliable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hard-working	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Intelligent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Corporate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Successful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leader	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Upper class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Glamorous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good-looking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Feminine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smooth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoorsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Masculine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Western	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rugged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Page 3: Brand Engagement/Self Concept

4. To what degree do you relate to the following statements. There are no right or wrong answers so please answer as honestly as you can. 1= Strongly disagree. 2 = Disagree 3 = Somewhat disagree 4= Neutral. 5 = Somewhat agree. 6 = Agree 7= Strongly agree

Answers

I have a special bond with the brands that I like.	Please select <input type="text"/>
I consider my favourite brands to be a part of myself.	Please select <input type="text"/>
I often feel a personal connection between my brands and me.	Please select <input type="text"/>
Part of me is defined by important brands in my life.	Please select <input type="text"/>
I feel as if I have a close personal connection with the brands I most prefer.	Please select <input type="text"/>
I can identify with important brands in my life.	Please select <input type="text"/>
There are links between the brands that I prefer and how I view myself.	Please select <input type="text"/>
My favourite brands are an important indication of who I am.	Please select <input type="text"/>

Page 4: Your favourite branded Smartphone Applications

5. A branded application can be defined as a software application downloaded to a Smartphone which prominently displays a brand's logo, colour or strapline, with a primary purpose for e-commerce (online shopping). **This does not include social networking apps.** Thinking about the branded applications you currently have downloaded on your Smartphone, please write the names of the **3 branded applications that you feel most favourably towards**. These do not have to be the apps you use the most.

Most favourable branded app

Branded App #1	<input type="text"/>
Branded App #2	<input type="text"/>
Branded App #3	<input type="text"/>

5.a. Thinking about the branded apps you listed above, please choose any of the following personality characteristics which you would associate with each **brand** of Smartphone app. You may want to complete the personality characteristics for Branded App #1 before moving on to Branded App #2 and Branded App #3. You may select as many personality characteristics per app as you feel appropriate. *(Please tick)*

Please don't select more than 3 answer(s) per row.

Please select at least 1 answer(s).

	Branded App #1	Branded App #2	Branded App #3
Down-to-earth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family orientated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small-town	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Honest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sincere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Real	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wholesome	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Original	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Cheerful	☐	☐	☐
Sentimental	☐	☐	☐
Friendly	☐	☐	☐
Daring	☐	☐	☐
Trendy	☐	☐	☐
Exciting	☐	☐	☐
Spirited	☐	☐	☐
Cool	☐	☐	☐
Young	☐	☐	☐
Imaginative	☐	☐	☐
Unique	☐	☐	☐
Up-to-date	☐	☐	☐
Independent	☐	☐	☐
Contemporary	☐	☐	☐
Reliable	☐	☐	☐
Hard-working	☐	☐	☐
Secure	☐	☐	☐
Intelligent	☐	☐	☐
Technical	☐	☐	☐
Corporate	☐	☐	☐
Successful	☐	☐	☐
Leader	☐	☐	☐
Confident	☐	☐	☐
Upper class	☐	☐	☐
Glamorous	☐	☐	☐
Good-looking	☐	☐	☐
Charming	☐	☐	☐
Feminine	☐	☐	☐

Smooth	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoorsy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Masculine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Western	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rugged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.b. Please rate your **intention to continue using** your three applications listed above that you currently have downloaded to your Smartphone, based on the following factors. You may want to complete the personality characteristics for Branded App #1 before moving on to Branded App #2 and Branded App #3. 1= Strongly disagree 2= Tend to disagree 3= Neutral 4= Tend to agree 5= Strongly agree

	App #1 = Favourite	App #2 = Favourite	App #3 = Favourite
My experience with using my favourite branded app was better than I expected	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>
The service level or function provided by my favourite branded app was better than I expected	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>

Overall, most of my expectations from using my favourite branded app were confirmed

I have not used my favourite branded app but intend to in the future

I intend to continue using my favourite branded app

I intend to discontinue using my favourite branded app

I would strongly recommend my favourite branded app to others

I am satisfied with this branded app

I am pleased with this branded app

I am content with this branded app	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>
I am delighted with this branded app	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>
Using this branded app improves my personal performance	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>
Using this branded app increases my personal productivity	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>
Using this branded app enhances my personal effectiveness	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>
Overall, this branded app is useful in my personal management	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>	<input type="text" value="Please select"/>

Page 6: Thank You

Thank you for taking the time to complete this questionnaire. All data will remain anonymous.

Should you require any further information please contact the researcher at Samantha.Reed2@northampton.ac.uk

Appendix C: Validation of Aaker's brand personality scale (1997)

Extraction Method: Principal Component Analysis

Rotation Method: Promax with Kaiser Normalisation

Items	Factor loadings				
	Dimension 1	Dimension 2	Dimension 3	Dimension 4	Dimension 5
Down-to-earth	.758				
Family orientated					
Small-town					
Honest	.780				
Sincere	.778				
Real	.829				
Wholesome					
Original					
Cheerful					
Sentimental				.801	
Friendly					
Daring					
Trendy		.864			
Exciting		.783			
Spirited				.744	
Cool		.743			
Young		.720			
Imaginative		.880			
Unique		.775			
Up-to-date					
Independent					
Contemporary					
Reliable			.727		
Hard-working			.827		
Secure			.858		
Intelligent			.801		
Technical					
Corporate			.848		
Successful			.724		
Leader			.792		
Confident			.791		
Upper class					
Glamorous		.958			
Good-looking		.953			
Charming				.761	
Feminine					
Smooth		.702			
Outdoorsy					
Masculine					
Western					
Tough					.836
Rugged					.784

Appendix D: Validation of Sprott *et al*'s (2009) BESC Scale

Extraction Method: Principal Component Analysis

Rotation Method: Promax with Kaiser Normalisation

Items	Factor
	1
I have a special bond with the branded app that I like	.635
I consider my favourite branded app to be a part of myself	.834
I often feel a personal connection with the brand I most prefer	.737
I can identify with important brands in my life	.666
There are links between the brands that I prefer and how I view myself	.659
My favourite brands are an important indication of who I am	.672

Appendix E: Validation of Bhattacharjee's (2001) ECM model

Items	Factor Loadings			
	1 Functiona value	2 Satisfactor	3 Value expectancy	4 Usage continuance'
My experience with using my favourite branded app was better than I expected			.791	
The service level of function provided by my favourite branded app was better than I expected			.816	
Overall, most of my expectations from using my favourite branded app were confirmed			.812	
I have not used my favourite branded app but intend to in the future				
I intend to continue using my favourite branded app				.838
I intend to discontinue using my favourite branded app (reverse coded)				.744
I would strongly recommend my favourite branded app to others		.760		
I am satisfied with this branded app		.685		
I am pleased with this branded app		.816		
I am content with this branded app				
I am delighted with this branded app		.812		
Using this branded app improves my personal performance	.859			
Using this branded app increases my personal productivity	.901			
Using this branded app enhances my personal effectiveness	.869			
Overall, this branded app is useful in my personal management	.802			

