Psychological Ownership in Brand Communities:
The case of the Volkswagen diesel emissions scandal

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Abstract
This thesis aims to understand the presence of psychological ownership within an online brand community. Psychological ownership is becoming increasingly relevant in marketing, being able to provide benefits to both consumers and firms. Firms should therefore attempt to facilitate and capitalise on psychological ownership in their consumers. Brand communities are becoming a more and more common platform for consumers of a brand to use for information and interaction with the brand and other enthusiasts. Due to the strong feelings that brand community members generally have towards the focal brand, it is likely that psychological ownership feelings may also develop towards the brand. Therefore it is important to understand how psychological ownership can develop in a brand community context, and also how it can manifest in the attitudes and behaviours of members.

To achieve this aim, the present study used a grounded theory approach to guide the use of a single-case study. This enabled the gathering of comprehensive, qualitative data to discover new theory about the phenomena. The case study used was the online Volkswagen brand community, and members’ responses to the diesel emissions crisis of 2015/16. Data was collected in the form of Facebook comments in the Volkswagen online brand community. A total of 355 responses were thematically analysed before theoretical saturation was reached.

The results of the study found evidence of existing psychological ownership elements. Two of the routes to psychological ownership were identified within the brand community: coming to intimately know, and investing the self into the target of ownership. Additionally the outcomes of organisational commitment, citizenship behaviour, sense of loss, and escalation of commitment were proven to exist in the brand community. The study also presented new findings in relation to the little-studied collective psychological ownership and blame-shifting as a potential form of escalation of commitment.

The major conclusions that can be drawn from the present study are of significance to the marketing literature. Psychological ownership can occur towards a brand, and within the context of a brand community, thus opening the door for further research within these constructs. Based on the present study, it is recommended that managers attempt to facilitate psychological ownership within their own brand’s communities. Actions by firms such as facilitating interaction between members, asking members for help and ensuring favourable change processes is important in order to create and maintain consumer psychological ownership, while providing a positive workplace can ensure psychological ownership of their employees.
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Chapter One: Introduction

1.1 Introduction to Study

This research will aim to explore the construct of psychological ownership, and the extent to which it occurs within an online brand community.

The concept of psychological ownership, or the state in which one feels that a target of ownership is their own (Pierce, Kostova & Dirks, 2001), is becoming an increasingly relevant topic in the marketing literature, with its observed ability to give rise to customer satisfaction, relationship intentions, word-of-mouth, willingness to pay, and competitive resistance (Asatryan and Oh, 2008; Fuchs, Prandelli, and Schreier, 2010; Peck and Shu, 2009). Based on positive outcomes such as those mentioned, firms would benefit from an understanding of how to better facilitate and encourage the development of psychological ownership within their consumers.

The presence of brand communities is also becoming more and more common in marketing, particularly online brand communities, which function over the Internet (Wirtz, den Ambtman, Bloemer, Horváth, Rameshan, van de Klundert, Canli & Kandampully, 2013). Members of brand communities are known to be strong enthusiasts of the brand (Muñiz & O’Guinn, 2001), and given the positive effects that online brand communities have on relationship benefits with the firm (Gummerus, Liljander, Weman & Pihlström, 2012), brand awareness (Hutter, Hautz, Dennhardt & Johann, 2013), and brand loyalty (Jahn & Kunz, 2012), firms would benefit from learning more about creating and maintaining successful online brand communities.

Because brand communities contain members who are brand enthusiasts, with strong connections to the brand (Muñiz & O’Guinn, 2001), it appears likely that psychological ownership could develop in these invested members. Therefore a brand community would be an interesting and insightful platform within which to observe the possible presence of psychological ownership. Additionally, the recent conceptual proposition of collective psychological ownership (Pierce & Jussila, 2011) is likely to be facilitated in the group setting of a brand community.

This research will take on the single case-study of the Volkswagen online brand community members’ responses to the Volkswagen diesel emissions scandal. This is an online brand community that uses the social media platform, Facebook. The reason for use of this particular case is that members’ emotions are likely to be heightened in the face of a crisis (Hoffman & Ford, 2010), whether positive or negative, and therefore stronger responses may be elicited relating to the psychological ownership construct.
This chapter will introduce a research background of the psychological ownership and brand community literature, as well as rationale for the present study, the research questions that the study will aim to answer as well as a description of the thesis structure.

1.2 Research Background

The concept of psychological ownership can be defined as “the state in which individuals feel as though the target of ownership or a piece of it is “theirs” (Pierce, Kostova & Dirks, 2003, p. 86). Psychological ownership is a construct that has been used to describe feelings of possession and ownership towards a material or immaterial target (Pierce et al., 2001, 2003). The theoretical underpinnings of the psychological ownership concept stem from the psychology of possession and property literature (Dittmar, 1992; Furby, 1978a, 178b; Litwinski, 1947), with it subsequently being adopted in the management literature. Notably, it was Pierce et al. (2001) that first incorporated psychological ownership into a comprehensive conceptual framework within the field of management. Their seminal work paved the way for future theory and empirical research in psychological ownership, such as Pierce & Jussila’s (2011) in-depth theoretical propositions, which included the conceptualisation of the collective psychological ownership construct. Overall, in the field of management, psychological ownership has proven to be an important predictor of workplace motivations, attitudes and behaviours (Brown, Lawrence & Robinson, 2005; Pierce & Jussila, 2011; Pierce, Jussila & Cummings, 2009).

Scholars in marketing have only recently begun to explore the psychological ownership construct and its associated outcomes (Asatryan & Oh, 2008; Fuch et al., 2010; Jussila, Tarkiainen, Sarstedt, & Hair, 2015; Peck & Shu, 2009). So far, studies in marketing have found that psychological ownership can be linked to endowment, attachment and customer empowerment (Fuchs et al., 2010; Reb & Connolly, 2007; Shu & Peck, 2011). Research has found that psychological ownership is also capable of giving rise to customer satisfaction, relationship intentions, word-of-mouth, willingness to pay, and competitive resistance (Asatryan and Oh, 2008; Fuchs et al., 2010; Peck and Shu, 2009). While these studies do provide valuable insights into psychological ownership and its relation to consumer behaviour, perceptions and intentions, the range of this research is small, and requires further research for support (Jussila et al., 2015).

Another emerging concept in the marketing literature is that of a brand community. Brand communities are defined as “specialized, non-geographically bound communities, based on a structured set of social relations among admirers of a brand” (Muñiz & O’Guinn, 2001, p. 412). Brand communities have come about from a shift in the value creation process (Prahalad & Ramaswamy, 2004), which has seen consumers as being integrated into the products and services process, as
active, co-creators of value (Canniford, 2011; Prahalad & Ramaswamy, 2004). In more recent times, the Internet has made it possible to form brand communities through online media, such as websites, chat rooms, forums, and more recently social media (Sloan, Bodey & Gyrd-Jones, 2015). Thus the concept of online brand communities was formed. Online brand communities and their interactions are mainly Internet based (Füller, Jawecki & Muhlbacher, 2007). One way in which the facilitation of online brand communities can occur is on social media platforms, such as Facebook.

Facebook online brand communities have been limitedly studied in the marketing literature, with existing research identifying the importance of customer engagement. Customer engagement within Facebook online communities has been observed to have a positive effect on relationship benefits with the firm (Gummerus, Liljander, Weman & Pihlström, 2012), brand awareness (Hutter et al., 2013), and brand loyalty (Jahn & Kunz, 2012). Therefore, there is significant opportunity for more empirical research on Facebook online brand communities.

1.3 Rationale for Research
The opportunity for research on psychological ownership in the field of marketing lends itself as the rationale for the present research study. The psychological ownership construct will be observed in the context of an online brand community, as it is believed that the environment of an online brand community will facilitate stronger feelings of individual psychological ownership, due to its collection of brand admirers and enthusiasts. Furthermore the recent notion of collective psychological ownership may be enabled in the group context of a brand community.

This study will be of a qualitative nature, and will take place in the context of the Volkswagen online brand community, a Facebook community. Through the use of a grounded theory and case-study approach, the study aims to discover how the causes and outcomes of psychological ownership are displayed in the context of the particular case of the diesel emissions scandal in the Volkswagen online brand community, as well as whether there is any indication of collective psychological ownership within the group. The use of the diesel emissions scandal is a useful case-study for the present study, because this particular crisis situation may elicit stronger psychological ownership feelings in brand community members.

There is yet to be any empirical studies on psychological ownership in the context of marketing that focus on its occurrence within an online brand community, therefore leaving a gap in the literature which this study aims to fill.
1.4 Research Questions
The aim of the study is to explore the psychological ownership construct within brand communities. Therefore the overarching research question in regards to the study will be:

*To what extent is the psychological ownership construct present in the context of an online brand community?*

Based on a review of the relevant literature, the following three research sub-questions will be used to break down the overall research question, and to narrow in on the main elements of the study:

1. How and why do members of a brand community come to feel psychological ownership?
2. How and why do the members of a brand community display psychological ownership towards the brand?
3. How and why is collective psychological ownership displayed within the brand community?

1.5 Structure of Thesis
This thesis consists of six chapters. The current chapter has introduced the research by providing a justification for the chosen subject area, research gap and significance of chosen field. The content of the subsequent chapters is as follows.

In Chapter Two, Literature Review, an overview and discussion of the psychological ownership literature is provided as well a smaller review of the brand community literature.

Chapter Three presents the methodology of the current study, and its research design. The use of a grounded theory, case study approach is discussed, as well as the use of Facebook postings and their analysis through inductive thematic analysis.

In Chapter Four, the results of the analysis are revealed. The results are also discussed in relation to existing literature, while also drawing on other literature for new or other-related findings.

Finally, Chapter Five provides a summary discussion, as well as the theoretical and managerial implications of the research. Limitations of the present study as well as suggestions for future avenues of research are also provided.
Chapter Two: Literature Review

2.1 Introduction
This chapter serves to review the current conceptual and empirical literature on the two constructs within the present study; psychological ownership and brand communities. The literature review first covers the conceptual nature of psychological ownership, as well as its use in the organisational, psychology and marketing literature. Following this, a brief review of brand community literature takes place, with a particular interest in online brand communities. This chapter concludes by locating deficiencies in the current literature on both topics, and outlining the issues and gaps in the marketing literature that the present study will attempt to solve.

2.2 Psychological Ownership
The concept of psychological ownership can be defined as “the state in which individuals feel as though the target of ownership or a piece of it is “theirs” (Pierce et al., 2003, p. 86). Psychological ownership has stemmed from the psychology of possession and property literature (Dittmar, 1992; Furby, 1978a, 1978b, Litwinski, 1947). At the conceptual core of psychological ownership, is a sense of possession. This feeling of possession leads the individual to form the mind-set that an object, entity or idea is ‘mine’ or ‘ours’ (Furby, 1978a). The individual can become psychologically tied to that object, and the object may become a part of their extended self (Beaglehole, 1932; Belk, 1988; Furby, 1978a). Feelings of ownership must occur towards a specific target. This can take the form of a material object, such as a toy, or as an immaterial object, such as an idea (Belk, 1988; Dittmar, 1992). Ownership feelings can shape one’s identity and affect behaviour (Isaac, 1933).

In the existence of psychological ownership, possessive feelings can occur without having any formal or legal claim of ownership to the object that is the target of psychological ownership. Instead, some form of association is sufficient to produce feelings of ownership (Beggan & Brown, 1994).

The majority of the literature identifies that psychological ownership is a complex, cognitive-affective construct. From a cognitive aspect, psychological ownership can reflect individual’s awareness, thoughts, and beliefs regarding the target of ownership (Pierce et al., 2001) yet it can also cause emotional or affective sensation (Jussila et al., 2015).

As such, it appears that psychological ownership is closely related to the self-concept. Psychological ownership suggests that feelings of ownership cause people to view targets of ownership as part of the extended self (Belk, 1988; Dittmar, 1992; Furby, 1978a). In this context, Pierce et al. (2001, 2003) have also noted that the ultimate meaning of psychological ownership is the fusing of the target of ownership with the self.
In order to understand why people develop feelings of ownership, Pierce et al. (2001) initially suggested that psychological ownership exists because it satisfies three basic human needs: self-efficacy, self-identity and having a home. Later on the fourth need of stimulation was recognised (Pierce & Jussila, 2011; Pierce et al., 2003). These four needs are seen to be motivational forces that can set individuals on their path toward psychological ownership (Jussila et al., 2015).

2.2.1 Self-efficacy and Effectance
One of the driving motives of possession is to be in control (Isaacs, 1933). The sense of control that comes about through the ownership of objects can produce pleasure and lead to positive feelings of self-efficacy; the ability to produce a desired or intended result (Furby, 1978a). Self-efficacy can also lead to feelings of effectance. Effectance motivation can be defined as an inclination to explore and influence the environment (White, 1959).

2.2.2 Self-identity
Numerous researchers have suggested that possessions also serve as symbolic expressions of the self, and that there is a close connection between possessions, self-identity, and individuality (Abelson & Prentice, 1989; Dittmar, 1992; Mead, 1934; Porteous, 1976).

Possessions can serve as symbols of our own identities. In this way, these objects can help create, continue or transform our identities (Belk, 1988; Kleine & Baker, 2004; Schouten, 1991; Tian & Belk, 2005). In psychological ownership, the individual begins to intimately understand the meaning of an object, and will often find themselves present within it (Dittmar, 1992). For this reason, the individual will often experience the target as a part of his or her extended self (Pierce et al., 2003).

2.2.3 Having a home
Another need that can be served by possessions is the need for a place (Duncan, 1981; Porteous, 1976). There is a need for individuals to find a preferred space or a fixed point of reference around which to structure their daily lives (Kron, 1983). Possessions can fill this need, as familiar objects can help people to feel that they have a place or a home (Mehta & Belk, 1991).

2.2.4 Stimulation
Activation theory (Gardner, 1990) proposes that individuals have a need for stimulation and activation. Likewise, territoriality literature suggests that possessions can serve as a source of stimulation (Duncan, 1981; Porteous, 1976). This stimulation drives individuals to use possessions, think of them, observe them, care for them, and when required, to defend them (Duncan, 1981; Kamptner, 1989; Porteous, 1976).

Pierce and Jussila (2011) find that “human beings are motivated to seek stimulation, to meet their arousal requirements” (p. 48). This means individuals will not always remain in their comfort zone.
with their current possessions, and tend to actively seek out and take on new and different possessions, while also sometimes abandoning possessions that they already have. A sense of ownership can emerge from participation in these activities, and these ownership feelings may be maintained, reproduced and transformed (Jussila et al., 2015).

2.3 Targets of Psychological Ownership
Within the literature, there has been much speculation on what can be regarded as a potential target of psychological ownership, as well as what types of qualities and attributes a target of psychological ownership is likely to have.

Pierce et al. (2001, 2003) maintain that both material objects such as a physical product or space, as well as objects of an immaterial nature, such as an idea or value can be psychologically owned by an individual. Pierce and Jussila (2011) present an integrative summary of categories of targets of ownership that have been put forward by some psychological ownership researchers to include: work (Holmes, 1967); physical/material objects (Dittmar, 1989; Isaacs, 1933; Prelinger, 1959); relationships/people (Prelinger, 1959; Rudmin and Berry, 1987); space/territory (Altman, 1975; Rudmin and Berry, 1987); creations (Rudmin and Berry, 1987); and sounds that can be heard (Isaacs, 1933).

Certain attributes, such as such as attractiveness, accessibility, openness and manipulability also seem to play an important role in making a potential target of ownership feelings (Pierce & Jussila, 2011). These can be seen as boundary conditions (Jussila et al., 2015), and therefore a lack of these attributes in a target is likely to equate to a lack of psychological ownership feelings.

An unattractive target will not capture the individual’s attention, and it is likely that psychological ownership for the target will not be able to develop. Likewise, if the target is not accessible by the individual then there will be no way for the individual to gain a sense of ownership. If the target is not available, receptive and open, the individual will not be able to find a home within it; the individual will not be able to inhabit it or understand the target’s meaning. And if the target is unable to be manipulated, this means that there will be no potential for feelings of causal efficacy, and the target will not be able to be personalised (Jussila et al., 2015).

Recently, Jussila and Tuominen’s (2010) study on consumer cooperatives found that these types of organisations that are made up of a variety of material and non-material objects that can become a target of psychological ownership for the consumer-owner.

Finally, although there appears to be no prior research in marketing that focuses specifically on target attributes and psychological ownership, Jussila et al. (2015) believe that previous
psychological ownership literature in marketing indicates that customers of any firm can develop a sense of ownership for the products and services provided by the businesses with which they associate. The authors have stressed the importance of distinguishing a particular instance of consumption from the product or service on an abstract level (e.g. the brand), and to look at the concrete elements of the product, service or brand. There has also been discussion of the fact that research on psychological ownership in a marketing context has not come up with a list of attributes of a potential target, which means that it remains unclear what kind of products, services or brands can even be targets of psychological ownership (Jussila et al., 2015).

2.4 Legal Ownership vs. Psychological Ownership

Ownership appears to manifest itself as a legal phenomenon, but also as an important psychological state (Pierce, Rubenfeld & Morgan, 1991). Although the two can be thought to be related, legal and psychological ownership differ in significant ways.

Legal ownership is recognised and ensured by a society (Chang, Chiang & Han, 2012). The society must agree to lawful possession, and therefore the rights that come with the ownership of these possessions are specified and protected by the legal system (Pierce et al., 2003).

Psychological ownership, on the other hand, is something that is psychologically experienced by individuals (Chang, Chiang & Han, 2012). As opposed to legal ownership, psychological ownership is recognised and ensured by the individual who holds this feeling (Pierce et al., 2003). As a result, the individual demonstrates felt rights that can be associated with psychological ownership.

As noted by Furby (1980), Isaacs (1933), and Etzioni (1991), among others, psychological ownership can exist in the absence of legal ownership. This is also the case for legal ownership, wherein one can legally own an object (such as an automobile or home), yet they may never feel that the object is their own. McCracken (1986) believes that this occurs under certain conditions, due to the object failing to provide personal meaning to the individual, something that is necessary for one to claim something as “mine”.

The responsibilities associated with legal ownership and psychological ownership also differ. The responsibilities that come with legal ownership are often a product of the legal system, and something that is bound by law. Responsibilities associated with the psychological state however, come from the individual and from his or her feelings of responsibility towards the object, and their claiming of a non-owned object as “mine” (Pierce et al., 2003).
2.5 Routes to Psychological Ownership

Psychological ownership theory speculates that feelings of ownership may come about as a result of three particular experiences (Pierce et al., 2001, 2003): controlling the target of ownership, coming to intimately know the target, and investing the self in the target.

2.5.1 Controlling the target of ownership

Control can be considered both a characteristic of ownership (Snare, 1972), as well as a route to achieving it (Csikszentmihalyi & Rochberg-Halton, 1983; Sartre, 1969). It can occur in several facets of everyday life. People frequently will use small acts of control to make an object theirs, such as adjusting the height of an office chair. Some authors have observed that the more we experience control and influence over an object, the more we feel in possession of that particular object, and the more that the object can become a part of the extended self (Belk, 1988; Dittmar, 1992).

White’s (1959) work focused on the motives for environmental exploration, control, and resulting feelings of efficacy, while McClelland (1951) likened the control of material objects to parts of the body, inferring that things that can be controlled can be thought of as part of the self. Furby (1978a) built on these works to develop the proposition, that the greater the level of control one can exercise over an object, the more the object will become psychologically experienced as part of the self.

The idea of control was also a core feature of Rudmin and Berry’s (1987) studies of ownership semantics. These authors found that ownership could be perceived as the ability to use and to control the use of objects, and their work suggests that there is a causal path; that objects that are able to be controlled by individuals are the objects that are more likely to be perceived as “theirs” (Pierce et al., 2003).

Some human development research (Lewis & Brook, 1974; Seligman, 1975) also identified a self and control relationship, arguing that objects become associated with the self through the exercise of control, and those objects that are controlled by others, or are not able to be controlled are not part of this concept of self.

Ellwood (1927) brought meaning to the concept of “use” in the control of a target. He/she suggested that objects that are regularly used by an individual may become assimilated into the user’s self. Furby (1978a) later observed that use of an object is another form of exercising control over that object. In addition, people can have more control over an object than others, when they are seen to frequently use the object: “that over which I exercise… control becomes a part of my sense of self” (Furby, 1978a, p. 322-323).
The importance of control in developing ownership can also be thought of in terms of the consequences of users who lose control of objects. A number of studies (Halme, Anttonen, Hrauda & Kortman, 2006; Kahneman, 2011;) have found that the lack of ownership and control over an object can be a barrier to adopting less traditional modes of consumption.

2.5.2 Coming to intimately know the target of ownership
This route (Pierce et al., 2003) can refer to the depth and breadth of knowing the object or target of ownership. James (1890) argued that when relationships between individuals and objects exist, the individual will come to know the object increasingly well, and that this process will lead to feelings of ownership towards the object. Similarly, Beaglehole (1932) implied that when an object is known passionately or intimately, it is likely to become part of the self. In terms of ownership feelings for places and dwellings, Heidegger (1967) and Polanyi (1962) are some authors that have found that the intimacy of knowing a target of ownership creates familiarity, anchors oneself in time and space, and therefore facilitates satisfaction of the need for a place.

Weil (1952) observes that anything that one spends a long, uninterrupted period due to work, pleasure or necessity can bring about a feeling it is the individual’s. For example, a gardener who works in a garden for long periods of time, and becomes quite familiar with it, may eventually feel that the garden belongs to them (Brown, Pierce & Crossley, 2014).

Some scholars (Sarte, 1969; Furby, 1978b) have put forward an associational aspect to ownership. In this way, it has been argued that an individual can come to own something through their association or familiarity with the target of ownership. In addition, Beggin and Brown (1994) and Rudmin and Berry (1987) have also observed this process of association leading to knowing objects. The findings of their studies show that the more information that is possessed about the target of ownership, the more intimate that the relationship between the individual and that target can become.

James (1890) concludes that part of our feelings about what is actually “ours” comes from being in close proximity to, becoming familiar with, and experiencing those things around us. Therefore, by knowing more information about the target of ownership, one will feel things more thoroughly and deeply, and during this process the self will become attached to the object, and the object may even come to be felt as part of the self.

Rudmin and Berry (1987) observes that ownership is somewhat opaque, and cannot always be seen. For this reason they suggested that attachment to the target of ownership provides some of the meaning of ownership. Likewise is the statement that “after all, a stolen apple doesn’t look any different from any other (Snare, 1972, p. 200). Rudmin and Berry (1987) also recognised that people
to prefer their own possessions over others, even if others are quite similar (Beggan, 1992; Horwicz, 1878; Nuttin, 1987). This can often be due to knowing our own possessions more intimately and deeply (James, 1890).

Some studies (Peck & Shu, 2009; Zajonc, 1968) show evidence of this through an increased valuation or sense of ownership, after even basic exposure to a stimulus. Although it takes time for the emotional aspect of ownership to strengthen (Strahilevitz & Loewenstein, 1998), exposure to a stimulus can represent some gained knowledge of the target, such as what it look like or feels like. Time can allow an individual to get to know an object and its features, and can also allow one to identify features that make the object distinct from its almost identical mass-produced counterparts.

### 2.5.3 Investment of self into the target of ownership

Throughout the literature, there have been several authors who have provided insight into the relationship between work and psychological ownership (Locke, 1690; Sartre, 1969, Rochberg-Halton, 1980). Locke’s (1690) political philosophy took the view that we own our labour ourselves, and therefore it is common for us to feel that we own anything that we create, shape, or produce. Labour can include an investment of time, physical energy and our mental drive (Pierce et al., 2003). Even the act of buying an object can be thought of as a form of creation, as the object will ultimately stem from the fruits of our labour (Sartre, 1969). Therefore, most things that stem from our labour can be seen to be a representation of the self (Pierce et al., 2003).

Arguably the most powerful way that an individual can invest themselves into an object is to have created it themselves. This becomes a large investment because of the time and energy that one puts into the creation process of an object (Pierce et al., 2003). Sometimes even one’s values and identities are inputs in this creation process, and this investment of self, causes the self to become one with the object and to develop feelings of ownership towards it (Rochberg-Halton, 1980).

Durkheim (1957) argues that “things” become attached to the creator because they are his or her product, and derive their being and form from his or her efforts. The creator then owns them in a similar way to how they own themselves. Beaglehole (1932) found that this sense of ownership can occur between workers and their machines, their work, and the fruits of their labour. Similarly, individuals may experience ownership feelings towards products that they create through scholarly pursuits (academics), the organisations that they set up (entrepreneurs), or the bills that they draft (politicians).

Pierce et al. (2003) argue that another way, in which one can be invested in the target of ownership, is through the perceived or real responsibility for a target. This can ultimately lead to feelings of
ownership. One example of such a process is explained in Pierce et al. (2003) as a mentor-protégé relationship. In this way, the mentor may feel responsible for the protégé and their development, therefore investing a lot of time, energy, emotion and values into the protégé. At some point the mentor may come to think of the other person as his or her protégé. The social recognition of this relationship further supports the fact that people can see themselves in the target.

2.6 Affordances
As the routes to psychological ownership can influence an individual’s ability to claim something as their own, these three routes; controlling of the object, coming to intimately know the object, and investing the self into the object, can be otherwise seen as affordances that are required from the target object. Affordances stem from psychology (Gibson, 1977). According to Norman (2013), in the context of psychological ownership, affordances are possible interactions with, and use of, an object given the properties of the object and capabilities of the user. An example of this can be a step. A step affords step-ability to an adult, however it does not afford to a young toddler who is likely unable to use it (Pucillo & Cascini, 2014).

Recently, affordances have been explored within a psychological ownership context, in regards to designing object attachment (Baxter, Aurisicchio & Childs, 2015). Baxter et al. (2015) identified 16 affordance principles, within the three routes to psychological ownership that aided in the development of psychological ownership. This is based on Srivastava and Shu’s (2012) study on affordance principles for environmentally conscious behaviour.

2.7 Absence of Psychological Ownership
Throughout the literature, there is some consensus that psychological ownership can occur for any object that is visible, attractive, interesting, and experienced by an individual (Pierce et al., 2003). It has been said, that there are attributes of an ownership target that determine whether ownership feelings will come to fruition, and therefore these attributes are mediators of psychological ownership (Peck & Shu, 2009; Pierce et al., 2003; Shu & Peck, 2011). If the necessary attributes are lacking in the object, or if individuals do not find meaning in the object’s symbolic attributes (McCracken, 1986), then it is possible that no feelings of ownership will occur. This can be true even in cases where an individual owns an object, but never seems to take possession of it (Baxter et al., 2015).

One reason for an individual not engaging with any of the previously mention routes to psychological ownership, is if they are simply not attracted to the target. Generally objects can be seen as preferable when individuals are exposed to it (Fan, Sing & Ahluwalia, 2007; Zajonc, 1968), however this may not always occur if the object is seen as unpleasant (Meskin, Phelan, Moore &
Typically, feelings of ownership may also be prevented or hindered if the individual feels that object is contaminated, disgusting or offensive (Angyal, 1941; Argo, Dahl & Morales, 2006, 2008; Bardhi & Eckhardt, 2012; Hejmadi, Rozin & Siegal, 2004).

### 2.8 Effects of Psychological Ownership

Organisational research has identified a number of motivational, attitudinal, behavioural and personal functional effects that come from employees’ psychological ownership toward their job and/or organisation (Pierce & Jussila, 2011; Pierce et al., 2009). This review will cover the major effects of psychological ownership, and those which are likely to be useful in the marketing context. Some of these effects have been supported by recent consumer research on psychological ownership (Asatryan & Oh, 2008; Fuchs et al., 2010; Peck & Shu, 2009), which will be expanded on later in the literature review.

#### 2.8.1 Motivational Effects

Pierce and Jussila (2011) propose that psychological ownership has an effect on ownership motivations.

##### 2.8.1.1 Intrinsic Motivation

Most notably, psychological ownership is predicted to impact on intrinsic motivation.

Intrinsically motivated behaviour is that which energises, directs, and sustains human behaviour (Pierce & Jussila, 2011). It can shape the amount of time, energy, and force that is directed toward an activity, as well as the strength of an individual’s persistence in the face of adversity.

Pierce and Jussila (2011) take self-enhancement and self-consistency into consideration in order to explain the intrinsic motivation effects that can stem from psychological ownership. Building upon Festinger’s (1957) cognitive dissonance theory, self-consistency theory claims that people are motivated to maintain a consistent view of the self. As a result of this, the individual will be motivated to exert the effort that is necessary to continue to maintain their consistent abilities, and to engage in performance behaviours that demonstrate their competencies. Self-enhancement theory is similar in some ways to self-consistency; it proposes that in general people are motivated to enhance their self-concept.

Pierce and Jussila (2011) propose that the self has become intertwined with the target of ownership, and becomes an important part of the sense of self, and therefore the individual will be motivated to engage in behaviours to nurture, advance, and protect the target of ownership. Acts such as this serve to maintain or enhance the view of the self, hence why the individual carries out these behaviours.
2.8.2 Attitudinal

Pierce and Jussila (2011) propose that psychological ownership has an effect on attitudes.

2.8.2.1 Organisational Commitment

Organisational commitment describes an attitude that reflects the type and strength of an individual’s psychological attachment to the organisation (O’Reilly & Chatman, 1986). Essentially organisational commitment poses the question “Should I maintain my relationship with this organisation and why?” (Pierce & Jussila, 2011). Those with strong organisational commitment will continue their affiliation with their organisation, but may have different reasons for it.

Allen and Meyer (1997) identified three different forms of organisational commitment. First is ‘affective commitment’ which revolves around the positive feelings that can come from one’s organisational affiliation. This form of commitment takes place because the individual wants to be part of the organisation. The second is ‘normative commitment’, which reflects an organisational attachment that stems from the sense that the relationship is the ‘right (proper) thing to do’. This is where the individual feels that they should stay with the organisation. The third form of organisational commitment is ‘continuance commitment’, which can sometimes be referred to a behavioural commitment. This form of attachment is largely ‘economic’ in nature, addressing questions pertaining to the costs that are associated with leaving. Those who display continuance commitment tend to believe that they need to stay with the organisation, as there is too much to be lost by leaving (Pierce & Jussila, 2011).

2.8.2.2 Satisfaction

One of the key attitudinal consequences of psychological ownership is affect- and judgement-based job satisfaction (Pierce & Jussila, 2011).

Pierce and Jussila (2011) reason that feelings of ownership for a job are likely to lead to a pleasurable or positive emotional job-related state (Locke, 1976), as well as evaluating the job and job situation as positive (Weiss & Cropanzano, 1996). Jussila and Tuominen (2010) saw consumer as being likely to experience satisfaction and associated factors of psychological ownership, in their study on consumer cooperatives. Studies by Beggan (1992) and Nuttin (1987) also imply that this can be applied to other contexts. Jussila et al (2015) propose that one example of another context, would be in the relationship between a consumer and a product or service. The authors propose that a consumer with feelings of ownership for a product is likely to experience fulfilment when consuming that particular product instead of an alternative product.

So far in the marketing, the empirical works of Fuchs et al. (2010), Peck and Shu (2009) and Nesselroade, Beggan, and Allison (1999) have supported the notion of ownership feelings of
products leading to satisfaction, or a more favourable assessment of a product. Jussila et al. (2015) observe that additional research is necessary in order to understand the role of psychological ownership in consumer satisfaction with particular products and services.

2.8.2.3 Experienced responsibility and stewardship

Often, if one’s sense of self is closely linked to something, there will be a desire to maintain, protect, or enhance that sense of identity within the target. This will result in an increased sense of responsibility (Dipboye, 1977; Korman, 1970). Similarly possession of something can imply felt accountability and a sense of responsibility to the target or ownership (Pierce & Jussila, 2011). When ownership feelings arise, it has been observed that an employee can experience a change in relationship with their organisation, and responsibility for the organisation may be an outcome (Kubzansky & Druskat, 1993).

The idea of experienced responsibility can be closely related to feelings of stewardship. Stewardship theory, which draws from sociology and psychology, is a view in which individuals in an organisation can see greater long-term utility in behaviour that is pro-social and focused on others, as opposed to short-term behaviour that is opportunistic only for the individual (Hernandez, 2012). Stewardship can arise when individuals feel responsible as the caretakers of a property, even though they are not the legal owners (Pierce et al., 2003).

In their stewardship theory, Davis, Schoorman and Donaldson (1997) proposed that in certain situations, individuals may feel as though they are stewards, and will be motivated to act in the best interest of the principals rather than in their own interests. Pierce et al. (2003), suggest that psychological ownership can create such situations. Individuals who experience psychological ownership may act as though they are “psychological principals”. Pierce and Jussila (2011) agree that psychological ownership is likely to create such stewardship situations. However, the authors believe that this is only true when there are conditions that ensure enhancement, maintenance and protection of the self.

2.8.2.4 Attitudes towards change

Psychological ownership can also impact on employees’ attitudes towards change (Pierce & Jussila, 2011). Dirks, Cummings, and Pierce (1996) propose that there are a few conditions under which individuals will show a positive orientation towards change concerning a target for which they feel ownership. Firstly when the change is self-initiated, as this reinforces the individual’s need for control and efficacy; when the change is evolutionary, in that it promotes the individual’s sense of self-continuity; and when the change is additive, and it contributes to the individual’s need for control, enhancement of self, and feelings of personal efficacy.
Furthermore, Dirks et al. (1996) propose that there are also some conditions under which individuals will resist change. That is when change to the target of ownership is imposed, as it will likely be seen as threatening to the individual’s sense of self; when the change is revolutionary, and threatens self-continuity; and when change is subtractive, whereby change takes away or diminishes the core of the target, to which the individual has become attached.

2.8.3 Behavioural
Psychological ownership is also associated with various behavioural effects.

2.8.3.1 Citizenship behaviours
Pierce et al. (2003) propose that psychological ownership can lead to citizenship behaviour. Citizenship behaviour is a form of behaviour that is voluntary, contributes to the wellbeing of the community, is exerted with positive intentions (outcomes) and for which there is no promise of reciprocation in return (Organ, 1988).

This link between psychological ownership and citizenship stems from the idea of behaviour being a partial function of self-identity. Individuals often create and maintain a sense of self by carrying out behaviours that infuse personal meaning (Burke & Reitzes, 1991). Because of this, the sense of ownership that individuals may develop towards a social entity (e.g. family, group, organisation or nation) may lead to them engaging in citizenship behaviours towards that entity. Some empirical research has also found evidence of a positive and significant correlation between psychological ownership and citizenship behaviour in a cooperative living arrangement (VandeWalle, Van Dyne & Kostova, 1995).

Often organisational citizenship behaviour is referred to as a behavioural consequence of psychological ownership, in terms of employees of an organisation (Pierce et al., 2009). This is where employees exert behaviours that intentionally contribute to the organisation’s wellbeing. Examples of such behaviour are helping, whistle-blowing, criticising the status quo, and offering suggestions (Pierce & Jussila, 2011). Beaglehole (1932) and Wilpert (1991) agree that feelings of possession can cause proactive behaviour that is meant to protect and enhance the target of ownership. Pierce and Jussila contend that when employees feel that an organisation contributes to their basic needs of efficacy and effectance, self-identity, a sense of home and stimulation, the employees are likely to respond by making positive, proactive contributions to the organisations.

In marketing, customer citizenship behaviours are seen as occurring when customers carry out extra-role tasks on behalf of a brand or organisation (Ahearne, Bhattacharya & Guen, 2005; Van Dyne, Cummings & McLean Parks, 1995) These actions are discretionary and pro-social, having benefit for
both the firm and other customers (Bove, Pervan, Beatty, & Shiu, 2009; Garma & Bove, 2011; Yi & Gong, 2008). Prior research has shown that customer citizenship behaviour is positively related to affect, satisfaction, loyalty and brand equity (Bove et al., 2009; Burmann, Jost-Benz, & Riley, 2009). Jussila et al. (2015) also suggest that in a marketing context, citizenship behaviours could stem from psychological ownership in the form of, for example, customer’s use of voice and word-of-mouth. Initial evidence of such a relationship has been provided by Asatryan and Oh (2008), but this relationship remains to be fully understood, particularly in the era of social media (Jussila et al., 2015).

2.8.3.2 Territorial Behaviour
Brown et al. (2005) suggest that territoriality, or the way that an individual behaviourally expresses his or her feelings of ownership towards a physical or social object, is an outcome of psychological ownership. They argue that there are a number of categories of territorial behaviours, for example those used to communicate the boundaries of one’s territory to others, those that are employed to maintain an attachment to an object; and those that defend the target of ownership. Porteous (1976) suggested a similar behaviour of the “marking” of objects, such as through personalisation could be a behaviour of experienced psychological ownership.

Brown et al. (2005) also believe that psychological ownership can promote defensive behaviours, as a result of infringement and/or fear of infringement into one’s territory. Anticipatory defensive behaviour is engaged in to prevent anticipated infringement, while reactionary defences are employed after an infringement has occurred.

Pierce and Jussila (2015) also predict that jealousy may arise when someone else develops an intimate knowledge of the target of an individual’s ownership, stemming from the fear of sharing the object, or simply fearing that others may come to the sense of possession that they already feeling towards the object.

2.8.3.3 Job Performance
One of the behavioural effects of psychological ownership is job performance. When employees feel psychological ownership towards their organisation, their work acquires an existential significance (Wilpert, 1991), and under the right conditions, their work triggering active participation (Dirks et al., 1996; Rochberg-Halton, 1980). Pierce and Jussila (2011) propose that there is a positive relationship between job-based psychological ownership and employee job performance.
2.8.3.4 Escalation of commitment

Escalation of commitment (Guha, 2009; Pierce & Jussila, 2011) can refer to the continuation of commitment to some form of action, even in the face of adverse warning signs, that suggest a bad decision has been made (Staw 1986; Staw & Ross, 1987).

Staw and Ross (1987) contend that there are a variety of forces that contribute to the continuation of a commitment to a poor course of action. Examples include psychological, social, and organisational forces.

The escalation of commitment can be a dangerous bias in various human activities such as personal relationships, athletic pursuits, work projects, policy making and business investments (Ross & Staw, 1993; Staw, 1976; Whyte, 1993). Particularly in the case of entrepreneurs who initiate, invest in and manage businesses, Markovitch, Huang, Peters, Phani, Philip and Tracy (2014) believe that they are likely to face an escalation of commitment dilemma at some point in the process.

Pierce and Jussila (2011) believe that an escalation of commitment to the target of ownership is an outcome of psychological ownership. They also argue that the strength of the individual’s sense of ownership for an object is a psychological force that may contribute to an escalation of commitment towards that target. In support of this idea, Pierce and Jussila (2011) draw on self-consistency, self-enhancement and self-protection motivation as factors that can influence an escalation of commitment towards a target. Self-consistency motivation is when people are motivated to engage in behaviour that are consistent with the image that they have of themselves (Korman, 1970, 1971, 1976). Self-enhancement motivation is where people are motivated to enhance the image of the self (Dipboye, 1977). And self-protection motivation occurs when an individual chooses to not perform a task (Korman, 2001), as a result they don’t have to deal with any performance failure, and this is how they provide reasoning for not trying to perform the task. This means that the individual can avoid any erosion to the self-concept that is likely to come as part of experienced failure.

Pierce and Jussila (2011) also note that because targets of ownership can become a part of the extended self (Belk, 1988; Dittmar, 1991; Furby, 1978b), a failure, loss, or destruction of this ownership target is likely to have a negative effect on the individual as he or she has become psychologically tied to that target. Therefore the authors (Pierce & Jussila, 2011) reason that an escalation of commitment is a likely occurrence as people are motivated to maintain, enhance, and protect the sense of self that has been wrapped up in the target. As such the individual is likely to engage in behaviours to protect, save, and/or grow the target even though the warning signs suggest that a continuation down this course of action is not advisable.
2.8.4 Personal Functioning Maladies

Pierce and Jussila (2011) suggest that there are certain personal functioning disorders that can be associated with personal feelings of ownership. The authors note that there is evidence which support a personal malady that is associated with the sense of possession. This includes James (1890) who argued that the loss or destruction of one’s possessions can frequently end in an erosion of the self.