Appendix F: Study 2 interview schedule

DATA TO DRAW UPON THAT IS COLLECTED PRIOR TO INTERVIEW
Questionnaire data (including self-congruence scores, BESC score and app usage continuance intention score).
Screen time hours for each week per participant
Frequency that each favourite app used across the 3-month period
Identified points during the 3-month period when favourite branded app usage stopped

POST RESEARCH PERIOD (3 MONTHS) ONLINE INTERVIEW VIA BLACKBOARD COLLABORATE ULTRA: c.40-45 minutes
Part 1: Review of three months usage questions (c.10 minutes)
Thank the participant for taking the time to complete the 3-month research period and ask them to have their screenshots in front of them
Question prompts: <ol style="list-style-type: none">1) Questions reflecting on the above data collected prior to the interview eg. What caused you to stop using App 1 in week 5? Do you still have this app on your phone? Why did you/did you not delete this? Is there anything about the data collected that surprises you? Did you use your favourite branded apps more/less than you expected to or than you usually do?2) Are these still your favourite branded apps? Why/why not?3) What do you usually use your Smartphone for?4) Have you downloaded any new branded apps over the past three months? Why did you download these?
Part 2: Projective technique 1 – Perceptions of brand relationships and brand personality (construction and storytelling via ‘the room’ scene) (c.15 minutes)

Share the pre-made image on the screen which shows each of the participant's three favourite brand people in an empty room

Imagine you are in a room with your three favourite brands from the branded apps you named as your favourite...

Question prompts:

- 1) Who would you talk to first?
- 2) What would you talk about?
- 3) If you had 10 minutes, how long would you speak to each for?
- 4) What would they be wearing?
- 5) Who would be the most fun?
- 6) What kind of event would you expect each to be at? Would you be at this kind of event? Would you like to be?
- 7) What question would each of them ask you?
- 8) How does each of them make you feel about yourself?
- 9) Who would you take a selfie with to share the image on social media?
- 10) Who would you trust to keep a secret?
- 11) Who would you call at 4am to help you in an emergency?
- 12) If there was a bar in the room selling alcoholic and non-alcoholic drinks, what would each of the brand people choose?
- 13) Who would be the first to leave?
- 14) How would you feel when they left?

Where are they going? Do you want to go with them?

Part 3: Projective technique 2 – Expression of the Ideal Self (c.10 minutes)

Please have in front of you the image of the person who you believe to be the person you would most like to be like. This could be a family member/a friend/a celebrity/a teacher etc. Please answer the questions below truthfully, there are no right or wrong answers.

Question prompts:

- 1) What kind of person are they?
- 2) What kind of job might they do?
- 3) What might they do for fun?
- 4) What kind of clothes might this person wear?
- 5) What kind of brands might they purchase from?
- 6) Who might this person follow on social media?

Part 4: Understanding of self-congruence (c.5-10 minutes)

Share on the screen the pictorial image of the self-congruence circles (a to e) and ask participant which they believe most represents the difference between their ideal self and actual self (explain these terms to them)

Questions prompts:

- 1) Why did you choose a/b/c/d/e?
- 2) How close do you feel to reaching your ideal self? Is this fixed?
- 3) What do you think is preventing you from reaching your ideal self?

Appendix G: Example of projective technique 1: Construction of a personified room of brand people for 'Beauty Bay', 'Amazon' and 'Wetherspoons'



Appendix H: Call for Participants (2020) research page

10472 | 500490 | 05 | 145109490 | 9 | 27/20

Study Page status - Expired

Study Page created from 11 January 2019 until 30 April 2019

Study details

Written by email

Study: chris.siddons@northampton.ac.uk

Study title

What do your Smartphone apps tell about you?

Study description

This questionnaire has been designed to measure Smartphone users' perceptions about their location, speed, and online browsing history. Participants will be asked to approximate how much time to complete and involves answering questions about how you use various Smartphone applications and your reasons for doing so.

Ethical approval

The study has been approved by the University of Northampton on 12th May 2019.

Research position

Corporate student

Keywords & disciplines

Smartphone apps | Personalization | Information systems | Smartphone apps

About the researcher

Academic Director, Business School, Faculty of Business and Law at the University of Northampton

When is this study conducted?

Online

Compensation

Stipend: Graduate

Study type

Online Questionnaire

How long will the study take to complete?

20-30 minutes

Study language

English

Participant requirements

- You are 18+ years old
- You are Smartphone user
- You are in United Kingdom

Online survey: Taking part link

<https://www.northampton.ac.uk/survey/academic/145109490/>

Institutions

What are the objectives? This questionnaire has been designed to measure Smartphone users' relations with their preferred Electronic Smartphone Applications. This includes any Smartphone application that you have downloaded to your Smartphone and how often you engage the consumer with its products or services such as: Facebook, BPi, Coca Cola. This does not include social networking applications. The questionnaire consists of several parts to measure attitudes to the self-perceived brand personality and Smartphone application usage.

What are the advantages? Participating in this research is completely free of charge and you can stop at any time. Incomplete questionnaires will be discarded.

Appendix I: Study Two consent form

Participant Consent Form

By running Apple’s Screen Time feature on your Smartphone device, you are consenting to take part in this research project. Please read the following statements carefully and click in the box whether you agree next to each point.

I have read and understood the Participant Information Sheet Yes No

I consent to Apple’s Screen Time feature on your Smartphone device and run this in the background for the three-month research period Yes No

I understand that all data will remain anonymous Yes No

I consent to take weekly screenshots of my 7-day Screen Time data and store these on my Smartphone to be used for discussion purposes during the online interviews Yes No

I understand that my participation is voluntary and that I am free to withdraw up to one month after the research period without giving a reason for withdrawing Yes No

I understand that my research data will be kept confidential but may be used for future research purposes in anonymous form, Yes No

including for the researcher's PhD thesis, conference papers and academic journal articles.

I consent to my data being stored and archived on the University of Northampton's secure repository Yes No

I consent to take part in this study Yes No

**Once completed, please email this consent form to
Samantha.read@northampton.ac.uk**

Supervisory Team:

Dr. Kathleen Mortimer (Kathleen.Mortimer@Northampton.ac.uk)

Dr. Angela Rushton (Angela.Rushton@Northampton.ac.uk).

Researcher's contact details:

Samantha Read

The University of Northampton

Waterside Campus

University Drive

Northampton

NN1 5PH

Samantha.Read@northampton.ac.uk

101. The first of the two...
 102. The second of the two...
 103. The third of the two...
 104. The fourth of the two...
 105. The fifth of the two...
 106. The sixth of the two...
 107. The seventh of the two...
 108. The eighth of the two...
 109. The ninth of the two...
 110. The tenth of the two...
 111. The eleventh of the two...
 112. The twelfth of the two...
 113. The thirteenth of the two...
 114. The fourteenth of the two...
 115. The fifteenth of the two...
 116. The sixteenth of the two...
 117. The seventeenth of the two...
 118. The eighteenth of the two...
 119. The nineteenth of the two...
 120. The twentieth of the two...

121. The twenty-first of the two...
 122. The twenty-second of the two...
 123. The twenty-third of the two...
 124. The twenty-fourth of the two...
 125. The twenty-fifth of the two...
 126. The twenty-sixth of the two...
 127. The twenty-seventh of the two...
 128. The twenty-eighth of the two...
 129. The twenty-ninth of the two...
 130. The thirtieth of the two...
 131. The thirty-first of the two...
 132. The thirty-second of the two...
 133. The thirty-third of the two...
 134. The thirty-fourth of the two...
 135. The thirty-fifth of the two...
 136. The thirty-sixth of the two...
 137. The thirty-seventh of the two...
 138. The thirty-eighth of the two...
 139. The thirty-ninth of the two...
 140. The fortieth of the two...

141. The forty-first of the two...
 142. The forty-second of the two...
 143. The forty-third of the two...
 144. The forty-fourth of the two...
 145. The forty-fifth of the two...
 146. The forty-sixth of the two...
 147. The forty-seventh of the two...
 148. The forty-eighth of the two...
 149. The forty-ninth of the two...
 150. The fiftieth of the two...
 151. The fifty-first of the two...
 152. The fifty-second of the two...
 153. The fifty-third of the two...
 154. The fifty-fourth of the two...
 155. The fifty-fifth of the two...
 156. The fifty-sixth of the two...
 157. The fifty-seventh of the two...
 158. The fifty-eighth of the two...
 159. The fifty-ninth of the two...
 160. The sixtieth of the two...

161. The sixty-first of the two...
 162. The sixty-second of the two...
 163. The sixty-third of the two...
 164. The sixty-fourth of the two...
 165. The sixty-fifth of the two...
 166. The sixty-sixth of the two...
 167. The sixty-seventh of the two...
 168. The sixty-eighth of the two...
 169. The sixty-ninth of the two...
 170. The seventieth of the two...
 171. The seventy-first of the two...
 172. The seventy-second of the two...
 173. The seventy-third of the two...
 174. The seventy-fourth of the two...
 175. The seventy-fifth of the two...
 176. The seventy-sixth of the two...
 177. The seventy-seventh of the two...
 178. The seventy-eighth of the two...
 179. The seventy-ninth of the two...
 180. The eightieth of the two...

Q176: The President's kind of... I think a picture of the... Register...
 Q177: ...
 Q178: ...
 Q179: ...
 Q180: ...
 Q181: ...
 Q182: ...
 Q183: ...
 Q184: ...
 Q185: ...
 Q186: ...
 Q187: ...
 Q188: ...
 Q189: ...
 Q190: ...
 Q191: ...
 Q192: ...
 Q193: ...
 Q194: ...
 Q195: ...
 Q196: ...
 Q197: ...
 Q198: ...
 Q199: ...
 Q200: ...

Q201: ...
 Q202: ...
 Q203: ...
 Q204: ...
 Q205: ...
 Q206: ...
 Q207: ...
 Q208: ...
 Q209: ...
 Q210: ...
 Q211: ...
 Q212: ...
 Q213: ...
 Q214: ...
 Q215: ...
 Q216: ...
 Q217: ...
 Q218: ...
 Q219: ...
 Q220: ...