Similarly when people witness the radical change of targets of ownership, they may come to feel personal loss, frustration or stress. These effects are based on a lack of control over what was once theirs (Bartunek, 1993). The loss of possessions or the perception of loss of possessions can lead to ‘the shrinkage of our personality’ (James, 1890, p. 178). In extreme cases, this sense of loss has been associated with illness and loss of the will to live (Cram & Paton, 1993).

Another malady that is theorised to be an outcome of psychological ownership is a burden of responsibility and the stress effects related to this (Pierce & Jussila, 2011). It is reasoned that an individuals who develops a sense of ownership will be motivated to assume responsibility for the target (Pierce & Jussila, 2011). Depending on how much responsibility the individual takes on, the assumption of responsibility can result in burden (Pierce & Jussila, 2011).

2.9 Collective Psychological Ownership

Some of the territoriality literature (Brown, 1987) has proposed that feelings of ownership can exist at the group level, such as street gangs having a sense of collective ownership over certain neighbourhoods’ (Brown et al., 2005). Based on this, Pierce & Jussila (2011) have recently established the collective psychological ownership construct.

Collective psychological ownership is the notion that through various interactive dynamics, a group of individuals who consider themselves as “us” can come to a single and shared mind-set as it relates to a sense of ownership for a material or immaterial object (Pierce & Jussila, 2011). There are four specific boundary conditions proposed for the development of collective psychological ownership: collectivistic values, collective identification, chemistry and cohesiveness, and task and goal interdependence (Pierce & Jussila, 2011).

First, a group of collectivistic individuals prefer collective actions and intimacy with other members of the social group (Triandis, 1995). Second, when individuals see and feel themselves as a group, and are also defined by others as one, this is the process of collective identification (Pierce & Jussila, 2011). Third, individuals experience affinity within a cohesive group that has high levels of chemistry. And fourth, people are attracted to remain a part of the group under the conditions of high
interdependence required to communicate, share knowledge and control, and jointly plan a course of action and solve problems (Wagemenar, 1995).

Pierce and Jussila (2011) mention they are the first to conceptualise psychological ownership, and that they knew of no published empirical work that reports on the development and validation of a research instrument for the measurement of collective psychological ownership.

Soon after, research by Rantanen and Jussila (2011) conceptualised the collective psychological ownership construct in the context of a family business, whereby the family business is the target of collective psychological ownership by the family members. A study by Sumida, Wooliscroft and Sam, (2012), also observed sports fans’ collective psychological ownership, finding that collective psychological ownership is shaped within interactions between meanings, individual interpretations and tribe rituals. Apart from this, there has been no further published empirical or conceptual literature on the topic, even though the initial findings imply that there is much more that can be explored.

2.10 Psychological Ownership in Marketing

Throughout history, scholars from various academic fields have been interested in the psychological ownership construct. The concept has been studied in a variety of contexts such as child development (Isaacs, 1993), consumer behaviour (Belk, 1988), among the elderly (Cram & Paton, 1993), and within the workplace (Dirks et al., 1996; Pierce et al., 2001).

Only recently have researchers in marketing come to take on the psychological ownership construct and associated theory (Jussila et al., 2015). Thus far the marketing literature has noted that the feeling of possession can be an outcome of marketing-related practices, such as the co-creation of value (Harwood & Garry, 2010) and customer empowerment (Fuchs et al., 2010). It has also been observed to give rise to several favourable outcomes such as customer satisfaction, relationship intentions, word-of-mouth, willingness to pay and competitive resistance (Asatryan & Oh, 2008; Fuchs et al., 2010; Peck & Shu, 2009). This existing literature is still limited in its focus on specific paths to customer psychological ownership (Jussila et al., 2015).

Additionally, the recent special issue of the Journal of Marketing Theory and Practice (2015) focuses on the theoretical concept of psychological ownership in the context of marketing. This journal issue emphasizes the relevance and importance of psychological ownership in marketing, as well as suggesting a number of avenues of which psychological ownership theory can be applied to the marketing and consumer behaviour domains (Jussila et al., 2015; Hulland, Thompson & Smith, 2015).
2.10.1 Psychological Ownership and Endowment

Up until recently, marketing and economics researchers have largely looked at possession and ownership through the theoretical lens of the endowment effect (Kahneman, Knetsch & Thaler, 1990; Knetsch & Sinden, 1984; Thaler, 1980).

The endowment effect observes that goods that are included in one’s endowment (i.e. goods owned by an individual) are valued more highly than identical goods that are not held in the endowment (Thaler, 1980). The endowment effect can also be interpreted as the result of loss aversion (Kahneman & Tversky, 1979) in that losses are weighted considerably more than gains. This means that if one initially owns an object, the prospect of losing it is seen as a relatively large loss. If one does not own the object, the prospect of acquiring it is seen as a relatively small gain (Reb & Connolly, 2007). Recently, research has begun looking at the psychological mechanisms that could drive the endowment effect, and have found psychological ownership to be one such driving force.

Based on the extensive literature review of psychological or subjective ownership by Pierce et al. (2003), Reb and Connolly (2007) carried out a research study based on chocolate bar possession before an experiment. The pre-experiment possession of the chocolate bar was carried out with the aim of getting the participants to feel control over the object, and become familiar with it (the routes to psychological ownership). The results of this study suggest that people may view an object with higher value (i.e. the endowment effect) through a subjective sense of endowment, rather than a legal entitlement, as in psychological ownership. (Reb & Connolly, 2007).

2.10.2 Psychological Ownership and Attachment

Throughout the psychology and marketing literature there have been a few studies that relate psychological ownership to attachment. Shu and Peck (2011) directly link psychological ownership to feelings of attachment, while Baxter et al. (2015) note that psychological ownership is useful in describing the personal attachment, or perceived psychological closeness to an object (Baumeister & Wangenheim, 2014). A study by Baxter et al. (2015) shows that psychological ownership determines the presence of a loss, while an affective reaction determines the magnitude of the loss.

Other studies have linked psychological ownership to different aspects of attachment, such as users giving an object a higher valuation (Franke, Schreier & Kaiser, 2010; Reb & Connolly, 2007), developing a sense of stewardship (Davis et al., 1997; Hernandez, 2012), and avoiding loss (Baer & Brown, 2012; Kahneman, Knetsch, and Thaler 1991).
2.10.3 Psychological Ownership and Customer Empowerment

A study by Fuchs et al. (2010) has found that psychological ownership can be related to customer empowerment. Empowerment allows customers to have some input into a firm’s product selection process. It is a strategy that firms can use to give their customers a sense of control.

By letting customers participate actively in the decision making process of a firm’s products, the customers will perceive that they may influence the outcome, and the final decisions also become “their decisions” (Agarwal & Ramaswami, 1993). This leads to psychological ownership, as people feel partly responsible for the outcome of decisions, which tends to elicit positive ownership feelings (Hartwick & Barki, 1994; Hui & Bateson, 1991).

2.10.4 Brand Psychological Ownership

Throughout the branding literature there has been a focus on understanding and explaining the types of relationships that consumers have with brands and branded products (Albert, Merunka, & Valette-Florence, 2007). These include brand sensitivity (Kapferer & Laurent, 1992), brand attachment (Thomson, MacInnis & Park, 2005), brand commitment (Bormann & Zeplin, 2005), brand trust (Chaudhuri & Holbrook, 2001), brand loyalty (Jacoby & Chesnut, 1978) and brand love (Ahuvia, 2005).

Prior research infers that psychological ownership can develop towards both tangible and intangible objects, and can arise from either legal or non-legal ownership (Pierce et al., 2003). Additionally psychological ownership is seen to cause a person to view tangible and intangible possessions as part of the extended self (Belk, 1988; Dittmar, 1992; Nesselroade et al., 1999). Based on these findings, it has been speculated that a person may develop psychological ownership towards brands; hence the term brand ownership (Chang, Kwak, Puzakova, Park & Smith, 2015). Chang et al (2015) introduce brand ownership in marketing as “the psychological state in which people feel possessive of a brand and as if they have control over the brand” (p. 595).

Similarly, in the management literature, brand psychological ownership has been previously defined as “the psychological experiences that make employees produce positive brand cognitions and brand attitudes” (Chang, Chiang & Han, 2012, p. 630). The main difference between the two definitions is that brand ownership in marketing relates to the feelings and behaviours of consumers, while the management-based definition relates to employee of organisations.

A study by Fuchs et al. (2010) conceived that consumers who are empowered to engage actively in the new product development process tend to feel that the brand or product is theirs, and develop a sense of control over the brand or the product. This can be thought of as an example of consumers
having a sense of psychological ownership towards the brand. Pierce et al. (2001) also developed a brand ownership measure, in the form of a 7-point Likert scale. Items included “I feel a very high degree of personal ownership for this brand”, “I feel like I own this brand” and “I feel like this is my brand”.

2.10.4.1 Brand Psychological Ownership vs. Brand Attachment

The literature on brand relationships provides the concept of brand attachment as such type of relationship. Brand attachment is of relevance to the psychological ownership literature, because it has some similar features to brand psychological ownership, and therefore the two can be thought to be related. However it is important to provide a distinction between the two concepts, to avoid confusion; the present section aims to do this.

Brand attachment refers to a strong emotional bond between a consumer and brand. This is evidenced by its three dimensions: affection, passion and connection (Park & MacInnis, 2006; Thomson et al., 2005). It is a strong, affective construct (Barkus, Schmitt & Zarantonello, 2009).

Psychological ownership on the other hand refers to a psychological state that focuses on the possession that one feel’s towards an object or target (Pierce et al., 2003; Pierce et al., 1991). It is both cognitive and affective (Jussila et al., 2015; Pierce et al., 2003), which means that it reflects an individual’s awareness, thoughts and beliefs as well as associated personal meaning and emotion (Pierce et al., 2003). This is unlike brand attachment, which only focuses on affective or emotional aspects.

The conceptual core of psychological ownership is the individual’s sense of possession for the object (Jussila et al., 2015), and this core distinguishes it from constructs such as brand attachment, where possession is not of importance. However, brand psychological ownership and brand attachment are similar in that they are both closely related to the self-concept (Hillenbrand & Money, 2015; Chaplin and John 2005), and the brand can provide a measure of how they see themselves in relations to it.

Pierce et al. (2003) suggested that attachment can provide part of the meaning of ownership, as it breeds familiarity and knowledge. Additionally, psychological ownership has been linked to attachment, noting that the two constructs may have a positive relationship (Shu & Peck, 2011; Baumeister & Wangenheim, 2014). This is likely to be the case in brand attachment in relation to brand psychological ownership also; however empirical research must be carried out in order to confirm this proposition.
2.11 Brand Communities
Recently, consumers have been given a new and more active role in the process of value creation (Prahalad & Ramaswamy, 2004). In traditional marketing management, marketing institutions would provide all knowledge, dominate promotional language and dictate the rituals of consumption. However over the last few decades, there has been a shift in understanding the value creation process. Much of the marketing and consumer research has recognised that products and services should be thought of as processes rather than finished merchandise, meaning that consumers are integrated into the process as active, co-creators of value (Canniford, 2011; Prahalad & Ramaswamy, 2004).

Due to this shift in view, the concept of consumption communities has emerged from the consumer research literature. One form of consumption community, which is becoming increasingly present in society, is that of a brand community.

A brand community can be defined as “a specialized, non-geographically bound community, based on a structured set of social relations among admirers of a brand” (Muñiz & O’Guinn, 2001, p. 412). This term encompasses the formation of groups of consumers who are users and enthusiasts of a particular focal brand (Muñiz & O’Guinn, 2001). Studies of brand community suggest that the shared use of products and services of a particular brand forms lasting interpersonal connections amongst likeminded individuals (Muñiz & O’Guinn, 2001; Schau, Muñiz & Arnold, 2009; Schouten & Alexander, 1995). Some examples of brand communities that have been investigated in the literature are the Jeep brand community (McAlexander et al., 2002), the Apple Macintosh brand community (Muñiz & O’Guinn, 2001), the Volkswagen brand community (Algesheimer, Dholakia & Herrman, 2005) and the Harley Davidson brand community (Corey, 2014).

2.11.1 Characteristics of a brand community
The sociology literature has established three core markers of a community: consciousness of kind, rituals and traditions, and a sense of moral responsibility (Muñiz & O’Guinn, 2001). Much of the research on brand communities has come to agree with the presence of these three components in its observation of brand communities. These characteristics are seen to enrich the co-creation of value between consumers and firms.

*Consciousness of kind* refers to the intrinsic connection that members of a brand community feel towards one another (Muñiz & O’Guinn, 2001). This is as opposed to the sense of difference that brand community members feel to those outside of the community (Muñiz & O’Guinn, 2001; Schouten & Alexander, 1995; Schau et al., 2009).
Brand communities partake in *shared rituals and traditions*, in order to continue and preserve the community’s shared history, culture and consciousness (Muñiz & O’Guinn, 2001; Stokburger-Sauer, 2010). This can often imply a somewhat religious passion towards the focal brand (Muñiz & Schau, 2005).

Brand community members come to feel a *sense of moral responsibility*, as a duty or obligation to the community as a whole, and to its individual members. This sense of moral responsibility is what can lead to the collective action of the brand community (Muñiz & O’Guinn, 2001).

The literature on brand communities identifies a few dimensions on which they differ. By definition, brand communities are known to be non-geographically bound (Muñiz & O’Guinn, 2001), however most studies have observed that they are either geographically concentrated (Holt, 1995) or scattered (Boorstin, 1974). Alternatively, they may even exist in the non-geographical space of the Internet (Granitz & Ward, 1996; Kozinets, 1998).

Social context within a brand community can differ; interactions within the community may be rich in social context or lacking (Fischer, Bristor & Gainer, 1996). Communities may communicate predominately in face-to-face interactions, be mediated by electronic devices, or be a part of corporate mass media (Boorstin, 1974; Stokburger-Sauer, 2010).

In terms of temporality, some brand communities are stable and enduring (Schouten & McAlexander, 1995), while others are temporary and periodic (Arnould & Price, 1993; Holt, 1995).

Brand communities have been shown to give rise to the creation and reinforcement of brand loyalty (Cova, Pace & Wright, 2006; McAlexandre, Kim & Roberts, 2003), to attract new product users, and to provide valuable insights into consumers of the brand (Muñiz & Schau, 2007; O’Guinn & Muñiz, 2005).

**2.11.2 Online Brand Communities**

In recent times, the Internet has made it possible for consumers to form relationships with other consumers in order to establish a sense of community (Yen, Hsu & Huang, 2011). This has often been achieved through online mediums such as websites, chat rooms, forums, and most recently social media (Sloan et al., 2015).

These communities that are formed over the Internet are known as online brand communities, or virtual communities of consumption (Kozinets, 1999). The difference between “offline” brand communities and online brand communities are that in an online brand community, members’ interactions are primarily Internet-mediated (Füller et al., 2007). These online interactions are based
upon shared enthusiasm for, and knowledge of, a specific consumption activity or related group of activities (Kozinets, 1999). Online brand communities can range from being entirely funded by the brand, to being fully funded by the community of enthusiasts (Wirtz et al., 2013).

Member interactions in an online brand community can include the posting of messages, exchange of ideas, and influencing other members’ product purchases and adoption decisions (Inversini & Masiero, 2014). Online brand communities are shaped by the contributions and discourse of like-minded netizens (Murphy, 1997), and therefore the context of the online brand community is an effective platform for allowing consumers to communicate with each other (Sloan et al., 2015). In this way, for example, some consumers will seek to participate in a brand community to reduce uncertainty in the purchase decision-making process, by gaining input and feedback from others who have used the particular product or brand (Casaló, Flavian & Guinalieu, 2007). It is through this participation and interaction in online brand communities that members can become embedded in the community. This process can turn casual users into members, members into contributors and contributors eventually into evangelists (Rotheaermel & Sugiyama, 2001).

The online brand community’s core factor is the brand itself but ultimately they exist and persist due to the relationships among their members (Jang, Olfman, Ko, Koh, & Kim, 2008). Online brand communities are thought to benefit both businesses and consumers alike. Kim, Choi, Qualls and Han, (2008) believe that an online brand community is important for both consumers and companies. Additionally some studies have shown that online brand communities can lead to stronger brand commitment and increased sales (Adjei, Noble, & Noble, 2010; Kim et al., 2008). Companies are also starting to take notice of the potential benefits of online communities for their customers and brands and are actively attempting to create them (Jones, Temperley & Lima, 2009).

### 2.9.2.1 Facebook as an OCB platform

Within the online brand community literature, common online platforms that have been utilised are mainly centred on websites (Dholakia, Blazevic, Wiertz & Algesheimer, 2009; Xue & Phelps, 2004), chat rooms (Bagozzi & Dholakia, 2002) and discussion forums (Antorini, 2007; Bickart & Schindler, 2001; Kozinets, 1998, 2002; Muñiz & O’Guinn, 2001). The use of social media is growing in a business scenario (Bulmer & DiMauro, 2011), and brand communities are now beginning to form via social media platforms.

Some marketing scholars have agreed that Facebook brand pages (also sometimes known as “fan pages”) can serve as a social media vehicle for brand communities (Hodis, Sriramachandramurthty & Sashittal, 2015). According to Hsu (2012) the Facebook brand pages include the following features: sharing company, product or service information, communicating and sharing marketing messages,
expanding networks, and getting feedback updates. Brand fans can share their enthusiasm about the brand on these dedicated pages and be united by their common interest in the brand (Kozinets, 1999; De Vries, Gensler & Leeflang, 2012). As a customer-based brand community, a Facebook fan page consists of information generated both by a business and its customers (McCarthy, Stock & Verma, 2010). Hodis et al. (2015) believe that Facebook brand pages are in essence online brand communities, and should be treated as such. The goal of a brand’s Facebook page should be to fully integrate and immerse users in a vivid and active brand community (Jahn & Kunz, 2012).

Sloan et al. (2015) observe that there is limited research that highlights the use of online brand communities in the context of these social media platforms such as Facebook. Despite the limited number of studies, there have been some insightful observations made in the online brand communities’ literature in regards to Facebook as the social media platform.

Gummerus et al. (2012) found that in the context of a Facebook online community, customer engagement had positive effects on relationship benefits such as liking content, writing content and reading messages. Hutter et al. (2013) explored user interactions on brand awareness and purchase intentions, finding that engagement had positive effects on consumers’ brand awareness. And Jahn and Kunz (2012) found that for Facebook in particular, greater engagement with a brand page has been shown to lead to greater brand loyalty, which in turn has a strong positive effect on brand commitment, word of mouth (WOM) and purchase. The intensity of the brand page usage was also shown to positively affect brand loyalty directly as well as indirectly via increasing engagement with the page (Jahn and Kunz, 2012).

**2.11.3 Member Participation in Brand Communities**

Member participation appears to be a prerequisite for the success of a brand community (Inversini & Masiero, 2014; Kim, 2000). The voluntary participation of members in interactive marketing activities can contribute to the prosperity and sustainability of a brand community (Hagel & Armstrong, 1997; Preece, 2000).

There are a number of studies that have looked into member categories of brand communities, based on the members’ level of activity with the community (Kozinets, 1999; Ridings, Gefen & Arinze, 2006; Wang & Fesennamaijer, 2004). Kozinets (1999) sorted brand community members into four groups; tourists, minglers, devotees and insiders. The tourist and insider groups represent the two extremes on a continuum of weak and strong social ties with other members. Similarly Burnett (2000) suggested that there are two types of community members; lurkers and posters, based on member contributions to a brand community. Lurkers take part in non-interactive behaviours, and can be referred to as “free-riders”, who simply browse the online brand community. Posters on the
other hand take part in interactive behaviours, and dynamically participate in posting messages (Burnett, 2000).

### 2.12 Chapter Summary

There has been a reasonable amount of research carried out on psychological ownership in the management and organisational literature (Brown et al., 2005; Pierce et al., 2001, 2003; Pierce & Jussila, 2011; Pierce et al., 2009) however there appears to be limited research on the construct in the marketing literature.