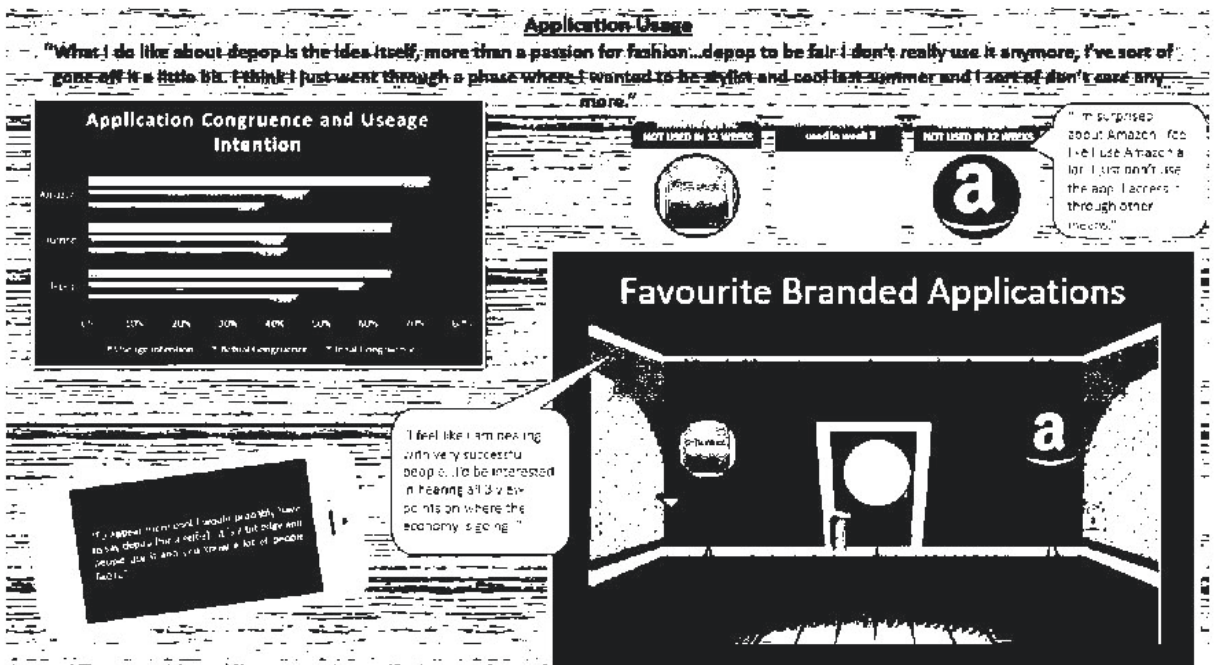
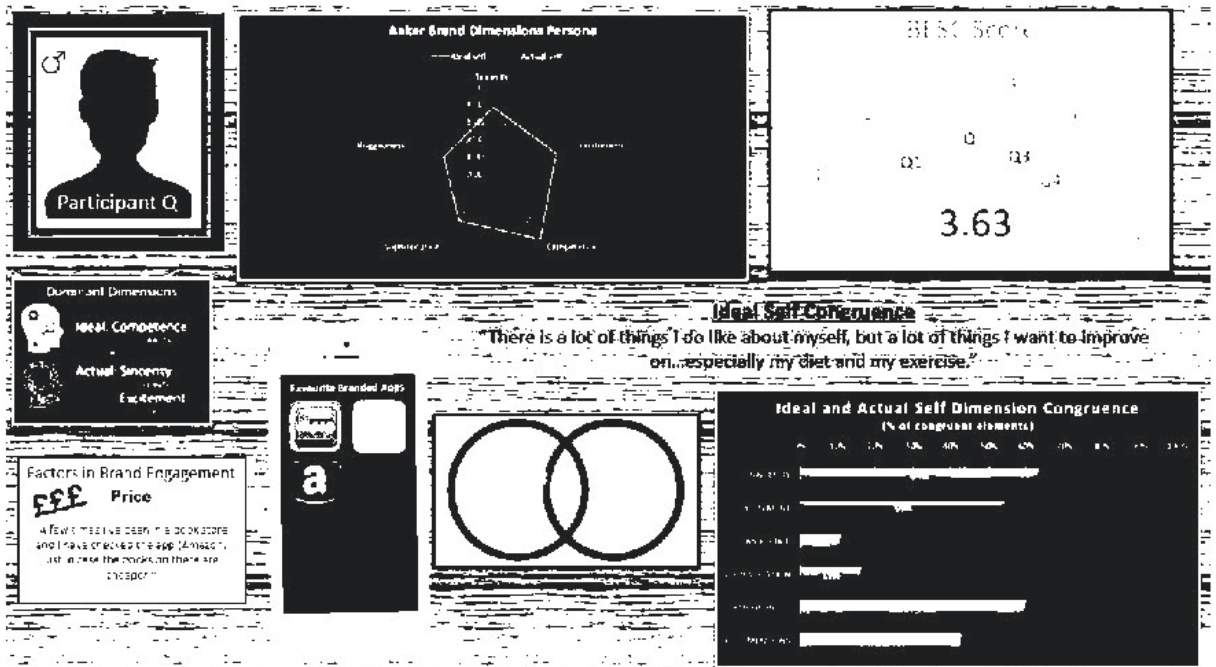
Answers

Q221: ...
 Q222: ...
 Q223: ...
 Q224: ...
 Q225: ...
 Q226: ...
 Q227: ...
 Q228: ...
 Q229: ...
 Q230: ...
 Q231: ...
 Q232: ...
 Q233: ...
 Q234: ...
 Q235: ...
 Q236: ...
 Q237: ...
 Q238: ...
 Q239: ...
 Q240: ...
 Q241: ...
 Q242: ...
 Q243: ...
 Q244: ...
 Q245: ...
 Q246: ...
 Q247: ...
 Q248: ...
 Q249: ...
 Q250: ...

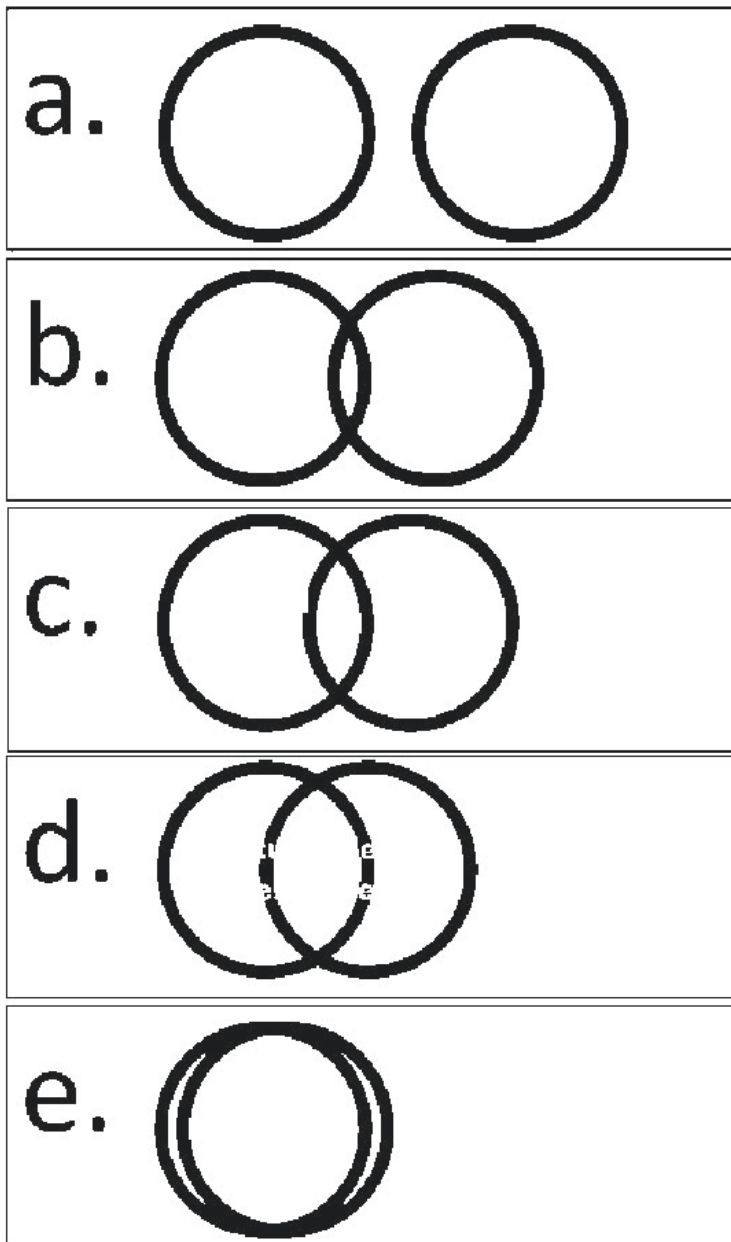
Q251: ...
 Q252: ...
 Q253: ...
 Q254: ...
 Q255: ...
 Q256: ...
 Q257: ...
 Q258: ...
 Q259: ...
 Q260: ...
 Q261: ...
 Q262: ...
 Q263: ...
 Q264: ...
 Q265: ...
 Q266: ...
 Q267: ...
 Q268: ...
 Q269: ...
 Q270: ...

Answers

Appendix K: Example participant profile

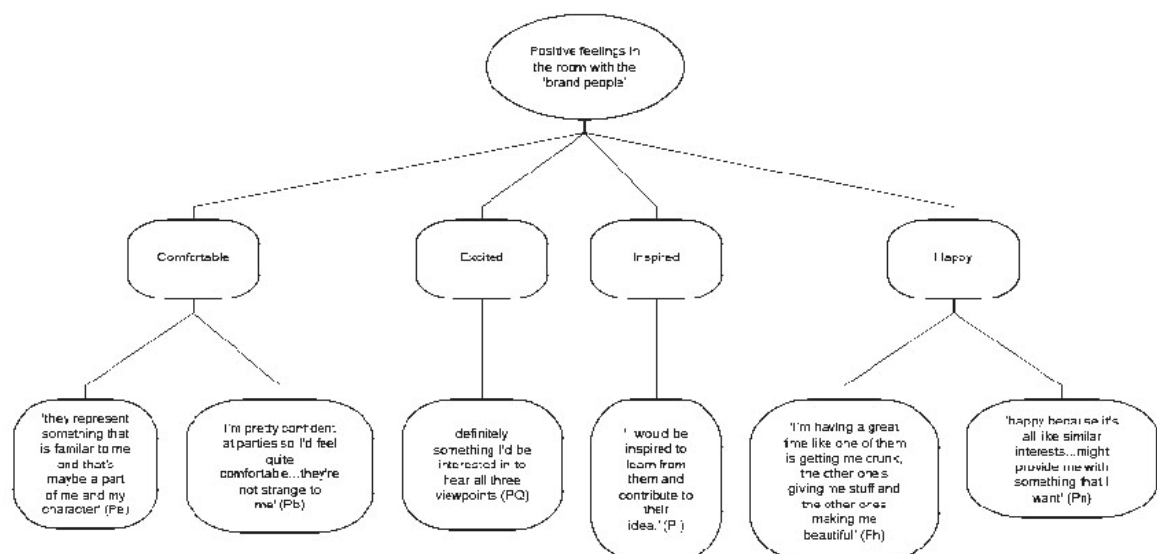
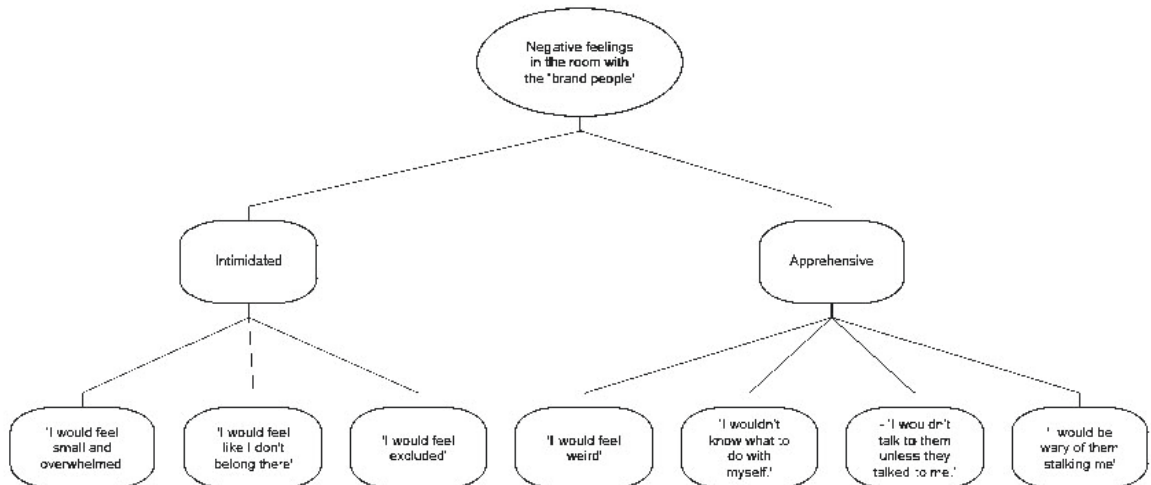