In the marketing literature, studies on psychological ownership have been connected the construct to endowment, attachment and customer empowerment (Fuchs et al., 2010; Reb & Conolly, 2007; Shu & Peck, 2011), and also the outcomes of satisfaction, relationship intentions, word-of-mouth, willingness to pay, and competitive resistance (Asatryan & Oh, 2008; Fuchs et al., 2010; Peck & Shu, 2009). There have been some insightful observations gathered from these previous studies; however more research is needed to support and further understand these insights. This presents an opportunity for the current research study to reveal more about psychological ownership in the marketing context. Only one study (Chang et al., 2015) has focused on brand psychological ownership in the context of marketing. This leaves many unanswered questions in regards to brand psychological ownership, which this study will attempt to answer.

Another emerging concept in the marketing literature is that of a brand community (Muñiz & O’Guinn, 2001; Schau et al., 2009; Schouten & Alexander, 1995). In particular, online brand communities have been studied limitedly (Algesheimer et al., 2005; Gummerus et al., 2012; Royo-Vela & Casamassima, 2010), and therefore there lies a reasonable gap in the literature that requires further empirical research.

The aim of the present study is to explore the presence of psychological ownership within an online brand community. No prior studies in the marketing literature have studied this combination of concepts, and therefore there is a research gap. The reasoning behind the purpose of studying these two concepts together is as follows. Due to brand communities consisting of members who are enthusiasts of a brand (Muñiz & O’Guinn, 2001), there is a possibility that brand psychological ownership may occur within these groups. Furthermore, the introduction of the collective psychological ownership construct (Pierce & Jussila, 2011), requires a collective group of individuals, which fulfils the definition of a brand community. Therefore, it is proposed that collective psychological ownership is more likely to be facilitated in the group setting of a brand community.

The following section will explain the chosen methodology for the present study.
Chapter Three: Methodology

3.1 Introduction
The previous chapter summarised the existing literature on the psychological ownership construct, as well as identifying the deficiencies on the topic in the marketing literature, particularly in observing potential outcomes of psychological ownership that can be experienced by the consumer.

An exploratory study is therefore needed to fill this specific research gap. The purpose of this chapter is to outline the research design that will be used to collect empirical data for the study, in order to explore outcomes of psychological ownership in marketing. This study will take on a grounded theory approach. This chapter outlines in detail the sampling procedure, the platform used to collect the data and the thematic analysis procedure, which will be used to build theory from the data.

3.2 Research Design
The present section will outline the research design of the present study.

3.2.1 Qualitative Methodology
A number of scholars have suggested that researchers should use qualitative methodologies when exploring cultural phenomena (Dominick & Wimmer, 2003) and a consumer’s experience of a particular occurring phenomenon (Calder, 1977). Qualitative research also enables one to understand the meaning that people bring to the phenomena being studied (Lincoln & Denzin, 2003). Based on these reasons, as well as the theoretical literature review, a qualitative approach was considered most appropriate for the current study.

3.2.2 Grounded Theory Approach
The proposed research question is of an exploratory nature as it aims to identify and understand the outcomes of psychological ownership in brand communities, a topic of which there is limited research, as the previous literature review has shown.

Because there is a limited amount of existing knowledge and prevailing theory on the phenomena, a deductive approach to the data was considered inappropriate (Goulding, 1998; Stern, 1980). It was considered more appropriate to approach the data inductively, and to therefore attempt to generate new theory from the data, as opposed to testing existing theory (Bryant & Charmaz, 2007). This was the premise of a grounded theory approach to research, and therefore it was most appropriate to use this approach for the present study.
3.2.3 Case Study Method
A case study method is fitting when researchers are trying to answer “how” or “why” questions, when the investigator has little to no control over events, and in the case that the study is examining a contemporary phenomenon within a real-life context (Yin, 2003) The present study examined the contemporary phenomenon of psychological ownership, and did so within the specific context of an online brand community, where the researcher had no control over the events that are occurring. Therefore the case study design proved best to use in the present study. Case studies can also allow the researchers to uncover meaningful patterns within narratives (Babrow, 1995). This aligns with the present study, as it was more interested in what people are saying, rather than the frequency of their comments.

3.3 Case Study: The Volkswagen Diesel Emissions Scandal
The following section will provide an overview of the Volkswagen diesel emissions scandal, as the case study to be used in the present research. This section will also explain and justify the use of this particular case study, in reference to the two constructs being studied; psychological ownership and brand communities.

3.3.1 Overview of the Case Study
This section will present an overview of the Volkswagen diesel emissions scandal.

3.3.1.1 The Company
Volkswagen is a German car manufacturer that was established in 1946. It has its headquarters in Wolfsburg, Lower Saxony in Germany, and in early 2015 it was the top-selling brand and namesake of the Volkswagen group, and the second largest automaker in the world (Murphy, 2015). The Volkswagen Group has a number of subsidiary car brands including Audi, Porsche, Bugatti, Bentley and Skoda among others.

3.3.1.2 The Scandal
On 18th September 2015, the United States Environmental Protection Agency (EPA) released findings that many of the Volkswagen TDI models that were being sold in America had a “defeat device” in their diesel engines (Brooks, 2015). This software meant that the diesel-engine cars could detect when they were being tested for emissions, and this would prompt the cars to perform within the emissions regulations. However, the software turned the equipment off during regular driving, which would lead to the cars emitting a higher level of diesel emissions, far above legal limits (Jordans, 2015).

The EPA issued a notice of violation of the Clean Air Act to the Volkswagen Group, and upon further investigation it was revealed that TDI models emitted up to 40 times more nitrogen oxide (NOx)
output when driving in the real world, as opposed to the output during regulatory testing. Volkswagen’s behaviour had the potential to be extremely harmful, as NOx is a pollutant that can cause emphysema, bronchitis and other respiratory diseases (Russell, Gates, Keller and Watkins, 2016).

It was revealed that Volkswagen had implemented this programming into approximately 11 million cars worldwide between 2009 and 2015, with approximately 500,000 models located in the United States of America (Ewing, 2015). The EPA said in September that it would order Volkswagen to recall seven of its American models, which amounts to a total of 500,000 vehicles (Russell et al., 2016).

On 2nd November 2015, the EPA found the same test-cheating software in additional Volkswagen and Audi diesel models, as well as in a Porsche model (Russell et al., 2016).

3.3.1.3 Aftermath

3.3.1.3.1 Impact on Volkswagen
Volkswagen was hit hard by the emergence of the scandal. On 21st September, the first trading day after the EPA’s revelations became public, share prices of Volkswagen AG fell 20% on the Frankfurt Stock Exchange (Bradshaw, Yeoman and Millward, 2015). On the 22nd September, the stock fell another 12%. And on the 23rd of September, the stock fell an even further 10.5%, dropping to 100 euros, a record 4-year low (Bradshaw et al., 2015; Lewin, 2015; Smith, 2015). Additionally, on the 28th October, Volkswagen was pushed 3.5 billion euros into the red. This was the company’s first quarterly loss in 15 years (Kollewe, 2015).

3.3.1.3.2 Impact on the Industry
Although there are many other German automakers that had no involvement in the Volkswagen “Dieselgate” scandal, a number of them were unable to escape association with the scandal in the market’s mind. This is evidenced by the drop in share prices for some other German automakers, for example, BMW whose share price went down by 4.9%, as well as Daimler whose share price decreased by 5.8% (Smith, 2015).

Similarly a survey conducted by AutoList (2016), in which 2387 American car owners of a range of car brands were surveyed, revealed that public trust in the auto industry as a whole had gone down by 12%, and trust in German engineering quality in particular was down 18% (Morrison, 2015).

3.3.1.3.3 Volkswagen’s Remedial Actions
Almost immediately after the scandal, Volkswagen’s CEO Martin Winterkorn apologised to the public and resigned as CEO on 23 September 2015 (Farrell & Ruddick, 2015; Moore, 2015; Woodyard, 2015).
On 25th November, 2015, Volkswagen said that it would install a small tubular part into some of its engines to help them come into line with European clean air standards (Russell et al., 2016).

Volkswagen of America hired Kenneth Feinberg, a prominent victim compensation attorney in order to create and administer a claims program that will address the needs of car owners impacted by the company’s diesel emissions violations (Bartlett, 2016). Details of how these programs will work and who will be eligible have not been determined yet (Bartlett, 2016).

As part of its “Customer Goodwill Package”, Volkswagen is handing out $1000US cash to every owner of a VW TDI named in the EPA’s first violation notice. This means nearly 482,000 people are eligible to receive a $500US prepaid Visa card to spend on anything and another $500US cash card valid only at Volkswagen dealerships. These people are also entitled to free 24-hour roadside assistance for the next three years (Clifford, 2016). Initially offered to just 2.0L TDI owners, the goodwill package has recently been extended to 2009-2016 Touareg TDI owners, as well (Bartlett, 2016).

3.3.2 Justification of the Case Study
This section provides an explanation and justification for the choice of the Volkswagen diesel emissions scandal as the case study for the present study. Justification will be given for the use of Volkswagen, a car brand, as a target of psychological ownership, the selection of the Volkswagen online brand community, and the use of the Volkswagen diesel emission scandal as the context for the present study. The use of a single-case study method will also be justified.

3.3.2.1 Car brands as targets of Psychological Ownership
The current research study proposes that although ownership can manifest itself as a legal phenomenon in the context of car ownership (Pierce et al., 1991) it can also be psychologically experienced by the owner. Therefore, car brand can be justified as a potential target of psychological ownership.

From the previous literature review, it was established that one of the routes to an individual developing feelings of psychological ownership is through *coming to intimately know the target*” (Pierce et al., 2003). In this way, Sartre (1969) and Furby (1978b) have argued that an individual can come to own something through their association or familiarity with the target of ownership. Cars appear to be such an object, with which the owner can become very familiar with. This is due to the fact that cars can be used by individuals on a daily basis, in everyday life. Cars are used for all sorts of transportation tasks such as getting to and from work, running errands, leisure activities and road trips. Due to the frequent use of one’s car, a relationship between the individual and the car has the potential to develop as the individual comes to know the car increasingly well.
(James, 1890) and it may eventually become thought of as a part of the individual’s self (Beaglehole, 1932).

Another proposed route to psychological ownership (Pierce et al., 2003) is the *investment of self into the target of ownership*. Based on Locke’s (1690) political philosophy, an individual owns his or her labour, and therefore it is common for one to feel that they own anything that they create, shape or produce. Pierce et al. (2003) propose that this labour can include an investment of time, physical energy and mental drive towards the target of psychological ownership. Individuals may take this route to develop psychological ownership feelings towards their car. This may be through the actions of cleaning and maintaining of their car, whether it is through their own physical labour, or whether they outsource it to an organisation, this can still involve an investment of time researching, booking and taking the car in to the mechanic or car cleaning service. Even the simple of act of filling one’s car with petrol can be considered an investment of time and resources into the car, as well as investing time in obtaining a warrant of fitness and car registration on a somewhat regular basis. All of these tasks can be thought of as the individual’s investment of self, and therefore the car can potentially be seen as a target of psychological ownership.

The literature review section of this thesis also explains that psychological ownership is thought to fill the human need of self-identity (Pierce et al., 2003) in that the individual will experience a possession as help to create, continue of transform their identity (Belk, 1988; Kleine & Baker, 2004; Schouten, 1991; Tian & Belk, 2005). Therefore a car brand as a potential target of psychological ownership can be justified in relation to self-identity, because a car appears to be a possession that is able to influence an individual’s self-identity. It is a product that is often seen by others as a symbol of the individual owner’s personality or style. It appears that one can definitely change or enhance their sense of identity through ownership of a car brand that is aligned with their perceived or desired sense of self. For example, a person who sees themselves as being environmentally conscious may purchase from a car brand that promotes a green image, whereas a consumer who feels that they as a classy and sophisticated individual may purchase from a more prestigious car brand that is known for its style and high status.

3.3.2.2 Volkswagen Online Brand Community
A brand community is a group of people who are connected through a particular brand, of which they share admiration for (Muñiz & O’Guinn, 2001). These users or enthusiasts of the brand can form interpersonal connections amongst likeminded individuals (Muñiz & O’Guinn, 2001; Schau et al., 2009; Schouten & Alexander, 1995). Via the internet, online brand communities have formed,
through online medium such as websites, chat rooms, forums, and most recently social media (Sloan et al., 2015).

With the rise of social media, some researchers have agreed upon the use of Facebook brand pages (also sometimes known as “fan pages”) as a platform for brand communities (Hodis et al., 2015; Hsu, 2012; Sloan et al., 2015). Hodis et al. (2015) observed that brand pages are in essence online brand communities, and should be treated as such. Therefore, the present study will use the Volkswagen USA Facebook page, as the brand community to be studied. This brand community is made up of users and brand enthusiasts. It possesses all of the qualities of an online brand community, as it is centred around a focal brand; facilitates discussion and interaction between community members, and is mediated by the internet-based social media website; Facebook.

Additionally, cars are known to elicit high levels of emotions and involvement in many consumers (Brown et al., 2003; McAlexander & Schouten, 1998), something that is conducive to brand community participation (Algesheimer et al., 2005). Therefore, the use of car-brand Volkswagen’s brand community was considered to have potential to elicit strong responses of psychological ownership, an aspect that will be able to provide more insight from the research.

### 3.3.2.3 The Diesel Emissions Scandal as a context for Psychological Ownership feelings

The selection of a particular context is important for case study research. Pettigrew (1988) noted that because there are usually a limited number of cases that can be studied, it would be appropriate to choose cases that are extreme situations, in which the process of interest is “transparently observable”. Based on the above justification of using a car brand, and its brand community of consumers for the current research study, the Volkswagen diesel emissions scandal was chosen as the case study. This is because this incident is an extreme situation, in which a popular car brand has carried out unethical and illegal behaviour, something that is not seen to be the norm. Due to the nature of this case, it appears that it could have had a huge impact on Volkswagen customers, and therefore it is hypothesised that this situation could potentially elicit strong feelings and responses due to the presence of psychological ownership.

### 3.3.2.4 Use of Single-case study

The present study used the Volkswagen diesel emissions scandal as the case in a single-case study method. Although multiple-case designs can be seen to be stronger than single-case designs in a number of situations (Yin, 2003), there is some worthy rationale behind the choice to use a single-case study in this particular situation.

Single case studies are appropriate in research when the case represents an extreme or unique case (Yin, 2003). The Volkswagen diesel emissions issue presents one particular context in which the
phenomenon of psychological ownership can occur. This context is an extreme or unique case of the company misinforming its consumers, something that is not seen to be the norm for car brands. Because of this, it was considered more important to focus on this single case. It was thought to be too difficult to use a multiple-case study method, as with such extreme cases, no two are the same.

Single cases studies can richly describe the existence of a phenomenon (Siggelkow, 2007), as well as be used to provide a holistic, in-depth analysis of one setting, characterised by the production of rich descriptions (McLeod, MacDonell & Doolin, 2011). Due to the serious nature of the Volkswagen diesel emissions scandal, and the myriad of potential outcomes and consequences, for the company and its customers, it was considered appropriate to use it as a single case study.

3.4 Data Collection
This section will describe the data collection process of the present research study.

3.4.1 Volkswagen Online Brand Community
The data set for the present study was collected on the selected Volkswagen online brand community, which is the official Volkswagen USA Facebook page. The link to this page is: https://www.facebook.com/VW/?brand_redir=DISABLE.

This page was selected, as opposed to other country’s Volkswagen pages, because the emissions violation was issued to Volkswagen by the Environmental Protection Agency (EPA), which is based in the United States of America. Therefore, the Volkswagen USA brand community appeared to be the most relevant page for understanding the reactions of those consumers who were most affected by the scandal. This brand community also primarily uses English to communicate, so this was another contributing factor to the choice of Volkswagen brand community.

Additionally, the Volkswagen USA online brand community was selected because it is likely the most established Volkswagen online community on the Internet. It has over 24.5 million “likes” on Facebook, which is representative of the members in the brand community. These members consist of both consumers of the brand as well as employees. The online brand community is owned and facilitated by Volkswagen, but all members can post comments or pictures and interact with other members of the community, or the brand itself.

Furthermore the Volkswagen group itself posts its own content, in the form of Facebook posts where it can present the community members with information, pictures and videos related to the brand. An example of such posting could include Volkswagen posting about a new product that
they've launched. On each of these posts, members of the Volkswagen online brand community are able to reply to the messages from Volkswagen, or discuss the content with other members.

These posts by Volkswagen were used to collect data from brand community members in the present study. Data was collected in the form of consumer responses to Volkswagen posts, across five different postings. These postings spanned a period of approximately two months. They were selected because they were directly related to the Volkswagen diesel emissions scandal.

In other words, these posts had been made by Volkswagen in regards to the emissions issue, to apologise to the brand community, to provide members with information about the issue, and to provide the members with compensation. The brand community members’ responses to these posts; the units of data in the present study, therefore directly related to the diesel emissions issue, and were able to provide insight in this way. This is further explained in the timeline section of the methodology.

3.4.2 Sampling process

3.4.2.1 Theoretical Sampling

Because of the grounded theory approach of the research study, the purpose of the research was to develop theory, and not to test pre-existing theory. Therefore, theoretical sampling was used. Theoretical sampling is where cases are selected because they are most suitable for highlighting the phenomena in question, as well as being able to extend relationships and logic amongst constructs (Eisenhardt & Graebner, 2007). Generally, cases that are sampled will be unusually revelatory, extreme exemplars, or opportunities for unusual research access (Yin, 2003).

3.4.2.1.1 Purposive Sampling Criteria

In order to fulfil theoretical sampling, purposeful sampling criteria were used in order to select community members’ responses to the 5 postings on the Volkswagen online brand community. Purposive sampling (otherwise known as judgement sampling) involves the researcher making a decision as to what is deemed appropriate to include in the sample (Neuendorf, 2002). This aligns well with the goal of theoretical sampling, which is to choose cases which are likely to replicate or extend the emergent theory (Eisenhardt, 1989).

In order to choose which consumer responses to include in the sample, a general rule was established, that responses were to meet two inclusionary criteria. Firstly, they needed to be in response to a post by Volkswagen that pertained specifically to the diesel emissions issue, and secondly the comment or response needed to be strong enough to be revelatory in some way, or to resemble some possible relation to psychological ownership, whether it was positive or negative.
Purposive sampling was the most effective way to collect the data for this study, due to the large number of consumer responses that could have otherwise been in the data sample. It was not feasible to do any form of random or systematic sampling, because this runs the risk of not seeing some of the most important comments—especially due to “trolling” or irrelevant comments which are prevalent on social media platforms.

3.4.2.2 Time Frame
The Volkswagen online brand community continuously posts content, on a weekly to monthly basis. Therefore the present study aimed to take a sample of responses from the time frame within the occurrence of the diesel emissions issue. The research has therefore included posts by Volkswagen in the online brand community made after the 18th September 2015, as this was the date that Volkswagen was issued a notice of violation from the EPA, and therefore the first time that all consumers started to become aware of the issue in the media. As aforementioned, Volkswagen has made 5 official postings in the Volkswagen online brand community which fit the criteria for the study. These are presented in Table 1 below.

Table 1: Number of responses per Facebook post

<table>
<thead>
<tr>
<th>Post No.</th>
<th>Date</th>
<th>No. of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>September 25th 2015</td>
<td>7,416</td>
</tr>
<tr>
<td>2</td>
<td>September 28th 2015</td>
<td>4,696</td>
</tr>
<tr>
<td>3</td>
<td>October 17th 2015</td>
<td>284</td>
</tr>
<tr>
<td>4</td>
<td>October 29th 2015</td>
<td>1,253</td>
</tr>
<tr>
<td>5</td>
<td>November 18th 2015</td>
<td>364</td>
</tr>
</tbody>
</table>

Each of these five posts generated between 284 and 7,416 community members’ responses, the unit of data for the present study. Overall, shared between all five posts, there were 14,013 consumer responses. This was an excessive amount of data, given the time constraints of the current research project, and therefore sample size measures were taken. These are explained in the following section.