Appendix L: Self-congruence circles

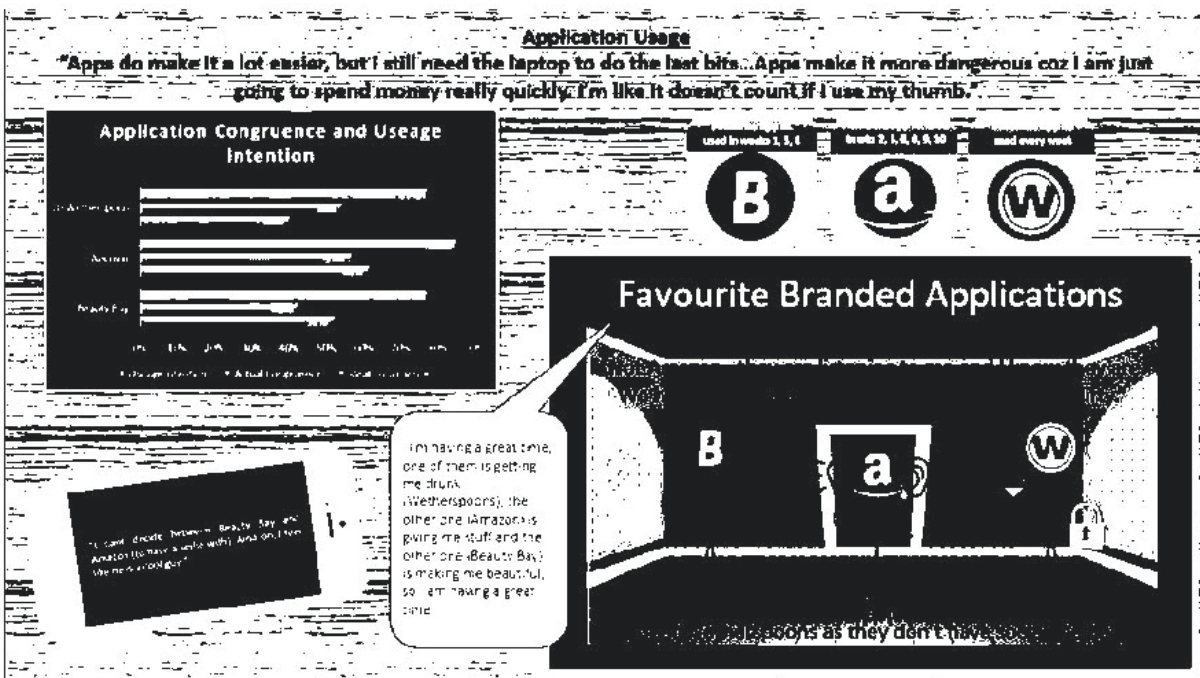
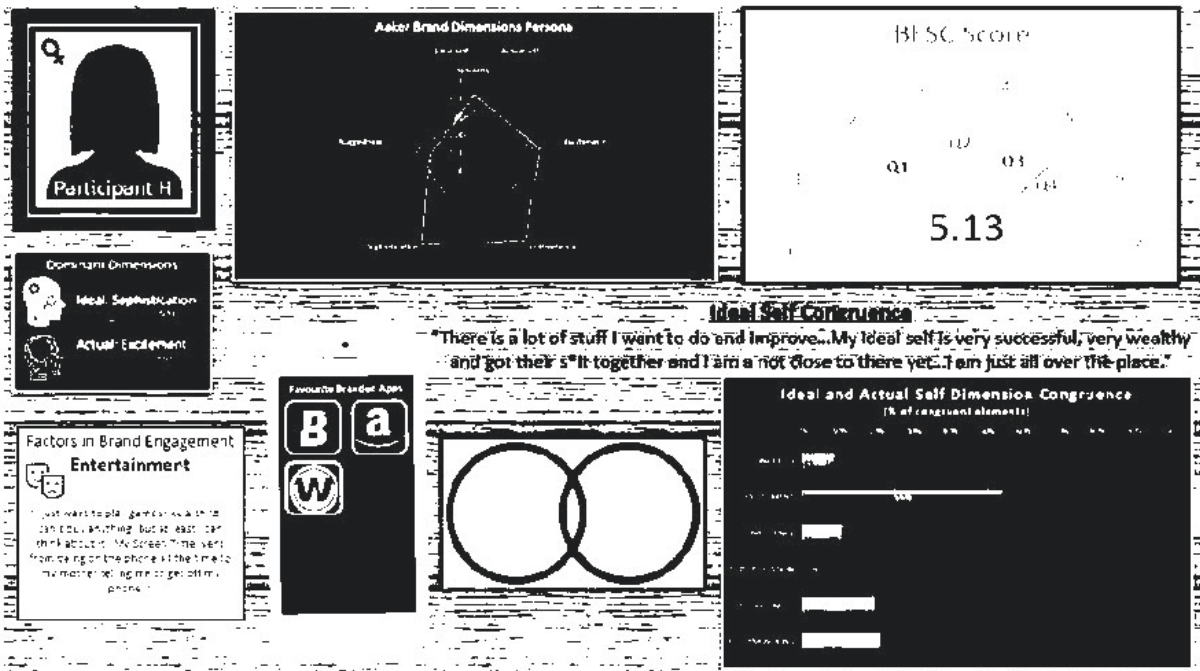


Adapted from Stenseng *et al.* (2015)

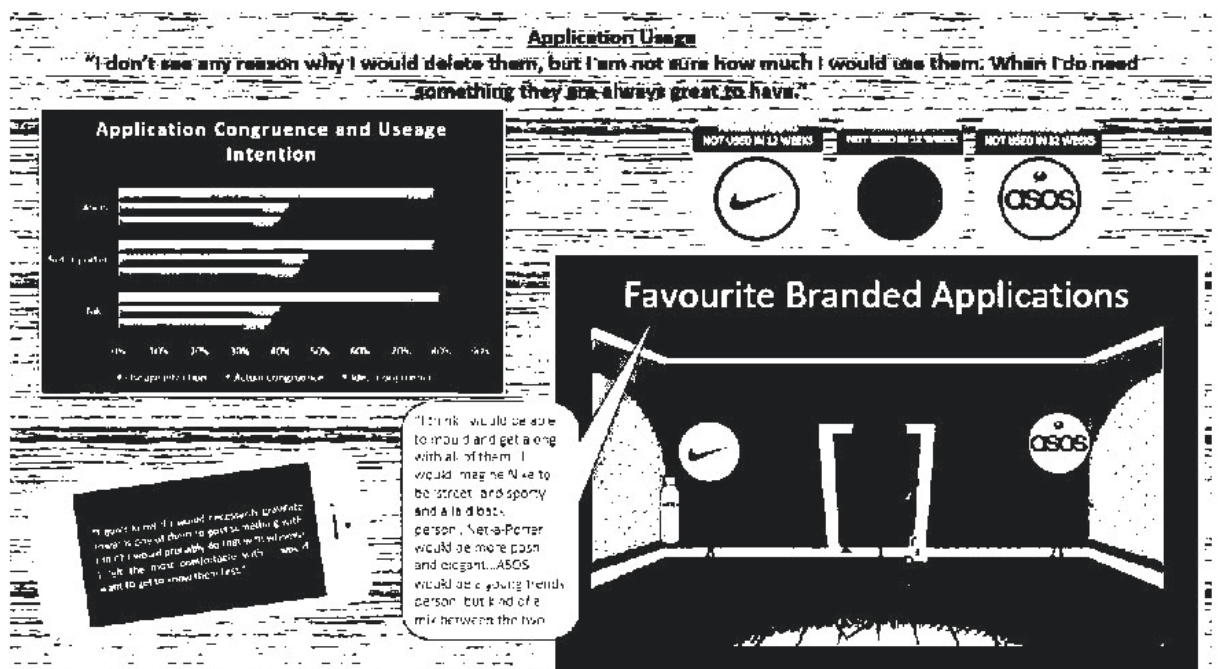
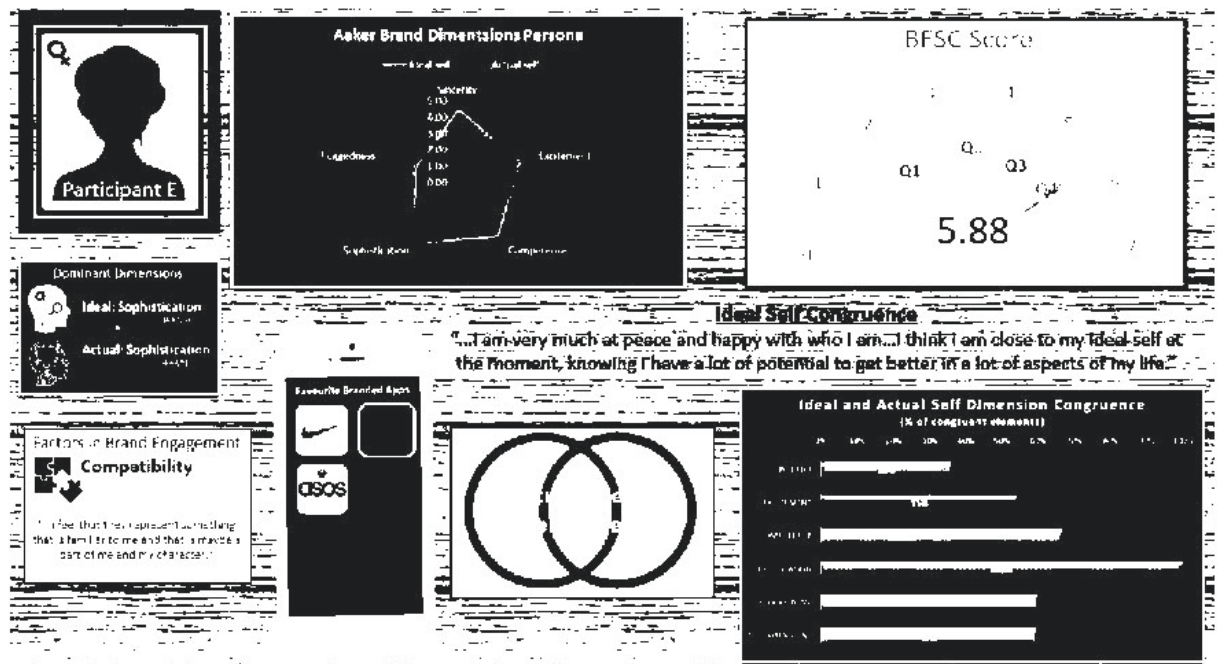
Appendix M: Feelings expressed when enter the personified room of brand people