3.4.2.3 Sample Size
Although a total of 3,648 responses were within the initial scope of the present study, this was an excessive amount, and it was made clear that it would be unfeasible to collect all of these responses as data given the time constraints of the current project.
Therefore purposive sampling was carried out during the data collection and analysis stage of the study, until theoretical saturation for each Facebook posting had been reached. Theoretical saturation occurs when no additional data can be found to provide insightful meaning towards a theme or category (Glaser & Strauss, 1967). This saturation was the key determinant of sample size (Josselson & Lieblich, 2003) for the present study, and theoretical saturation was reached upon the 355th response. Therefore the final sample size of the study is 355.

3.4.3 Ethical Considerations
Because the current research study does not involve the use of any human participants in its empirical research, there was no obligation to apply for human ethics approval. The study does however use data that is collected from real people on the social media website, Facebook. Originally this data contains the names of the community members, and for privacy and consent reasons, these names have been deleted, and are not presented anywhere in the sections of this document. All of the responses will remain anonymous, and when quoted, will be referred to by a mixed alphabetical and numerical code that is related to the chronology of the response, and has no relation to the names. This system will be further explained in the results chapter.

3.5 Data Analysis
This section explains how the data was analysed in the present study. It also justifies the use of and inductive thematic analysis, and the employment the constant comparison method.

3.5.1 Thematic Analysis
Thematic analysis can identify, analyse and report patterns or themes within the data. In this way, it can minimally organise and describe your data set in detail (Braun & Clarke, 2006). Thematic coding as a process can be conducted within major methodologies, such as grounded theory (Ryan & Bernard, 2000). For this reason, the present study combined the grounded theory approach with a thematic analysis of the data. This was most appropriate for the present study, as the conventional grounded theory coding process is known to be most suitable for data collected through interviews (Stern & Porr, 2011), while thematic analysis serves better for a discussion forum (Sanderson & Emmons, 2014), which is most similar to the data collected from Facebook in the present study.

In order to analyse the data and to answer the research questions, a thematic analysis of the Facebook responses for each Volkswagen Facebook post was conducted. This analysis also drew on parts of grounded theory by using constant comparison methodology as well as theoretical sampling (Glaser & Strauss, 1967). Throughout the analysis, each Facebook comment or response was treated as a unit of analysis.
The analysis process is based on Sanderson and Emmons (2014) study, where each comment or response was coded to develop initial themes, following which they were further analysed, and the themes were classified into emergent categories (Strauss & Corbin, 1998). A theme represents some level of patterned response or meaning within the data set. It captures something important about the data in relation to the research questions (Braun & Clarke, 2006).

The analysis took place by mainly following Braun and Clarke’s (2006) 6 phases of thematic analysis. The six phases included:

1. The researcher familiarising his/herself with the data
2. Generating initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes
6. Producing the report

3.5.2 Inductive Nature
The study took on an inductive approach, in that it was analysed with the aim to generate new theory from the data. An inductive analysis occurs when the coding of data does not try to fit into a pre-existing coding frame. The coding is therefore driven by the data itself, and not existing theory (Braun & Clarke, 2006; Patton, 1990). This is as opposed to deductive reasoning which tests an existing theory.

Inductive reasoning was used in the study because of the small amount of literature on psychological ownership in marketing. Therefore it was considered that any new research on the topic would most usefully contribute by attempting to generate new theory and to provide new insight.

3.5.3 Constant Comparative Method
Glaser and Strauss (1967) argue for the constant comparative method. This involves joint collection, coding, and analysis of data. This is a back and forth technique of data collection, coding and comparing analytic discoveries with already obtained data and with newer incoming data (Stern & Porr, 2011), and this was used in the current research study.

A constant comparative method is also the best way to reach theoretical saturation (Glaser & Strauss, 1976), and it also allows the researcher to take advantage of flexible data collection. This is because key feature of theory-building case research is the freedom to make adjustments during the data collection process (Eisenhardt, 1989). This flexibility is controlled opportunism in which
researchers take advantage of the uniqueness of a specific case and the emergence of new themes to improve resultant theory.

3.6 Evaluating Data Quality
In order to produce the highest quality of research it is important to carry out measures to test the quality of the data, and to assess and make improvements to the study.

The quality of quantitative research usually depends on the construction of the instrument, however in qualitative research, of which the nature of this study is, it is the researchers themselves that are the instruments (Patton, 2014). Therefore, the quality of qualitative research often depends on the ability and effort of the researcher (Golafshani, 2003).

In quantitative research, the research design and data quality is often tested for using validity and reliability tests, which are known as “traditional” design tests. Authors Guba and Lincoln (Guba & Lincoln, 1981, 1982; Lincoln & Guba, 1985) substituted reliability and validity with the concept of “trustworthiness”, which contains four corresponding design tests: confirmability, credibility, transferability and dependability. Several authors (Hirschman, 1986; Riege, 2003; Robson, 1993) recommend that these tests be used in qualitative research as they can establish quality, trustworthiness and rigour. This method has been selected for discussing the quality of the design and data in the current research study.

3.6.1 Confirmability
Confirmability refers to the degree of neutrality and accuracy of the data (Lincoln & Guba, 1985; Tobin & Beagley, 2004). It assesses whether the interpretation of the data is drawn in a logical and unprejudiced manner; with the aim that ideally it will be shaped by the respondents and not by researcher bias, motivation or interest (Lincoln & Guba, 1985).

The concept of confirmability is comparative to the qualitative researcher’s objectivity. Steps must be taken to ensure that the work’s findings are the results of the experiences and ideas of the informants, rather than the characteristics and preferences of the researcher (Shenton, 2004).

In order to achieve confirmability of research, one can use an “audit trail”, which allows an observer to trace the course of the research step-by-step (Rosamund, 1999; Ryan-Nicholls & Will, 2009).

Rigour can be achieved by outlining the decisions made throughout the research process to provide a rationale for the methodological and interpretative judgements of the researcher (Houghton, Case, Shaw and Murphy, 2013). An audit trail approach was used in the present research study, in the form of comprehensive notes related to the contextual background of the data, and rationale for all methodological decisions (Glaser & Strauss, 1967; Rodgers & Cowles, 1993; Ryan-Nicholls & Wills,
2009). Additionally, coding software NVivo version 10 for Windows was used in the analysis phase of the method, and provided a comprehensive ‘trail’ of decisions during this phase (Richards, 1999; Silverman, 2010).

3.6.2 Credibility

Credibility refers to the confidence in the ‘truth’ of the findings (Lincoln & Guba, 1985). It involves two processes: conducting the research in a believable manner and being able to demonstrate credibility (Houghton et al., 2013). The aim of credibility is to show that the research findings have truly captured what is really occurring in the context. To have credibility, a study needs to have rich and meaningful descriptions, internally coherent findings, and concepts that have been systematically related (Miles & Huberman, 1994). There are a number of provisions that researchers can take to gain confidence of the credibility of their study.

It is recommended that the researcher partakes in frequent debriefing sessions with his or her superiors (Appleton 1995; Burnard, 2002). However the usefulness of this approach is debated in the literature, with some authors suggesting that no two researchers will interpret the data in the same way (Andrews, Lyne & Riely, 1996; Cutcliffe & McKenna, 1999; McBrien, 2008), as it is an individual, unique process. Therefore it is recommended to use debriefing in qualitative research with caution (Cutcliffe & McKenna, 2004). This occurred throughout the research process of the current study, with the researcher meeting with their research supervisor on a weekly to fortnightly basis. The pair also communicated frequently via email. These meetings involved discussion of the research project, goals and outcomes, as well as the discussion of alternative approaches, and possible flaws in the proposed course of action, which could be remedied.

3.6.3 Transferability

The transferability of the study refers to whether the findings have applicability in other contexts (Lincoln & Guba, 1985). To be transferable to another similar context or situation, the meanings and inferences from the completed study are attempted to be preserved (Leininger, 1994).

Koch (1994) argues that to determine transferability, the original context of the research must be adequately or “thickly” described so that judgements can be made. Therefore the responsibility of the researcher lies in providing detailed descriptions for the reader to make informed decisions about the transferability of the findings to their specific contexts (Firestone, 1993; Lincoln & Guba, 1985; Stake, 1995).

In the current research study, thick descriptions were provided in order to enhance the study’s transferability. Detailed and appropriate descriptions were offered, particularly of the context of the
study, and examples of raw data, in the form of direct quotes (Houghton et al., 2012) were used so that alternative interpretations could be considered.

It should be noted that as the objective of this study was to generate new insight on psychological ownership in a specific situation, there are limitations around the transferability. This is due to the lack of previous research in this area, as well as the use of the Volkswagen diesel emissions scandal as a case study, which is an extreme and irregular context, and therefore may not be able to be replicated as similarly to this study.

3.6.4 Dependability
Dependability is often compared to the concept of reliability in quantitative research, and refers to how stable the data are (Graneheim & Lundman, 2004; Rolfe, 2006; Shah & Corley, 2006; Tobin & Beagley, 2004). Ideally, the dependability of a study would show that the findings are consistent and could be repeated (Lincoln & Guba, 1985).

The adoption of well-established research methods in qualitative investigation is of high importance. This can bring dependability to a study. Yin (1993) recognises that the correct operational measures must be employed for the concepts being studied. Therefore, the specific procedures employed could be derived, where possible, from those that have been successful utilised in previous comparable studies. In the current study, a grounded theory and case study method were used, which are sound methods in qualitative research. Also the studied closely followed the method of a previous study (Sanderson & Emmons, 2014), that also used discussion forum social media postings successfully. Other ways that dependability was increased within the study was by ensuring that the initial research questions were congruent with the features of the research design, and making sure that the entire design and analysis process was carried out with reasonable care.

3.7 Chapter Summary
This chapter has outlined the methodological procedures that were employed to conduct the present research study. Using a grounded theory approach to guide a single-case study, Facebook responses were inductively, thematically analysed in order to explore and understand the phenomena being studied. The findings of this research are described and discussed in the following chapter.
Chapter Four: Results

4.1 Introduction
The previous chapter examined the various methodological techniques employed for data collection in the current research study. This chapter will present the findings from the data, acquired from the responses of community members to the Volkswagen online brand community’s postings, as well as some discussion of each of these themes and their potential relevance to previous literature.

The data analysis process of the present study involved thematic coding of the data (Braun & Clarke, 2006). At the initial coding stage, 48 items of varying strength and importance were produced. After further reading, re-reading and coding, these 48 codes were then amalgamated or removed to identify 8 overarching themes that are of significance to psychological ownership, and 3 other-related themes.

In order to maintain the anonymity of responses while also indicating where a posting fell in a data set, reporting of the data made use of a two-character system. This was based on a similar system used in Sanderson and Emmons (2014). In the current study, the first character is a letter, which corresponds to the Facebook post that the response has been taken from. This means that:

Post 1: 25th September 2015 → A
Post 2: 28th September 2015 → B
Post 3: 17th October 2015 → C
Post 4: 29th October 2015 → D
Post 5: 18th November 2015 → E

The second character(s) is the number of a comment within the data set for a particular post. For example, a posting with a number code of 100 indicates that it is the 100th posting in a data set. Therefore a posting with a code of (D85) represents the 85th comment in the fourth Volkswagen USA Facebook post. Comments have been reported verbatim from the data, and therefore any spelling and grammatical errors were left intact (Sanderson & Emmons, 2014).

Below is a summary table of all of the themes that were revealed in the data (Table 2). The table presents each theme, along with the frequency of the themes as they appeared within the data set. As can be seen, the most popular responses overall were related to a long-term relationship with the Volkswagen brand, anger and frustration towards Volkswagen, and anecdotes of near-death experiences in a Volkswagen vehicle. Two of these themes; long-term relationship with the
Volkswagen brand and near-death experiences were found to be related to the psychological ownership construct, while the theme of anger and frustration towards Volkswagen did not reveal any psychological ownership feelings.

Table 2: Referenced themes in the data

PO = Psychological Ownership

<table>
<thead>
<tr>
<th>Theme</th>
<th>Type</th>
<th>Number of References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term relationship with brand</td>
<td>PO</td>
<td>52</td>
</tr>
<tr>
<td>Anger and Frustration</td>
<td>Other</td>
<td>43</td>
</tr>
<tr>
<td>Near-death experiences</td>
<td>PO</td>
<td>40</td>
</tr>
<tr>
<td>Feelings of Betrayal and Deception</td>
<td>PO</td>
<td>38</td>
</tr>
<tr>
<td>Blame of EPA</td>
<td>PO</td>
<td>32</td>
</tr>
<tr>
<td>Denial</td>
<td>PO</td>
<td>29</td>
</tr>
<tr>
<td>Encouraging Advice</td>
<td>PO</td>
<td>27</td>
</tr>
<tr>
<td>Unimpressed with remedial actions</td>
<td>Other</td>
<td>23</td>
</tr>
<tr>
<td>Sense of Family</td>
<td>PO</td>
<td>21</td>
</tr>
<tr>
<td>Blame of other car brands</td>
<td>PO</td>
<td>19</td>
</tr>
<tr>
<td>Addressing Volkswagen supporters are being wrong</td>
<td>PO</td>
<td>16</td>
</tr>
<tr>
<td>Organisational Commitment</td>
<td>PO</td>
<td>15</td>
</tr>
</tbody>
</table>

4.2 Timeline
The data set consisted of five separate Facebook posts that the Volkswagen brand had posted in their online brand community. These posts spanned from the 25th September 2015 until the 18th of November. These posts were staggered over time as the scandal unfolded; providing customers with apologies, information and updates. Because of this, the results were able to show how people’s responses were affected by time. This was useful in understanding the scandal and psychological ownership. The following table gives a brief summary of the most common or popular themes that were found from the data set, for each Facebook post by the brand community (ranging from themes 1-4), as well as whether they were related to psychological ownership.
Table 3: Most common themes per post

(PO) = theme related to psychological ownership

<table>
<thead>
<tr>
<th>Post</th>
<th>Time of Post (2015)</th>
<th>Theme #1</th>
<th>Theme #2</th>
<th>Theme #3</th>
<th>Theme #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>25th September</td>
<td>Blame the EPA</td>
<td>Near-death experience (PO)</td>
<td>Blame other car brands (PO)</td>
<td>Long-term relationship (PO)</td>
</tr>
<tr>
<td>B</td>
<td>28th September</td>
<td>Anger and</td>
<td>Addressing VW supporters as wrong (PO)</td>
<td>Encouraging advice (PO)</td>
<td>Long-term relationship (PO)</td>
</tr>
<tr>
<td>C</td>
<td>17th October</td>
<td>Downplaying (PO)</td>
<td>Anger and frustration</td>
<td>Questions about the process</td>
<td>Feel cheated or betrayed (PO)</td>
</tr>
<tr>
<td>D</td>
<td>29th October</td>
<td>Anger and</td>
<td>Questions about the process</td>
<td>Unimpressed with remedial actions</td>
<td>Downplaying (PO)</td>
</tr>
<tr>
<td>E</td>
<td>18th November</td>
<td>Unimpressed with remedial actions</td>
<td>Anger and frustration</td>
<td>Questions about the process</td>
<td>Feel cheated or betrayed (PO)</td>
</tr>
</tbody>
</table>

The following sections will provide each of the 5 Facebook posts made by Volkswagen in their online brand community, along with an explanation of the most popular consumer responses for each, and why these responses may have been elicited from each post. This will allow for a greater understanding of the context of each specific post in terms of content and timing, as well as an understanding of how community members’ responses showed patterns over the diesel emissions scandal period.

4.2.1 Post A: 25th September 2015

"Volkswagen would like to offer our deepest apologies to those affected by our violation of CARB and EPA emissions standards. We will remedy the issue, and we will make things right in order to win back the trust of you, our customers, our dealers, the government, the public, and our employees. We kindly ask for your patience as we work very hard to address this complex issue, and we will share more information as soon as we can. - Michael Horn President and CEO Volkswagen Group of America"

The first post made by the Volkswagen USA Facebook page in regards to the diesel emissions scandal was an apology on behalf of Volkswagen for their violation of emission standards. The five most popular responses to Facebook Post A are all of a positive nature towards Volkswagen. The most
commonly occurring response is people blaming the Environmental Protection Agency (EPA), while the third most popular response was the blaming of other car brands. Also high on the list are respondents talking about their near-death experiences with Volkswagen cars, and how the safety of the cars saved their lives, and therefore put them in support of the brand. The fourth most popular responses are community members demonstrating loyalty to Volkswagen.

It seems as though a possible explanation for these responses is due to the earliness of this Facebook post; people had only just found out about the Volkswagen diesel emissions scandal and therefore it is likely that many of them did not know much information on the issue. All of Volkswagen’s most supportive community members have initially come forward to defend the company, likely because they didn’t believe it to be true, or thought that Volkswagen could not have done anything so bad, as they had trust in the brand.

4.2.2 Post B: 28th September 2015

“We’ve launched http://VWDieselInfo.com to keep our community updated with information regarding affected TDI vehicles. Thank you for your patience as we work to remedy this issue and regain your trust.”

The second post made by the Volkswagen USA Facebook page was an announcement that the company had launched a website to provide update information on the TDI vehicles that were affected by the scandal. The responses to this Facebook post saw a change in the most popular responses. Unlike the frequent blame of the EPA and other car brands in Post A, in Post B the most common response was of anger and frustration to Volkswagen, followed by responses by those addressing Volkswagen supporters as being irrationally loyal, in the face of such great deception. However, the third and fourth most common responses were encouragement to Volkswagen and then loyalty to Volkswagen. It appears that community members were becoming more aware of the scandal at this stage, and how the emissions issue would affect their cars and themselves. Because of this, responses became more negative. There were still those positive reactions from Volkswagen supporters; potentially those who had feelings of psychological ownership.

4.2.3 Post C: 17th October 2015

“We have updated our VIN look up tool to help you determine if your 2.0L TDI vehicle is affected by the emissions issue. Please consult your Owner’s Manual for information on locating your vehicle’s VIN. We appreciate your ongoing patience and support. http://www.vwdieselinfo.com”

The third post made by the Volkswagen USA Facebook page was in regards to a tool that could look up if certain 2.0 TDI vehicles were affected by the emissions issue. The most common consumer response was of downplaying, where responses explained that what Volkswagen had done was not
as bad as had been made out, and that there other instances of behavioural misconduct that should take priority over Volkswagen’s emissions issue. Many of the responses also warned others not to buy Volkswagen products, while a number of community members had a lot of questions about the remedial process. People also displayed feelings of being cheated and betrayed by Volkswagen in their responses.

4.2.4 Post D: 29th October 2015

“To help keep our customers informed with the latest information, we encourage owners of affected 2.0L TDI vehicles to sign up to receive communications and updates. Visit vwdieselinfo.com to sign up.”

The fourth post by the Volkswagen USA Facebook page was an announcement and reminder for 2.0 TDI vehicle owners to sign up to the information website in order to keep up to date with the latest news of the scandal. Most commonly, respondents displayed messages of anger and frustration towards Volkswagen, followed by questioning of the remedial process. Many were unimpressed with Volkswagen’s remedial actions, while some supporters tried to downplay the incident.

4.2.5 Post E: 18th November 2015

“2.0L TDI Owners, we’re working hard to make things right. Visit http://www.vwdieselinfo.com/goodwill_package/ for more information.”

The fifth post, and the final one analysed by the current research study was posted almost two months after the revelation of the Volkswagen diesel emissions scandal. By this stage the second wave of cars affected by the diesel emissions issue had been revealed, and Volkswagen was in the process of offering a “customer goodwill package”. The most popular response was being unimpressed with remedial actions, while the next most popular responses displayed anger and frustration towards Volkswagen. A number of others questioned the remedial process, while the fourth most common response was of feelings of betrayal and deception. All four of the most popular responses to this post displayed negativity towards the Volkswagen brand.

By this stage it appears that there has been a decrease in support and loyalty for Volkswagen, with the most popular responses being negative. The reason for this could be that Volkswagen have not sufficiently responded to the crisis overall; people are unimpressed with its attempts at compensation, and do not feel satisfied with the result. This is bad news for Volkswagen, as even their most supportive enthusiasts appeared to be taking a back seat in comparison to the negatively charged Volkswagen community members.
4.3 Themes

4.3.1 Psychological Ownership Related Themes
There were a number of themes that emerged from the data that were related to the psychological ownership construct and psychological ownership literature. These are listed and explained in the following section.

4.3.1.1 Near-death Experiences
Some of the Facebook responses elicited strong messages of support, based on the individual’s relationship with their Volkswagen vehicle, and the brand. Some of the most emotional and heartfelt responses of positivity towards the brand came from those who had experienced themselves or loved ones being in vehicle accidents in a Volkswagen, but surviving. “VW has supported me as a brand and as a vehicle that’s saved my family’s life.” (A58)

These responses credited Volkswagen and its product as the reason that they are safe and alive today.

“I love my 2010 Jetta... took a bad hit shortly after I purchased her and we both are still here to testify. I believe that if VW were not built with the passenger safety in mind, I may not still be here.” (A78) and “I love VW, it saved my life. Head on collision & all I did was fracture my foot and bruising from the airbag. Quote from EMT when I asked abt my car: “By the look of you. Your car did what it was supposed to do”. I did not have a single scratch. Thank GOD & VW.” (A44)

Respondents who had been through these near-death experiences ultimately were not as concerned about the diesel emissions issue, because they held the view of safety being the most important factor of a car, after having been through a serious incident: “I can’t say much about their emissions, but if I have to give up an emissions issue for the trade-off of safety, I will pick my VW every time. I support you VW! Thank you for protecting my family.” (A37)

The results show that a number of respondents displayed messages of support as a result of psychological ownership, which they credited to the safety of their Volkswagen vehicles; having experienced a near-death collision or incident in a Volkswagen vehicle and surviving due to the engineering of the cars. When relating this experience to the literature on psychological ownership, it becomes apparent that it does not quite fit with any of the three proposed routes or “experiences” in which one comes to feel psychological ownership. The three routes to psychological ownership are controlling the target of ownership, coming to intimately know the target of ownership, and investing the self into the target of ownership (Pierce et al., 2001, 2003).
Out of the three mentioned paths, the near-death experience that has been spoken about by Volkswagen brand community members appears to be most related to the owner coming to intimately know the target of ownership. When Pierce et al. (2003) describe this route as the depth and breadth of knowing the target of ownership, there is reason to believe that the relationship one develops with their vehicle when they are in a serious car incident, and the individual survives (often in part due to the structure of the vehicle) can be thought of one with serious depth. It appears that this proposed route to psychological ownership does not only occur when relationships form because of the increased knowledge or information about the target of ownership, as much of the existing literature predicts (Beaglehole, 1932; James, 1890; Pierce et al., 2001, 2003; Weil, 1952). There may in fact be a particular experience or incident that does not necessarily require the more time-consuming experience of coming to intimately know the target that is usually thought of in the literature. This appears to be another possible way in which one comes to intimately know a target of ownership, and it would be worthwhile for research to further explore the depth of psychological ownership when individuals have been through an intense or serious incident or event with their possession. This may not be limited to near-death experiences; it could also represent life events such as marriages, birthdays and life achievements.

4.3.1.2 Long-term relationship with brand
Support for Volkswagen was also revealed in brand community members who had developed a long-term relationship with the brand and its products. A number of members displayed a strong sense of affinity to Volkswagen through their repeat purchases of the Volkswagen brand. Many claimed that they had owned several Volkswagen’s and that they would continue to own Volkswagen vehicles for the rest of their life. These enthusiasts of the brand could not see themselves owning any other car brand. Such examples of responses demonstrating their long-term commitment and relationship with the brand are:

“Once something means so much to you it’s hard to steer away from it.. My second VW and former Audi owner. I will always be a faithful VW customer. Best of luck!” (E31)

“You still have our support VW! I’ve been driving VW’s since I could drive and have loved every single one. People that actually understand the situation will never lose trust in VW.” (B33)

“We will continue our 25 years of loyalty…” (A66)

“I’ve never owned anything but VW, first car and i hope last. Got 3 now. I stand behind you.” (C39)

“I love my VW Jetta, i have been driving VWs for over 15 years and I will drive them
These results of the present study show that members of the brand community who have had long, continuous relationships with the Volkswagen brand tended to show stronger messages of support and loyalty to Volkswagen than those who did not. This finding appears to give evidence of one of the proposed routes to psychological ownership; investing the self into the target of ownership (Pierce et al., 2003; Pierce & Jussila, 2011).

Based on the view that individuals own their labour themselves (Locke, 1690), individuals may come to feel that they own anything that they create, shape or produce (Pierce et al., 2003). This labour can include an investment of time, physical energy or mental drive (Pierce et al., 2003). Even the act of buying an object can be thought of as a form of creation (Sartre, 1969), and therefore evidence of an individual simply having bought and owned a Volkswagen vehicle in the study’s findings is thought to be some form of investing themselves into Volkswagen. However, it can take time for the emotional aspect of ownership to strengthen (Strahilevitz & Loewenstein, 1998), and this is where those community members who have owned several Volkswagen vehicles, or have owned their vehicles for long periods of time appear to have developed strong psychological ownership towards their vehicles and the Volkswagen brand.

Similarly, previous studies (Peck & Shu, 2009; Zajonc, 1968) have shown that individuals can feel an increased sense of ownership after even basic exposure to a stimulus. Some of the Volkswagen community members have been customers of the Volkswagen brand for 25 years, which represents that a strong psychological ownership relationship between these customers and the brand that has strengthened over time (Strahilevitz & Loewenstein, 1998).

Furthermore Pierce et al. (2003) argue that one can also be invested in the target of ownership through real or perceived responsibility for the target, ultimately leading to feeling of psychological ownership. This concept can be linked to those long-term owners of the Volkswagen brand, in that they have ownership responsibility for their cars, and have to invest time and energy into doing things to maintain the car such as fuelling it, making sure it is fit for driving, ensuring that its registration is up to date, and cleaning and servicing the vehicle.

4.3.1.3 Organisational Commitment
The results of the present study show that a number of employees of Volkswagen responded
positively to the Volkswagen brand in the wake of the diesel emissions scandal. These employees ranged from the salespeople, maintenance staff, engineers and corporate employees. Their responses displayed the strength of their bond with Volkswagen and the wider Volkswagen community, with many stating that they believed Volkswagen to be the best employer:

“I am and will loyally remain, a proud employee of the greatest car manufacturer in the world.” (A39)

“I am a VW workers and I stand beside VW because I know the problem will be fixed and are cars are number one in Safety in the US and we will overcome this (VW Strong and VW Proud).” (A83)

“Love working for Volkswagen the best employer of choice. I know we will stand behind our product and customers.” (A52)

These responses from the employees of Volkswagen indicate that they are maintaining a high level of organisational commitment to the company. This is shown through their messages, which state that they want to continue working for Volkswagen, and would like to stand by Volkswagen despite the news of the diesel emissions issue (Pierce & Jussila, 2011). Their responses display support towards Volkswagen, and they have also attempted to defend the company from others who are not supportive of the brand. These responses can be seen to represent the proposed psychological ownership outcome of organisational commitment (Pierce & Jussila, 2011).

Their organisational commitment appears to be affective (Allen & Meyer, 1997), because the majority of these responses are focusing on the positive feelings that the employees have towards the company, such as that Volkswagen is: “the best employer of choice” (A52) and the “greatest car manufacturer in the world” (A39). It is unlikely that employees would share such praise for Volkswagen if they did not enjoy working for the company. Therefore, it appears that these individuals have a strong psychological attachment to the organisation (O’Reilly and Chatman, 1986) through their displays of organisational commitment.

In organisational commitment literature, it has been generally observed that organisational ethical values and organisational commitment are significantly related; that is when an organisational has ethical value that are in-line with the individual, they are more likely to remain in the organisation and be highly committed to their work (Posner & Schmidt, 1993; Sims & Kroeck, 1994). Volkswagen carried out unethical behaviour within the diesel emissions scandal, and therefore it would be expected that based on the previously mentioned literature, ethical employees would lose their organisational commitment in the wake of the scandal, as they would not want to be associated with
the brand. However this does not appear to be the case. In this study, overall employees showed high levels of organisational commitment to Volkswagen. This supports Pierce and Jussila’s (2011) proposal that organisational commitment is an outcome of psychological ownership. It seems that psychological ownership is the most logical explanation for the responses of the employees, as these responses deviate from the aforementioned general organisational commitment literature. Therefore, the findings of this study have revealed that the employees of Volkswagen have displayed psychological ownership towards the brand.

4.3.1.4 Encouraging Advice

Some people showed their support by positive encouragement towards Volkswagen in their bid to rectify their mistake. These responses pointed out the good parts about Volkswagen that have attracted them to the brand in the past, and believed that Volkswagen could get back to their original, favourable image if they take the right steps:

“I like VW but really if you want our trust VW. Offer up the main criminals. Fall on your sword. Rebuild the trust. You make a great product but someone criminally took advantage of people and harmed the environment. We or you don’t need to cheat. VW is a great brand before this incident. Fix the problem and move on.” (A118)

These responses provided encouragement for Volkswagen, in how to earn back the trust of their consumers:

“I know VW will do the right thing to take care of the issue.” (C16)

“While I do not like the fact that unscrupulous management came up with a cheat for the system, I remain confident that the company can be turned back in the right direction, earn the trust of consumers and regulators, and once again truly be “the people’s car.” (B24)

They also provided suggestions of specific things that Volkswagen could do in response to the situation:

“I hope VW group recovers from this, and compensates those who have lost out.” (B99)

“Scrap the diesels altogether, but keep working on R&D to enable them to pass EPA requirements, in case you want to bring them back in the future. For the immediate future, focus on hybrids and electrics, and maybe even hydrogen, to fill that void.” (D61)

The above findings suggest that consumers can be proactive in their responses to a product and/or brand, and display citizenship behaviours. Citizenship behaviours are a proposed outcome of psychological ownership (Pierce & Jussila, 2011).
Beaglehole (1932) and Wilpert (1991) agree that feelings of possession can cause proactive behaviour that is meant to protect and enhance the target of psychological ownership. Examples of such behaviour are helping, whistle-blowing, criticising the status quo, and offering suggestions (Pierce & Jussila, 2011). Citizenship behaviours are usually referred to in an organisational context, in which employees display citizenship behaviours on behalf of the organisation that they work for (Pierce, Jussila & Cumings, 2009). Pierce and Jussila (2011) contend that citizenship behaviours are an outcome of psychological ownership.

The current research study has found that some Volkswagen enthusiasts have been acting as citizens of the Volkswagen brand, and performing citizenship behaviours through their Facebook post responses such as trying to help the company with advice and suggestions for their recovery plan. This use of voice proves to fulfil the suggestion of Jussila et al. (2015), that in a marketing context, citizenship behaviours can stem from psychological ownership in the form of customer’s use of voice as well as word-of-mouth. The behaviour of some brand community members, in their responses to Volkswagen mirror customer citizenship behaviour, which is where respondents effectively fulfil customer in-role behaviours such as purchasing a product (Ahearne et al., 2005; Van Dyne et al., 1995) but these customers also engage in extra-role behaviours, in terms of voluntary and discretionary behaviour of which is not expected or rewarded (Groth, 2005). The responses that have displayed customer citizenship behaviour can potentially provide great benefit to the organisation (Gruen, 1995), and in the case of Volkswagen this could occur should Volkswagen management find value in the consumers responses of advice and suggestions in the study (Gruen, 1995).

4.3.1.5 Escalation of commitment

In the psychological ownership literature, an escalation of commitment has been proposed as a possible outcome of psychological ownership (Pierce et al., 2003; Pierce and Jussila, 2011). An escalation of commitment (Guha, 2009; Pierce & Jussila, 2011) occurs when an individual continues commitment to some form of action, even in the face of warning signs that suggest that bad decisions have been made (Staw, 1986; Staw & Ross, 1987). There is evidence in the results of the current research study that point to the respondents displaying an escalation of commitment towards Volkswagen, as an outcome of the psychological ownership that they feel towards the brand. These respondents have attempted to protect and defend Volkswagen despite the fact that the company have taken part in unethical and illegal activity. This can be seen as an escalation of commitment. The following sections will outline how the respondents demonstrated an escalation of commitment towards the Volkswagen brand in the form of trying to downplay the impact of
Volkswagen’s behaviour, as well as attempting to shift the blame of the incident from Volkswagen, onto other entities.

4.3.1.5.1 Denying the impact of Volkswagen’s behaviour
There were a number of responses that downplayed the seriousness of Volkswagen’s fraudulent behaviour. Some people thought that there was too much of a big deal being made of the diesel emissions issue. Some of these people also thought that what Volkswagen had done was not as serious as other issues that have occurred in the past, with examples such as:

“I honestly have no idea why everyone is freaking out so much. Volkswagen cars are among the most durable and longest lasting on the market.” (D69)

“From where I’m standing the worse thing Volkswagens done is try to keep their customers happy by letting their cars achieve better fuel mileage. Then I’d say it’s not too bad. At least they didn’t try and cover up a safety issue like so many other manufacturers have.” (A33).

“The ones that are "upset" are the ones lying about why they purchased the vehicle in the first place. All they see is a way to make money. VW has been a fantastic car. Did they lie, yes, but what they did was genius. Hyundai just had a recall of 400,000+ because the connecting rod bearing fails and the motor seizes. I think I would rather be "poluting" than have my motor seize on me while I'm driving down the road. I will not be part of any lawsuit. VW lied about the emissions, but they produce a fantastic car and will always have my business.” (B89)

Some people felt that Volkswagen had done no wrong by cheating emissions testing, and that they were in fact doing a good thing for the customers or for the company:

“You did nothing wrong. Thank you for trying to get us more for our money when our government refuses to actually protect the environment.” (A117)

“I love the fact you are apologizing but for what? Pure genius for doing what you did (ok maybe not legal) but your cars are great. You outsold every other car brand in America, and no one got killed.” (A54)

Literature on the escalation of commitment points out that one of the drivers for such behaviour is the individual’s perceived need for self-justification (Drummond, 2014). An example of this is a manager, who has invested scarce resources into a business. The manager will then be driven to persist with the business and prove to themselves and others that their decision was correct (e.g. Brockner, 1992; Drummond, 1994; Staw, 1976). In order to prove this self-justification, this
behaviour may be accompanied by denial and other ego-defensive behaviours (Drummond, 2014). This denial can be seen through the denial of actions or through the denial of the impact of actions, which may occur when people attempt to downplay or even ignore the negative actions (Nisbett & Ross, 1980; Staw & Ross, 1987; Zhang & Baumeister, 2006). As downplaying is behaviour within escalating commitment, it can be seen as an outcome of psychological ownership.

The aforementioned quotes from the present study provide evidence of these feelings of denial in brand community members who appear to be most supportive of Volkswagen. These Volkswagen enthusiasts appear to be emotionally invested in the brand, and to display psychological ownership feelings that have lead them to attempt to deny the harm that has been caused by Volkswagen’s actions. This denial has been displayed in the form of downplaying the behaviour of Volkswagen, by for example comparing it with other, more serious incidents in history. These responses have displayed an escalation of commitment as a result of psychological ownership feelings from the members towards the Volkswagen brand and its products.

4.3.1.5.2 Blame-shifting
One commonly occurring result of the present study was of community members’ responses blaming others for Volkswagen’s fraudulent actions, in order to minimise the impact on Volkswagen. Although this finding has not been specifically mentioned in previous psychological ownership literature, it does bear resemblance to the escalation of commitment outcome of psychological ownership. This is explored in the present section.

The results from the present study that indicate a shift of blame show that respondents most frequently blamed the Environmental Protection Agency, which was the government organisation that uncovered Volkswagen’s cheating software. Other respondents blamed other car brands such as Toyota and General Motors, who had also encountered car scandals in the past, which some Volkswagen online community members perceived as being worse than the Volkswagen emissions scandal.

4.3.1.5.2.1 Blame of the EPA
The most common shift of blame was from Volkswagen to the Environmental Protection Agency (EPA), which was the group that tested Volkswagen’s diesel emissions, and identified the fraudulent software. There were a few different ways in which this blame was directed towards the EPA.

Firstly, there were those responses that portrayed dislike, hate or blame on the EPA, but with no logical explanation. Such examples are “Screw the EPA” (A67), “EPA is a joke” (C49), “Fix the EPA. Nothing wrong with my TDI #stillloveytdi” (A41), “We stand with Mr Horn and VW. But we also have a hatred for the EPA.” (A105) These responses can be seen as a simple defence mechanism
employed by community members who didn’t seem to think that Volkswagen has done anything wrong.

Other responses provided reasoning for their blame of the EPA in this issue. Some responses showcased that community members believed the EPA was taking on double-standards, and choosing to punish Volkswagen yet letting other environmental issues remain unsolved. This came from examples such as “The real crooks here is the EPA and its illusion of environmental protection with blanket requirements and outdated, inefficient techniques for clean emissions” (A69) and “I’m quite certain the priorities in the EPA are terribly skewed…” (C54) In a similar way, respondents demanded that the EPA re-focus their priorities, suggesting that the Volkswagen diesel emissions issue should not be their main concern, at least not in comparison to other issues that respondents perceived needed to be solved more promptly: “Hey VW, ask the EPA when they are going to fix my river in Colorado!” (A55).

Some respondents even blamed the EPA for causing some environmental damage through their funded projects, such as: “Maybe the EPA should worry about the billions of gallons of water they are destroying by polluting our rivers with their tax funded projects, before worrying about VW” (A88).

A few responses attacked the EPA for their presumed focus on money, and perceptions of the EPA's lack of genuine concern for the diesel emissions issue: “The epa is attacking VW for money, not solely for emissions. If it was just for the environment, they would clean up their act, and be strict about all vehicles emissions not just those under 20 years old” (E57).

Those brand community members that tried to shift the blame from Volkswagen to the EPA also claimed that the EPA had set unreasonable emissions regulations: “Don’t apologise our government is insane, the EPA has crippled the trucking industry with there regulations on diesel engines and no one cars, it’s our government who needs to apologize for focusing on regulations that no one can meet at this time” (A81) These responses seemed to believe that Volkswagen would not have cheated on their emissions testing had the regulations not been unreasonably strict: “This might not have happened had the government not set such unrealistic NOX emission standards for diesel motors” (A75). In some cases, respondents even tried to maintain that Volkswagen had done no wrong: “Volkswagen, be proud you provided high performance in spite of impossible emissions requirements that are totally unnecessary” (C45).
4.3.1.5.2.2 Blame of other car brands

For some people, their responses evoked a sense of blame-shifting onto other car companies, and historical situations in which a car brand other than Volkswagen had provided a dangerous or unsafe offering: “I’m still amazed at all this negative press over this. GM, Ford, Toyota have cars that have killed people for issues and VW is being made out to be the evil one because they duped the government with their tdi line?” (A66)

For these people it was much more significant that there were car makers out there who had vehicle faults that could potentially physically harm or even kill people.

“During that same time period, as many as 303 DEATHS have occurred from GM vehicles, 89 Toyota vehicles, and 20 Fords. Not to mention Takata airbags have been linked to deaths and injuries when deployed within Fiat Chrysler, BMW, Mitsubishi, General Motors, Toyota, Nissan, Ford, Mazda, Subaru, and Honda vehicles. No one has died from a VW or Audi’s emissions.” (B41)

This led to the respondents attempting to redeem Volkswagen, and trying to make other members of the brand community look at the perceived worse actions of other car manufacturers:

“Well let’s see now, do I want to drive a VW that puts a little more smog in the air or would a prefer a GM car that catches on fire or the brakes go out without warning. Hmmm I think I’ll stick to my VW thank you very much.” (D17)

As previously mentioned, thus far, a shifting of blame outcome has not been mentioned in the extant psychological ownership literature. This could however be a worthy theme to explore in future research. The reason for this is that this shifting of blame seems to fit within the psychological ownership outcome of an escalation of commitment. Likewise to an escalation of commitment, a shift of blame focuses on committing to the target (Volkswagen), even though one knows that their behaviour was unethical and illegal, and trying to defend the target’s action, and to shift the blame to deflect the bad attention from the target of ownership.