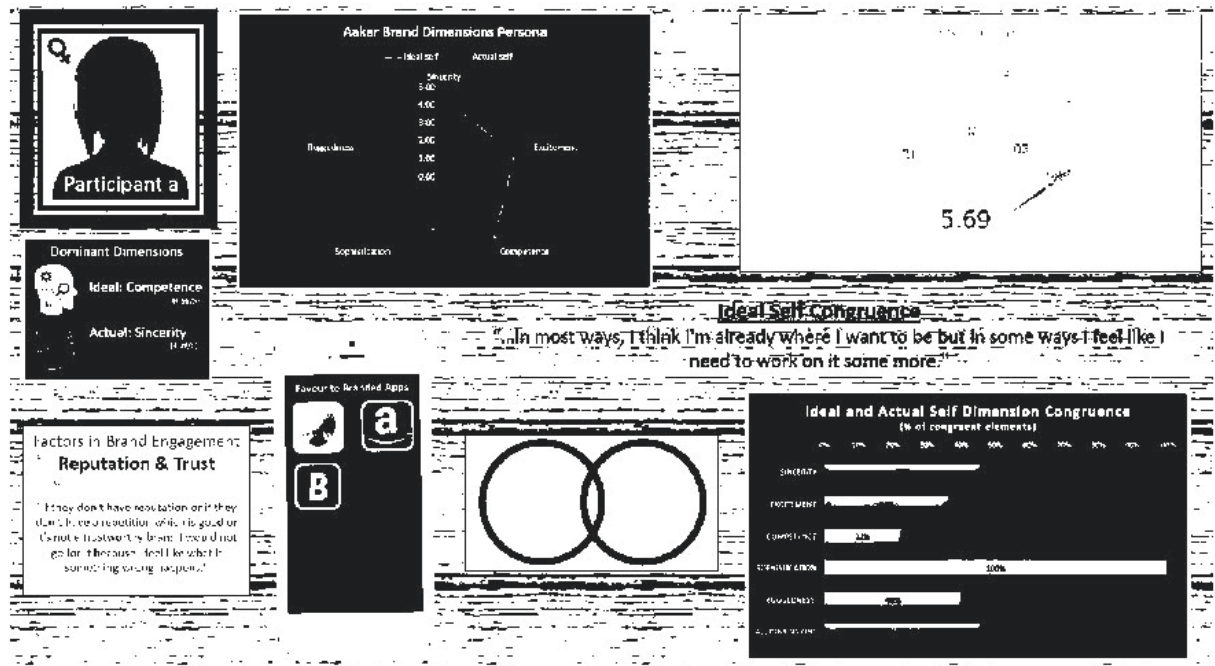
Appendix N: Participant H's profile



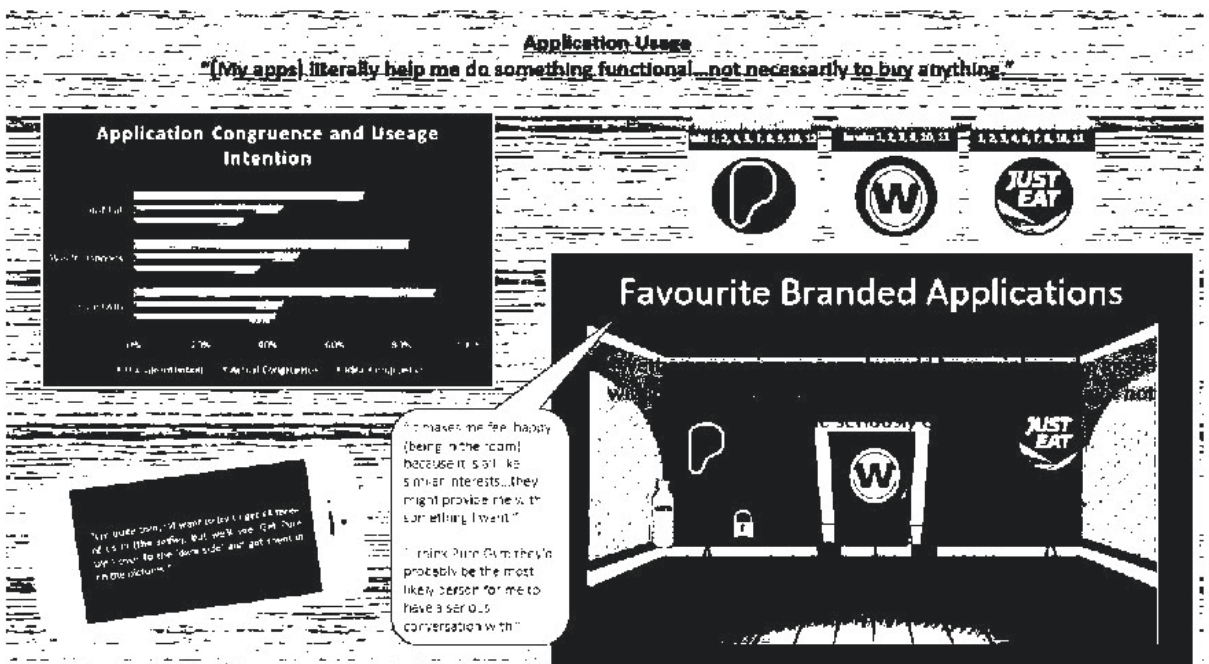
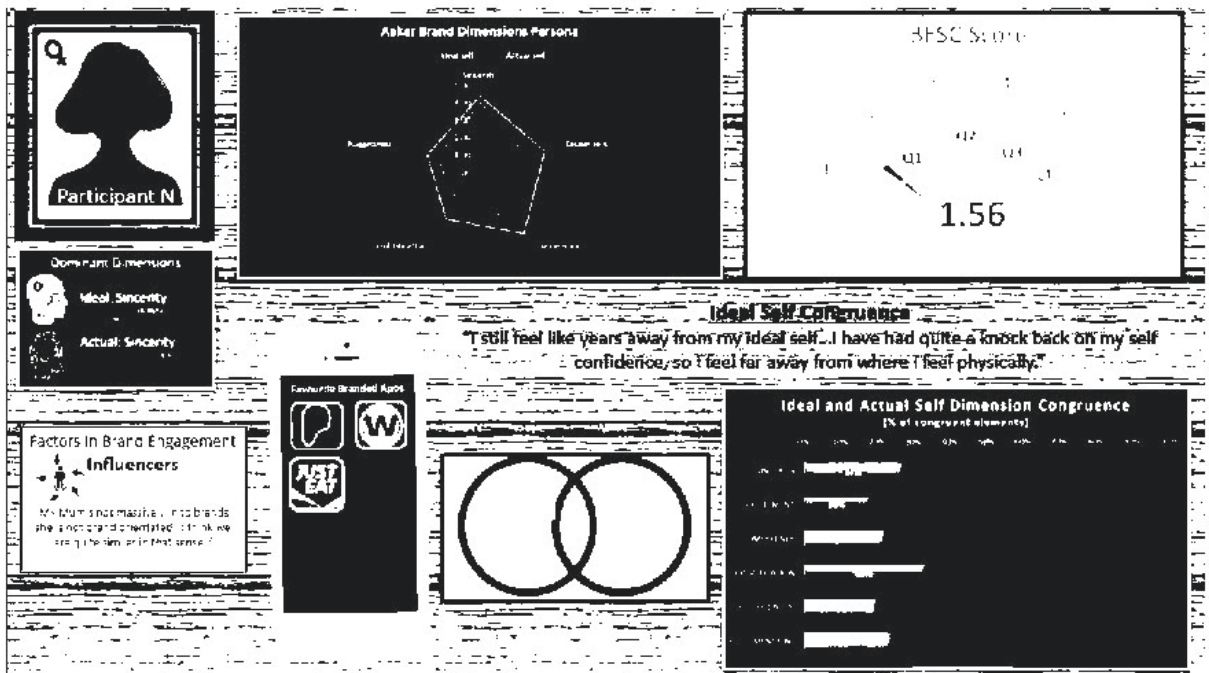
Appendix O: Participant E's profile



Appendix P: Participant A's profile



Appendix Q: Participant N's profile



Appendix R: Research dissemination to date

2016

Read, S. (2016) Marketing to the digital self - assessing the variables affecting the adoption and retention of branded Smartphone applications in relation to the theory of self-concept. Paper presented to: *Academy of Marketing Doctoral Colloquium, Newcastle Business School, Newcastle, United Kingdom, 04-07 July 2016.*

Read, S, (2016) 4% remaining, my heart sinks as if a part of me is dying. Competition Entry: *Images of Research, The University of Northampton Graduate School Competition, Northampton, United Kingdom, June 2016.*

2017

Read, S. (2017) The Role of Digital Possessions in Consumer Engagement. Paper presented to: *The Graduate School PGR Annual Research Conference, The University of Northampton, 13 September 2017*

Read, S. (2017) Marketing to the Extended Self. Competition Entry: *3MT Competition, The Graduate School PGR Annual Research Conference, The University of Northampton, Northampton, United Kingdom, 13 September 2017*

Read, S (2017) Live radio interview discussing the impact of academic research on the local community. *BBC Radio Northampton, Northampton, United Kingdom, September 2017*

2018

Read, S (2018) Live radio interview in response to the 'Life in Likes' (2018) publication from the Children's Commissioner for England. *BBC Radio Northampton, Northampton, United Kingdom, 4th January 2018*

Read, S. (2018) Marketing to the Digital Extended Self. *UoN Research Conference 2018, Northampton, United Kingdom, 20-21 June 2018.*