Relatable to the blame-shifting result in the current research study is some of the literature on image repair, which outlines some image restoration strategies that can be taken when a person or organisation has committed an offensive act for which they have been accused responsibility (Benoit, 1995). One such strategy is to shift the blame onto others, something that is seen in the Volkswagen case study. According to Benoit (1995), the “immediate effect of (successfully) shifting the blame is to damage the reputation of the other person. However, the ultimate end or goal sought by shifting the blame is to exonerate the source.” (p.80). This work provides a possible explanation behind the shifting of blame that has occurred from the respondents in the current research study. It can provide support to the fact that the members of the brand community who
have shifted blame onto others have not necessarily done so with the intention of harming the EPA or other car brands, but that have ultimately done so to exonerate Volkswagen, and to protect and defend their brand.

Although the psychological ownership literature does not specifically talk about such behaviours being an outcome of psychological ownership, it is an interesting finding that may have some relevance in similar cases, and therefore could be further researched in the psychological ownership literature.

4.3.1.5.2 Responses that address the escalation of commitment

One interesting and recurring response from within the dataset was from those community members who were baffled by the reactions of others who were loyal, supportive and forgiving of Volkswagen: “I don’t understand this blind trust to a company who admittedly lied to its consumers, governments and completely disregarded the EPA.” (B16)

Due to the outpouring of support from loyal Volkswagen consumers, some respondents took to the Facebook posts in order to voice that Volkswagen supporters were far too forgiving of Volkswagen. Some examples are shown below:

“Brand loyalty is great, but were they loyal to you when they sold you these cars that you are now stuck with, for years to come?” (B26)

“Amazing. This company flat out lied. How is everyone so willing to “stand by their brand” and turn a blind eye to the deception? I love my tdi but feel duped.” (B90)

All this “unconditional love” for the VW-brand makes me think the people will still love VW in their deepest heart, even though VW put their beloved VW in a shredder...” (C42)

These respondents seemed to feel that Volkswagen supporters were blindly following the company out of their loyalty, however were not thinking of the bigger picture and about how the scandal was affecting other people, the law and the environment:

“I am just amazed by the comments some folks make about the TDI diesel VW. They don’t care they were lied to and their car has lost most of its value. All they care about is the gas mileage and loyalty to a brand that lied to them.” (D68)

This finding from the data set appears to be of interest to the proposed psychological ownership outcome of an escalation of commitment (Pierce and Jussila, 2011). It appears that it is rather obvious to these respondents that some members of the Volkswagen community are displaying feelings of an escalation of commitment. These members are acknowledging it, and feel like it is a
ridiculous thing to do. This result indicates that these respondents do not feel psychological ownership towards their Volkswagen vehicles or the brand.

4.3.1.6 Sense of Family
Another response from within the data set was around the idea of the “Volkswagen family”; that the Volkswagen brand, and its consumers and supporters were like a family. “I have always felt like I was part of Das Family... and family sticks together even when someone makes a bad mistake” (A40).

These respondents seemed to feel such a bond with their car, the Volkswagen Company, and all of the other Volkswagen consumers that they had the utmost faith in Volkswagen, and would never stray from supporting the brand. Examples are shown below:

“We are a Volkswagen Family and will NEVER drive anything but a Volkswagen!” (B19)

“#vwforlife! We are a Volkswagen Family and will NEVER drive anything but a Volkswagen! You make the most reliable and safest vehicles on the road! We love our TDIs and every other VW we own, from aircooled to watercooled...” (B19)

“We are and will always be a VW family.” (A107)

This collective notion of support towards the Volkswagen brand, through the use of “we” and “family” resembles the proposed concept of collective psychological ownership (Pierce & Jussila, 2011). Pierce & Jussila (2011) have suggested that the concept of collective psychological ownership may exist within groups of individuals who feel ownership of the same object or possession. Pierce and Jussila (2011) believe that collective psychological ownership would be a logical concept because individuals like collective actions and intimacy with other members of groups (Triandis, 1995) and when individuals feel like they are part of a group, a process of collective identification takes place (Pierce & Jussila, 2011). Individuals can experience kinship within a tight-knit group, and are likely to remain part of a group when there are conditions of high interdependence required to communicate, share knowledge and control, and jointly plan a course of action and solve problems (Wagemenon, 1995).

The notion of collectivism amongst the community members in the study also highlights the sense of community that may be felt within the Volkswagen online brand community. Research on brand communities has observed that the shared use of products and services of a particular brand forms lasting interpersonal connections amongst like-minded individuals (Muñiz & O’Guinn, 2001; Schau et al., 2009; Schouten & Alexander, 1995). Similarly, in an online brand community, the community’s
focus is on the brand itself; however they ultimately exist and persist because of relationships amongst their members (Jang et al., 2008). This serves to explain the members’ feelings of “family” within the Volkswagen online brand community. The strongest responses that use the pronoun “we” in describing the brand community and those displaying the “family” feelings appear to feel this way as a result of collective psychological ownership, where they believe that the collective actions and opinions of the group are the most important (Pierce & Jussila, 2011).

Additionally one of the three main characteristics of a brand community is the sense of moral responsibility that accompanies members and their feelings towards the community as a whole and to its individual members. This can lead to the collective action of a brand community (Muñiz & O’Guinn, 2001), and therefore may be a contributing factor to the Volkswagen brand community’s collective psychological ownership.

4.3.1.7 Feelings of betrayal and deception
Some members of the Volkswagen online brand community responded to the diesel emissions issue through messages that expressed that they felt they had been deceived or betrayed by Volkswagen. These members’ responses often entailed how they were once avid supporters of Volkswagen, and spread positive word-of-mouth of the brand, but for them to hear about the emissions scandal was a huge sense of betrayal. Effectively these people had lost trust with Volkswagen, something which was disappointing and hurtful to these community members. Below are some examples of these responses:

“This was a huge disappointment to hear that we got duped by VW, especially since I’ve been a loyal customer, have owned 5 VW’s over the years. Now, what I’m hearing is that the two we have now will lose engine power and value, very upsetting. I feel like I’ve been ripped off yet again by big corporations.” (A96)

“Shame on you Volkswagen USA. How dare you “kindly ask for the patience” of people you have been cheating on for years? How dare you believe you can “win back the trust” of consumers and citizens you’ve been voluntarily lying to? You have shown such disrespect to all of us who are fighting for things to change, all of us who are fighting for companies to respect us, our health and our children’s health. Shame on you.” (A113)

Those who appeared to feel especially deceived were community members who lived a “green” lifestyle. By consuming Volkswagen’s products, they had thought they were carrying out environmentally conscious and efficient behaviours; however the realisation that they were damaging the environment much more than they had thought through their Volkswagen vehicles
was the ultimate betrayal.

“I love my VW Golf TDI for many reasons but I don’t trust you anymore, VW. You lied. You cheated. You polluted. You do not deserve my loyalty and years of promoting you to everyone I ever met about how "green" you told me your products are.”

"We bought a diesel Jetta Sportwagen precisely because we are environmentalists and wanted to use our purchasing power to increase US demand for cleaner, more fuel-efficient cars. However, the recent revelations about the true environmental impact of our and similar diesel models sickens us and makes us profoundly sad that we have been greater polluters because of our "green" car choice 2 years ago. And of course the fact that they blatantly lied to us makes it that much worse. I want to add my voice to the chorus of "you betrayed us" and "save the environment." (B97)

The psychological ownership literature proposes that psychological ownership can be associated with personal functioning maladies (Pierce et al., 2003; Pierce & Jussila, 2011) When people witness the radical alteration of targets that they perceive as being theirs, they may come to feel personal loss, frustration and stress (Pierce et al., 2003; Pierce & Jussila, 2011). The feelings of deception and betrayal that are displayed in the findings of this study infer this sense of loss that Pierce et al. (2003) first introduced. These consumers seemed to have believed that their vehicles were of a clean, green and ethical standing in the car industry. Upon finding out that their beloved vehicles were in fact contributing to much higher nitrogen oxide emissions levels than expected these consumers experienced a shocking and radical change in their perception of the target of ownership. The responses indicate that these brand community members are now seeing their Volkswagen vehicles, and the Volkswagen brand that they have up until now supported in a completely different light, and they have no longer agree with what Volkswagen stands for. These effects find their origin in the lack of control over what once was theirs (Bartunek, 1993). James (1890) states that a loss or diminishing of possessions can lead to “the shrinkage of our personality” (p. 178), and Cram and Paton (1993) observe that in extreme cases, this feeling can lead to sickness and the loss of will to live. Although the effects of the diesel emissions scandal do not appear to be as serious as some of those stated, it can been seen that there is a loss, and that the community members feel cheated, betrayed, shocked and sad about what has happened. These Volkswagen online community members will likely question their identity as the target of psychological ownership no longer represents what they thought, or what they want to be.

Furthermore, Dirks et al. (1996) propose that individuals will resist change when it is seen as
threatening to the individual’s sense of self, and when the change takes away or diminishes the core of the target of psychological ownership. This is what appears to have happened in the case of these particular brand community members, and although they were not resisting change, the deception and betrayal that they felt has lead them to forfeit the brand, therefore resisting the brand itself.

4.3.2 Other Themes

There were three other themes of that were prevalent in the data set that did not provide significant findings in relation to the psychological ownership construct. These themes are explained in the present section.

4.3.2.1 Anger and Frustration

The most popular response in the dataset was that of anger and frustration towards Volkswagen. There were a number of different reasons that emerged from the data set as to why these respondents were feeling angry and frustrated.

Upon the EPA’s revelation of the Volkswagen diesel emission scandal, the reactions of respondents were full of anger and frustration, due to the seriousness of the issue on the environment, as well as the impact on Volkswagen car owners, as they were lied to, and would eventually encounter a devaluation of their cars.

“We bought this car thinking that we were helping the environment only to find out that our emissions have actually been harming it for all these years. I will never buy another VW and there is nothing that the company could ever do to regain my trust!! We have bought 2 new vehicles from you VW, but never again.” (B108)

Some respondents displayed anger and frustration towards Volkswagen due to the company’s attempts at the remedial actions, such as Volkswagen’s information website, and VIN look-up tool. In such cases, respondents often felt that Volkswagen was not doing enough to help customers, and were unhappy and frustrated at the company because of this. Examples of such responses are:

“A website? Get real! Gotta do a heck of a lot more for me than a website - where’s the letter, phone call, and media coverage about what the consumers need? All I’ve heard on TV is VW market share, etc. Where’s the 10K+ for my ’09 Jetta TDI? VW hasn’t even had the guts to contact us??? All they do is build a website? How lame! They lied to we consumers, the world and the international environmental orgs!! Every time I sit in my TDI and turn the key, my heart sinks. I graduated from WVU and I’m so proud they found the deception! VW is a bunch of liars and I’ll NEVER buy another VW! Or Audi!” (B66)
“Why don’t you keep me informed with the information you already possess like the fact you collected data when we purchased the vehicle. You know the one you already knew about when you illegally sold it.” (D80)

Feelings of anger and frustration also manifested themselves in the form of impatience, especially in response to the last posting by Volkswagen in November, which was almost 2 months after the scandal first emerged. These responses displayed impatience at having to wait so long to receive compensation, and also frustration that the remedial actions that Volkswagen was taking were still not sufficient in response to the scandal:

“I think we’ve been patient enough. I have no more patients for Volkswagen. I’ve done nothing wrong except to choose VW for a new car. Volkswagen has done absolutely nothing to deserve me as a customer. As a matter of fact, it seems they are intentionally trying to lose customers. Mission accomplished, I’m done.” (E20)

“I guess all of us impacted need to come up with our own FB page before VW will approach any REAL compensation... VW you’ve had 4 months now..” (E35)

"2.0L TDI Owners, we’re working hard to make things right....." ?? You're working very hard at being very horribly slow!” (E18)

The psychological ownership literature does not mention feelings of anger and frustration as a specific outcome of the construct. Anger does not seem to be significantly related to psychological ownership, and therefore it is more appropriate to draw from the psychology and situational crisis communication research to explain this response.

In psychological literature, anger is considered an emotive reaction to an adverse state (Canary & Semic, 1999), and it is often caused by a specific action (Soscia, 2013). Causation is an important antecedent of anger; when one’s existence is affected by a negative event, one instinctively attempts to identify responsibility. When the external agent who is responsible for the event is identified, the individual comes to feel anger towards that agent (Clore, Ortony, Dienes & Fujita, 1993; Izard, 1991; Lazarus, 1991). Likewise in situational crisis communication theory literature, attribution theory can be applied, which posits that people search for the causes of events, especially those that are negative and unexpected (Weiner, 1985; Weiner, 2006). When a person attributes responsibility for an event they will experience an emotional reaction. Anger and sympathy are the core emotions of attribution theory. Behavioural responses are negative when a person is judged responsible and anger is evoked (Weiner, 2006). In the case of the Volkswagen
diesel emissions scandal, Volkswagen committed the specific action of cheating emissions regulation testing with their vehicles, and therefore consumers identified Volkswagen as being in a position of responsibility. This caused consumers to develop feelings of anger towards the brand. People can become angry with those who have offended them when they feel that the negative behaviour could have somehow been controlled by the external agent (Canary & Semic, 1999). This is true in the Volkswagen case study, where Volkswagen had control its actions and the brand chose to use the fraudulent software. Consumers are likely angry because this unethical behaviour did not need to happen, and Volkswagen could definitely have stopped it from occurring, by remaining an ethical brand.

In particular, anger appears to be a common consumer response to corporate scandal, and therefore it is not surprising that angry consumer reactions occurred. Because consumers are stakeholders who expect organisations to uphold certain standards, ethical scandals and crises will disturb these expectations. Stakeholder attributions of crisis responsibility have affective and behavioural consequences for an organization (Coombs & Holladay, 2005; McDonald & Härtel, 2000). It can lead to upset and anger, with a possible threat to the relationship between the organisational and its stakeholders organization (Coombs & Holladay, 2005; McDonald & Härtel, 2000). As a consequence, stakeholders may also sever connections to the organisation and/or create negative word of mouth (Coombs, 2007).

4.3.2.2 Lack of Psychological Ownership
The findings of the present study indicate that some of the Volkswagen brand community members did not have psychological ownership feelings towards Volkswagen. Those that particularly demonstrated this absence of psychological ownership were members who questioned the remedial process, as well as those who appeared to unimpressed with the remedial process.

4.3.2.2.1 Questions about the process
Upon Volkswagen posting news of information for owners about the diesel emissions scandal and how it would affect consumers, naturally there were many responses from the online brand community members in the form of questions. People questioned the remedial and compensation process at all five of the Volkswagen USA Facebook posts, as they appeared to be anxious about how the issue would affect them. These questions ranged from specific technical questions, questions about the cars true effect on the environment, questions about the legal process, and questions about customer service and about the “customer goodwill package” that was launched. Some examples are shown below:

“So when it's claimed that the current status is that the vehicles are fully safe to drive (I understand the technically for you as a driver), but are they fully safe for the
environment? I would love to switch my Golf Sportswagen to a TSI instead, can we do that?”

“I registered for the goodwill package a month ago but have not received it yet. Has anyone gotten theirs? I’m wondering if it really is in the mail or whether this is yet another lie on Volkswagen’s part. It certainly would have helped me pay for the $4,300 repair bill I had this week. Can’t wait to get rid of this car and buy a Subaru.”

“We have been following the process and were able to get our cards validated at the VW dealer local to us (Waldorf, MD) which was still a one way hour drive. However, much to our dismay, we aren’t able to use the VW card online and can only use it at the dealership. The dealership did not have the items that we wanted so any further attempts will require a 2 hour trip. Why aren’t the VW cards able to be used on the VW website??”

4.3.2.2.2 Unimpressed with remedial actions
In response to Volkswagen’s remedial actions, which included setting up an information website, a VIN look up tool, and a compensatory “customer goodwill package”, many consumers felt that Volkswagen’s efforts were insufficient. This was due to the fact that they took around 2 months to organise any form of customer compensation, as well as consumers feeling that they were not providing enough information, and were not being helpful, while the customers were stressed out about the situation. Examples of these responses are given below:

“Hey Volkswagen USA, My friends and I feel violated by your shenanigans you pulled relating to the TDI emissions. How do we get you to buy my car back and reimburse me for the interest that I paid? I think we are all tired of the rubbish you are feeding us about fixing this issue.”

“The Goodwill Package never arrived in over 4 weeks either. So far, we’re not impressed with VW’s efforts. While we never had problems with the wagon and enjoyed owning it until it no longer matched our needs, as you can understand, we couldn’t recommend that anyone buy a VW at this time.”

“What a joke. Been more than four weeks as still nothing. VW doesn’t care that they defrauded their customers.”

“You’re not doing very good job of “making it right” Volkswagen.”

Based on the themes that emerged from the data that are not related to the psychological ownership construct, it can be seen that there are some members of the brand community who did not appear to have formed psychological ownership towards their Volkswagen vehicle, or the
Volkswagen brand. These members were consumers, so this meant that they did possess legal ownership of a Volkswagen vehicle, as they were the legal owners. Legal ownership is recognised and ensured by society (Chang et al., 2012), and relates to the legal rights that come with the ownership of possessions (Pierce et al., 2003). Legal ownership was apparent with those members who were questioning the process and wanting remedial actions, and monetary compensation. This demonstrated that they were most concerned about the legal and financial repercussions on themselves and their affected Volkswagen cars. This differs from psychological ownership, where the ownership is experienced by individuals (Chang et al., 2012), who feel responsibility towards the object based on their personal feelings of the object as being theirs (Pierce et al., 2003). It appears that these members of the community may have not found meaning in Volkswagen’s symbolic attributes (McCracken, 1986), and therefore have not developed psychological ownership feelings. In these cases, despite having legal ownership of their vehicles, they have not taken possession of it (Baxter et al., 2015).

4.4 Chapter Summary
This chapter has described and discussed the findings from the present research study on psychological ownership within the Volkswagen online brand community. The findings were separated into psychological ownership related themes, and other-related themes.

The results that were related to psychological ownership were revealed the routes of coming to intimately know and investing the self into a target of ownership, as well as outcomes of organisational commitment, citizenship behaviour, escalation of commitment, sense of loss and collective psychological ownership. The results that were not seen as being related to psychological ownership were anger and frustration, as well as questioning the remedial process and being unimpressed with remedial actions.

A summary discussion of the findings as well as implications, limitations and future research directions are discussed in the following chapter.
Chapter Five: Discussion

5.1 Introduction
This chapter will provide a summary discussion of the key findings that were identified in the previous results chapter. This discussion will be linked to the purpose of the research as well as the literature review. This section will also include a discussion of the theoretical and managerial implications of the present study, the limitations of the present study, as well as potential direction for future research.

5.2 Summary of Research

5.2.1 Purpose of Research
The purpose of this research was to use a qualitative grounded theory approach to gain insight into the overall research question:

To what extent is the psychological ownership construct present in the context of an online brand community?

To do this, the research question was broken down into three sub-questions:

- **Research Question 1:** How and why do members of a brand community come to feel psychological ownership?
- **Research Question 2:** How and why do the members of a brand community display psychological ownership towards the brand?
- **Research Question 3:** How and why is collective psychological ownership displayed within the brand community?

The present study has provided some answers to the research questions, as well as additional key findings. These will be summarised and discussed in the following section.

5.2.2 Summary and Discussion
This section aims to cover a summary of the findings and discussion of findings that were presented in the previous chapter.

5.2.2.1 Volkswagen brand as a target of psychological ownership
The presence of psychological ownership’s conceptual routes and outcomes within the Volkswagen online brand community have reinforced the idea that the Volkswagen brand could be thought of as a target of psychological ownership. This aligns with Pierce et al. (2003), who have understood that not only material objects, but objects of an immaterial nature can also become targets of psychological ownership, such as an idea or value. A brand is of this immaterial nature; it is
intangible. The presence of attributes such as attractiveness and accessibility can be important in order for psychological ownership feelings to develop towards a target (Pierce & Jussila, 2011). The Volkswagen brand appears to possess some of these crucial attributes. The brand provides attractiveness in terms of its affordability, stylishness and assumed efficiency and environmentally consciousness. There is also accessibility of the brand, through many purchasing outlets, and many models available for purchase.

Additionally the concept of brand ownership, proposed by Chang et al. (2015) as “the psychological state in which people feel possessive of a brand and as if they have control over the brand” (p. 630) relates to the findings of the Volkswagen brand as a target of psychological ownership.

5.2.2.2 Lack of psychological ownership
It became apparent that despite owning a Volkswagen vehicle, some of the brand community members had not developed psychological ownership towards their vehicle, or the Volkswagen brand itself. These people legally owned a Volkswagen vehicle, and were therefore in protected by the legal rights associated with this ownership (Pierce et al., 2003) however they did not come psychologically experience their car (Chang, 2012). This may mean that the brand community members who did not feel as though they were psychological owners of the brand feel that Volkswagen has not provided any personal meaning to them (McCracken, 1986), which can occur when individuals do not feel that the objects is their own. Responsibilities associated with legal ownership also differ from those of psychological ownership. These are often a product of the legal system. This was seen in responses of the Volkswagen brand community, where those people that were asking questions and making comments on the legal process, and how it would impact on them financially were concerned about their legal ownership, and displayed no signs of psychological ownership.

5.2.2.3 Routes to Psychological Ownership
The presence of the routes to psychological ownership in the findings of the current research study help to answer the first research question: How and why do members of a brand community come to feel psychological ownership?

The literature on psychological ownership has identified three distinct routes in which one can come to feel psychological ownership over a target; controlling the target of ownership, coming to intimately know the target, and investing the self into the target (Pierce et al., 2001, 2003; Pierce & Jussila, 2011). The findings of the present study present a combination of all three routes within the brand community, with various groups of members going down different routes in order to develop psychological ownership.
*Controlling the target of ownership* is one of the routes to psychological ownership. The extant literature recognises that the more that one is able to control or influence an object, the more one feels in possession of that object, and hence the object can become a part of the extended self (Belk, 1988; Dittmar, 1992). Similarly, Ellwood (1927) suggested that objects that are frequently used by an individual may become assimilated into the user’s self. Given that all of the members of the Volkswagen online brand community that are in the dataset are consumers and therefore owners of Volkswagen vehicles, they have the opportunity to use their vehicle. Dependent on the frequency and duration of their use, these consumers all have the potential to develop psychological ownership through controlling the target.

*Coming to intimately know the target of ownership* is another proposed route of psychological ownership. It is based on the precedent that when individuals come to know an object increasingly well, this process will lead to ownership feelings from the individual towards the object (James, 1890). And when the object is known passionately or deeply, then it is likely to become a part of the self (Beaglehole, 1932), which is of importance to the development of psychological ownership.

In the present study, anecdotes of *near-death experiences* were a result that was most closely related to the route of coming to know the target of ownership. It is important to note that this finding does not fall perfectly into this psychological ownership route, and therefore further research is needed to distinguish whether it is a sub-route of coming to intimately know a target of ownership, or whether it could be a distinct route to psychological ownership of its own accord.

Many of the community members, who had experienced a serious accident or incident while in their Volkswagen vehicle, reasoned that because they were still alive, they had developed an extremely close bond with Volkswagen, and credited the brand to saving their lives. For this reason, it appeared that they had developed feelings of psychological ownership, in that they felt that they were psychologically tied to Volkswagen, and it had become a part of their self (Beaglehole, 1932; Belk, 1988; Furby, 1978a), through such a serious and important incident in their lives.

The last proposed route of psychological ownership is the *investment of self into the target of ownership*. This occurs when an individual comes to feel ownership of objects that they have created, shaped or produced (Locke, 1690). This is because, ultimately most things that stem from one’s own labour can be seen to be a presentation of the self (Pierce et al, 2003), therefore fulfilling the self-identity need. In the present study, the findings provided evidence of this route, through members’ responses detailing the *long-term relationship with the brand* that they have. Because even the act of buying an object can be thought of as a form of creation (Sartre, 1969), all Volkswagen owners are able to feel ownership of the brand. However, it can take time for the
emotional aspect of ownership to strengthen (Strahilevitz & Loewenstein, 1998). Some community members revealed that they had owned many Volkswagen vehicles in their lifetime, with some stating that this had been the case for 25 years. This represents a lengthy amount of time in possession of the target of ownership, and therefore a high emotional level of psychological ownership within these Volkswagen brand community members.

5.2.2.4 Outcomes of Psychological Ownership
The presence of some outcomes of psychological ownership in the current research study help to answer the second research question: *How and why do the members of a brand community display psychological ownership towards the brand?*

The literature on psychological ownership has identified a number of possible outcomes of psychological ownership. These fall under four categories: motivations, attitudes, behaviours and personal functioning maladies (Pierce & Jussila, 2011). The current study found evidence of one attitudinal consequence of psychological ownership, two behavioural consequences and one personal functioning malady within members of the Volkswagen online brand community.

5.2.2.4.1 Attitudinal Outcomes

5.2.2.4.1.1 Organisational Commitment
The findings of the present study showed that some Volkswagen employees demonstrated organisational commitment towards Volkswagen. This is one of the proposed attitudinal outcomes of psychological ownership (Pierce & Jussila, 2011)

Organisational commitment is an attitude that reflects both the type and strength of an individual’s psychological attachment to an organisation (O’Reilly & Chatman, 1986). It serves for employees to consider whether they want to maintain their relationship with the organisation that they work for (Pierce & Jussila, 2011). Some members of the Volkswagen online brand community who were also Volkswagen employees showed high levels of organisational commitment in the wake of the diesel emissions scandal. They demonstrated messages of support and loyalty to the company and brand. The organisational commitment that these employees had was affective (Allen & Meyer, 1997), as the responses contained messages that revolved around the positive feelings that they felt from being affiliated with Volkswagen (Allen & Meyer, 1997). This indicated that these employees enjoyed working for Volkswagen, and were still willing to maintain organisational commitment to Volkswagen even though Volkswagen’s unethical and illegal behaviour had been revealed to them.
5.2.2.4.2 Behavioural Outcomes

5.2.2.4.2.1 Citizenship behaviours
The literature proposes that psychological ownership can lead to citizenship behaviour (Pierce et al., 2003; Pierce & Jussila, 2011). Citizenship behaviour is voluntary, contributes to the wellbeing of the community, is exerted with positive intentions and occurs when there is no promise of reciprocation in return (Organ, 1988). Examples of such behaviour are helping, whistle-blowing, criticising the status quo and offering suggestions (Pierce & Jussila, 2011). Particularly, customer citizenship behaviour occurs when customers carry out extra-role tasks (beyond their role as a customer) on behalf of a brand or organisation, for nothing in return (Ahearne et al., 2005; Van Dyne et al., 1995). The proactive behaviour of some of the Volkswagen community members giving advice and suggestions to Volkswagen was evidence of customer citizenship behaviour. This showed that these members truly cared for the brand and may have seen it a part of the self (Burke & Reitzes, 1991). Their behaviours were attempts to protect and enhance (Beaglehole, 1932; Wilpert, 1991) the brand, while trying to help Volkswagen recover from the diesel emissions scandal.

5.2.2.4.2.2 Escalation of Commitment
Another proposed behavioural outcome of psychological ownership is an escalation of commitment towards the target of ownership. This outcome was observed in the findings of the present study.

An escalation of commitment refers to the continuation of commitment to some form of action, even in the face of adverse warning signs, that suggest a bad decision have been made (Guha, 2009; Pierce & Jussila, 2011; Staw, 1986; Staw & Ross, 1987). In the Volkswagen case, members of the brand community demonstrated an escalation of commitment towards Volkswagen, despite the unethical and illegal activity that Volkswagen had taken part in. In this way, some members tried to defend the Volkswagen brand from the criticisms of others, by attempting to deny the impact of Volkswagen’s actions (Staw & Ross, 1978; Zhang & Baumeister, 2006) as not being so bad in the form of downplaying the incident. Another way in which an escalation of commitment appeared to occur in the Volkswagen online brand community was through shifting of blame from Volkswagen and onto other entities, particularly the EPA and other car brands. This blame-shifting was a new finding, which has not been mentioned before in psychological ownership literature previously, however it bears strong resemblance to psychological ownership and its outcome of escalating commitment.
5.2.2.4.3 Personal Functioning Maladies

5.2.2.4.3.1 Sense of Loss
Volkswagen online brand community members also experienced loss as a form of personal functioning malady, which is a proposed outcome of psychological ownership (Pierce et al., 2003). These members felt deeply betrayed and cheated by Volkswagen, and their responses displayed a sense of loss towards the brand, as they came to realise that it was not at all the brand that they originally perceived (Cram & Paton, 1993; James, 1890).

5.2.2.5 Collective Psychological Ownership
Lastly, the presence of collective psychological ownership in the findings of the current research study help to answer the third research question: How and why is collective psychological ownership displayed within the brand community?

Recently in psychological ownership research, the concept of collective psychological ownership has been studied (Pierce & Jussila 2011; Rantanen & Jussila, 2011; Sumida, Wooliscroft & Sam, 2012). Collective psychological ownership has been conceptualised as the notion that a group of individuals who consider themselves to be an “us” can come to a single and shared mind-set, as it relates to a common sense of ownership for an object (Pierce & Jussila, 2011). Some evidence of this collectivism, and collective psychological ownership was found in the present study. This was through consumers’ responses that used the pronoun “we” to describe the entire brand community, and the describing of the group as a “family”, which implied close bonds between members. The responses assumed collective action, by stating that the entire community would carry out certain behaviour such as always supporting Volkswagen, and buying Volkswagen cars. These responses in particular resembled collective psychological ownership.

Additionally, the platform of the brand community is likely to facilitate the existence of collective psychological ownership amongst the community members. This is because brand communities ultimately exist and thrive due of the connections and relationships amongst its members (Jang et al., 2008; Muñiz & O’Guinn, 2001; Schau et al., 2009; Schouten & Alexander, 1995). In the present study, these close connections and interactions between members are likely to have influenced the members’ feelings of “family”.

5.3 Implications
5.3.1 Theoretical Implications
The major findings of this research offer some interesting theoretical implications. The results of this research lead to a valuable extension of the psychological ownership literature, as well as new
findings related specifically to the marketing context, such as blame-shifting and collective psychological ownership. The research can also have theoretical implications for the literature on brand communities, specifically in the realm of online brand communities.

The psychological ownership construct has risen as a research topic, particularly in the management literature, where it is seen as an important predictor of workplace motives, attitudes, and behaviours (Brown et al., 2005; Pierce & Jussila, 2011; Pierce et al., 2009). Thus far, the marketing literature on psychological ownership has been reasonably recent, and therefore limited, however a small number of studies have provided some important insight into psychological ownership and consumer behaviour. Psychological ownership in marketing has been viewed as an outcome of practices such as the co-creation of value and customer empowerment practices (Fuchs et al., 2010; Harwood & Garry, 2011). It has also been observed to produce outcomes such as customer satisfaction (Fuchs et al., 2010; Peck & Shu, 2009), relationship intentions, word-of-mouth, willingness to pay more, and competitive resistance (Asatryan & Oh, 2008; Lessard-Bonaventure & Chebat, 2015). Due to the limited psychological ownership literature in the context of marketing, the present study adds value to the current body of psychological ownership research.

Previous research in marketing has studied customers’ sense of psychological ownership with the possibilities of target’s being physical products (Fuchs et al., 2010; Peck & Shu, 2009), restaurant services (Asatryan & Oh, 2008) and customer-owner cooperatives (Jussila & Tuominen, 2010), as well as linking psychological ownership to digital products (Harwood & Garry, 2010; Lothian, 2009). A new concept is that of brand ownership, introduced as an outcome of employees’ psychological ownership (Chang et al., 2012). There is only one study on brand ownership from a consumer perspective (Chang et al., 2015), and therefore the present study significantly adds to this small section of brand psychological ownership literature, by providing evidence of it in the context of an online brand community.

The existing marketing literature on psychological ownership is limited in its focus on specific paths to customer psychological ownership (Jussila et al., 2015). The present study observes some of the routes to psychological ownership that have been constructed in previous psychology and management literature (Pierce et al., 2001, 2003; Pierce & Jussila, 2011). The finding of near-death experiences can be somewhat linked to the route of coming to intimately know the target of ownership, while the finding of long and enduring relationships between the consumer and brand can be linked to the route of investing the self into the target of ownership.
Prior research has identified organisational citizenship behaviours as an outcome of psychological ownership (Jussila et al., 2015; Pierce et al., 2001, 2003; Pierce & Jussila, 2011). The current research study supports the literature by identifying citizenship behaviours, however, these behaviours are coming from the consumers rather than the employees, as is the case in previous research. Therefore the finding of consumer citizenship behaviours adds a new finding, in that it can be an outcome of psychological ownership in the marketing context.

Furthermore the concept of collective psychological observed within the present study, to some extent demonstrates some of theoretical propositions made by Pierce and Jussila (2011), which is based on previous territoriality literature (Brown, 1987; Brown et al., 2005). The current research study adds to the small amount of existing literature on collective psychological ownership since the construct proposal (Rantanen & Jussila, 2011; Sumida et al., 2012), which has focused on the construct within a family business, and within sports fans. The present research findings focus on the consumers feeling collective psychological ownership within a brand community, with evidence provided in the form of the “we” pronoun being used by members as well as the sense of family that brand community members feel towards each other and towards the Volkswagen brand.

The present study also adds significant value to the brand community literature, particular that on online brand communities. Sloan et al. (2015) conclude that research in online brand communities is still in the preliminary stages (Algesheimer et al., 2005; Gummerus et al., 2012; Royo-Vela & Casamassima, 2010). Commonly, the literature has focused on the use of websites as an online platform for brand communities (Dholakia et al., 2009; Xue & Phelps, 2004), and there is little research explicating the use of online brand communities in the context of social media platforms, such as Facebook. The present study is therefore valuable, as it provides more insight into the use of Facebook as a brand community platform.

5.3.2 Managerial Implications
Along with the theoretical implications for academia, several practical implications can also be observed from the findings of the present study, which can be of use to managers and firms.

The findings demonstrate that consumers can come to feel a sense of psychological ownership towards a brand, whose products they consume and use. This is important to consider in relation to firms, as the positive motivational, attitudinal and behavioural outcomes that are associated with psychological ownership can potentially have a huge impact on the business and success of a firm whose customers feel psychological ownership. Managers should therefore attempt to facilitate the creation of psychological ownership feelings within their consumers, by allowing consumers to feel that they have possession of, or a stake in the brand.
The findings indicate that consumers can come to feel a sense of loss, when the target of ownership is not as they originally perceived, or a radical change occurs. This can lead to feelings of betrayal, eventually leading the consumer to forfeit the brand as they no longer trust it. In a managerial sense, this is important insight, as managers should realise the potential impact of making drastic changes to their brand or offering, that consumer who feeling psychological ownership towards this offering may feel betrayed, and not welcome the change, leading to a loss of trust. Of course, if in a similar context to the Volkswagen diesel emission scandal, by lying to their consumers about some form of their brand or offering, a firm will potentially lose these consumers. However, measures can be taken to ensure that if any radical changes are implemented to the brand, the consumers can remain happy. This could be through slowly implementing changes in stages, so that consumers can gradually get used to the changes. Alternatively the firm could run a poll amongst members of a brand community asking whether it would be beneficial to change the brand in a certain way. If the majority of consumers are against the changes, the managers could reassess their decision process, and come up with something different.

The findings of the present study observe that individuals can come to have feelings of ownership towards a target from continuous, enduring relationship with the target. In the case of Volkswagen, this was through the purchase and use of Volkswagen vehicles, spanning many years. This is of value to firms, as they will have to understand that they need to maintain their customer relationships, and turn them into repeat purchasers and users in order to help consumers to develop psychological ownership towards the brand and its products. To do this, firms can ensure that they provide an offering that is ongoing, or lasts for a long time (perhaps due to high quality and workmanship). Firms can also try and strengthen the psychological ownership bond between the consumer and the brand by encouraging value co-creation; such as letting the customers have a say in the new product design process, or improvements and changes to the brand, or being open to customer feedback.

Another important managerial implication is that individuals, under psychological ownership can display customer citizenship behaviours in the form of suggestions and advice to the brand. This is an important aspect of value co-creation that firms should recognise, as this may be particularly helpful to businesses. Suggestions and advice for consumers, not only can provide ideas that firms and managers had not previously thought of, but it is also likely that it can provide the firm with a general idea of what consumers actually want, which overall will help their brand or business to become more popular and successful with its consumers. Managers should aim to capitalise on the outcomes of psychological ownership by asking for help and suggestions from their brand community members, particularly in an online platform, for example in the form of a Facebook
status. This is likely to generate some helpful responses, as has been illustrated in the present research study.

5.4 Research Limitations
The present study has encountered a few limitations, which mainly come as a result of the methodological qualitative approach. Often, these limitations have occurred due to the presence of time and resource constraints on the present research project.

The use of a single-case study analysis has limited the generalisability of the present research findings. This is because the present study uses a single case, which is extreme or revelatory in nature. This case has presented distinct findings of phenomena within a particular context and setting, and is therefore unable to be generalised across all contexts (Eisenhardt, 1989). Therefore the reliability of the study is limited, and the analysis may not be able to be replicated across other cases in the same way as the present study. Additionally, single-case study designs are more vulnerable than multiple-case studies, because it involves putting “all your eggs in one basket” (Yin, 2003, p.53).

Another limitation of the present study was the use of a single source of data, in the form of consumer responses from the online brand community. Typically, using triangulation or multiple sources of evidence within case studies can improve the credibility of the research (Yin, 2003). This is because the use of multiple sources of evidence essentially provides multiple measures of the same phenomenon. This limitation occurred in the present study due to time and resource constraints (Denzin, 1978).

Central to conducting qualitative research, the researcher is the primary instrument of data collection and analysis (Denzin & Lincoln, 2000; Patton, 2014; Marshall & Rossman, 1995). This was the case in the present study, and it can prove to be limiting to the accuracy of the research. The analysis of the study is dependent on the interpretation that the researcher places on the information that they have acquired. This means that there is some scope for researcher or observer bias, and the data analysis may therefore be subjective to the opinions of the research, as opposed to objectiveness, which ensures accuracy (Chenail, 2011). Additionally, the data was analysed by one individual. Personal interpretation varies amongst researchers, and therefore the data could potentially be interpreted in a variety of other ways. This could have lead to the generation of different implications from the same data set. This limitation can contribute to the validity of the research.
5.5 Future Research
A prevalent finding of the current research study was the likelihood that supporters of Volkswagen would try to shift the blame onto others, such as the Environmental Protections Agency (EPA) and other car brands. This was a particularly interesting finding, and seemed most logically to be explained by the presence of an escalation of commitment to the Volkswagen brand; an existing outcome of psychological ownership. However, the specific behaviour of blame-shifting has not been encountered in previous psychological ownership literature. This could be a possible avenue for future research on psychological ownership, with research focusing on contexts in which the target of ownership has been involved in something that is seen as some form of wrongdoing.

Additionally, a finding that also presents a possibility for future research was the presence of strong support, from Volkswagen owners who had been through a near-death experience with their vehicle, and because of this had come to develop psychological ownership feelings. This was unlike most of the suggested routes to psychological ownership that exist in previous literature; however it seemed most similar one route of coming to intimately know a target of ownership. The route of experiencing an intense or serious incident or life event could be investigated in future research, as it is not explicitly mentioned in the literature. The results of the current study suggest that it could be part of the route of coming to intimately know a target of ownership, if not a stand-alone route of psychological ownership. Evidently more research on this possible route should be carried out in order to make this distinction.

Another finding of the present study that would warrant future research is the notion of collective ownership that was observed within the online brand community, through the use of the pronoun “we” and the sense of family between members and the brand. These findings are linked to collective psychological ownership, a concept that has not been adequately studied. The evidence of it taking some form in the current study gives reason to believe that it is a worthwhile topic for future research in psychological ownership, particularly in the context of brand communities, to explore.
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