Read, S. (2018) Marketing to the Digital Extended Self; Exploring the effect of digital Brand Engagement in Self-Concept (BESC) on the continued usage of branded digital possessions. Paper presented to: *Academy of Marketing Doctoral Colloquium, University of Stirling, Scotland, United Kingdom, 02-05 July 2018.*

2019

Read, S. (2019) Marketing to the Digital Self. Poster presented to: *UoN Research Conference 2019, Northampton, United Kingdom, 20-21 June 2019.*

Read, S (2019) Bake Your Research Entry. *UoN Research Conference 2019, Northampton, United Kingdom, 20-21 June 2019.*

Read, S (2019) Marketing to the Digital Self. Poster Presentation to: *Merged Futures Conference 2019, Northampton, United Kingdom 14th June 2019*

2020

Read, S (2020) Overview of doctoral research project. *Marketing and Consumer Studies Research Group, Nottingham Business School, 8th January 2020*

Read, S (2020) The Digital Self. Poster Presentation to: *Marketing and Consumer Studies Research Group, Nottingham Business School, 5th February 2020*

Read, S (2020) The Use of Projective Techniques to Enhance the Online Interview Environment: Innovative Consumer Research in a Digital Age. Conference presentation to: *NVivo Virtual Conference 2020, 23rd-24th September 2020*

2021

Read, S (2021) Knocking on the door of the unconscious - Creative Methodologies in the online environment. *Research seminar presentation to: Marketing and Consumer Studies Research Group, Nottingham Business School, 13 February 2020*

Read, S (2021, forthcoming) Self-brand congruence and digital possessions – Insights into the extended digital self and the role of ideal self-concept on branded Smartphone application usage amongst Generation Z. Paper accepted to: *Cyberpsychology Virtual Conference, British Psychological Society, 6-7th July 2021*