MIRROR ORGANISATION: AN INVESTIGATION INTO ETHNIC IDENTITY AS A DETERMINANT OF EMPLOYEE PSYCHOLOGICAL OWNERSHIP PERCEPTION. A SURVEY OF PUBLIC AND PRIVATE SECTOR EMPLOYEES IN RIVERS STATE, NIGERIA

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A thesis submitted to the University of Huddersfield in partial fulfilment of the requirements for the degree of Doctor of Philosophy

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Abstract

The implementation of employee ethnic representation has become a widespread practice for organisations operating within multi ethnic societies. However, scholars disagree on its effectiveness in positively influencing employees’ perceptions. Also, the process through which ethnic identification positively influences employee perceptions is currently unknown. The purpose of this study is to investigate the process through which ethnic identification influences employee psychological ownership perception. To achieve this aim, the thesis first reviews relevant literature which highlights the gap in literature and support the need for this study. For example, existing studies have not considered the components of psychological ownership and how they are influenced. This study contributes by showing that psychological ownership perception is a formative construct comprised of three distinct components; employee self-efficacy, organisational self-identity and employee voice. A review of literature on the empirical context show the importance of this study within the Nigerian context specifically noting Nigerians displayed high levels of ethnic identification. The problem that persist for organisations was how ethnic identification may be channelled to organisational identification.

A quantitative cross-sectional survey data collection approach was adopted for this study. Structural equation modelling was used to analyse survey responses from 1,525 employees of selected public and private sector organisations in Rivers State, Nigeria. Findings suggest the following relational framework for linking ethnic diversity and employee psychological ownership perception; that employees who overtly identify with their ethnicity at work will positively attract co-worker social support and this is possible in an organisational climate that promotes interpersonal fairness. Co-worker social support positively mediates
the relationship between employee ethnic identification and employee psychological ownership perception.

The practical implication for organisations operating within a multi ethnic environment is for human resource practitioners to pay attention to ethnic identification because of its influence on co-worker social support and employee psychological ownership perception.

The originality of this thesis is seen in the relational framework designed to link ethnic diversity to employee psychological ownership perception. This study contributes to existing literature by explaining how employees’ ethnic identification influences their perception of psychological ownership. The study provides new insights on the components of employee psychological ownership perception and how they relate to ethnic identity. The investigation of psychological ownership perception at the individual component level is novel and provides new insight into how psychological ownership relates with antecedents that influences it.

Keywords

Co-worker social support, ethnic diversity, employee ethnic identity, employee psychological ownership perception, employee voice, interpersonal fairness, organisational self-identity, relational framework, structural equation modelling
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Dedications and Acknowledgements

This thesis is dedicated to my dear wife Joy for her support and encouragement and for putting up with my absence for the past three years since this journey began. To my lovely daughters Shani and Tehillah, you have been a great source of inspiration to me. I wish to express my sincere gratitude to my supervisors; Dr Eleanor Davies and Dr Julie Davies. You are the best supervisors any one can have. I also wish to thank Prof Jawad Syed for accepting my proposal for this PhD programme and for his supervision during my first year. This acknowledgement statement will not be complete without mentioning the participating employees and organisations sampled in this study. I am indeed very grateful to them. Most importantly, I wish to thank God Almighty for His grace and guidance throughout this programme.
List of abbreviations

RSCS- Rivers State Civil Service
EPOP- Employee Psychological Ownership Perception
BER- Balanced Ethnic Representation
PER- Perceived Ethnic Representation
BPSR- Bureau of Public Service Reforms
FCP- Federal Character Principle
FCC- Federal Character Commission
RVSG- Rivers State Government
NBS- National Bureau of Statistics
PFIT- Perceived Fair Interpersonal Treatment Scale
GSES- General Self-Efficacy Scale
OID- Organisational Identification
EI- Employee Ethnic identity
EP- Interpersonal fairness
CWSS- Co-worker Social Support
ITF- Interpersonal fairness
ESE- Employee Self-efficacy
EV- Employee Voice
OSI- Organisational Self-identity
Academic Biography


Publications under review


Conferences /seminars


**Paper reviews**

Three papers reviewed for the European Academy of Management conference 2015
Chapter 1
Introduction

1.1 Introduction

Organisations are contending with the issues of promoting employee psychological ownership perception (Peng & Pierce, 2015). Several reasons have been given to explain how and why employees come to see themselves as emotionally attached to their organisation. These include the implementation of formal employee ownership schemes which confer certain rights, obligations and financial incentives to employees (Henssen et al., 2014; Mayhew et al., 2007). Studies have shown that these schemes have a temporary effect on employees, and that financial incentives only may not influence employees’ emotional attachment (Kohn, 1993). This warrants a need to investigate other informal processes within an organisation that may foster employees’ emotional attachment to their organisation (Andrew & Ashworth, 2015). This thesis investigates the extent to which ethnic identity as an informal process influences employee psychological ownership perception. The thesis focusses especially on employees working in a mirror organisation.

Mirror Organisation is a term introduced by this study into the diversity management discourse to represent an organisation that reflects the social characteristics of the society in its employee composition (Marvel & Resh, 2015; Meier, 1975). Although societal social characteristics include age, gender, social status, religion, ethnicity, and education; the concept of mirror organisation in this study focuses on employee ethnic representation. This is because ethnicity is central for creation of social characteristics in the empirical environment context of Nigeria (Higazi & Lar, 2015). In this thesis, a mirror organisation is regarded as an organisation that has a fairly balanced ethnic representation and does not show any form of bias in its ethnic diversity policies (Hicks, 2002; Sabharwal, 2014).
Many organisations seek ways to ensure representation of diverse groups of the population in their employee composition (Lippert-Rasmussen, 2008). This has been achieved by several countries, for example, the US federal workforce which has over 44% of its population as minorities (Choi & Rainey, 2014), also the local authorities of Birmingham in the UK has continued to make conscious efforts to reflect the demographic composition of its population in the employment outlay (Lippert-Rasmussen, 2008). Organisations that mirror the society may have some dark side such as increased tension amongst employees; but also some positive effects include improved organisational integrity and ethical climate (Hong, 2016).

Prior studies on mirror organisations have focused on ethnic representation as an affirmative action instrument. For example, Lippert-Rasmussen (2008), Turgeon and Gagnon (2013). Others have focused on its influence on perceptions of organisational justice and language abstraction (Roberson & Stevens, 2006), organisational performance (Choi & Rainey, 2010), and inclusion (Andrews & Ashworth, 2015). Further studies on ethnic representation focus on how ethnic stratification influences employees’ attainment of authority (Smith & Elliott, 2002), and organisational commitment (Messarra, 2014). This thesis focusses on how employee psychological ownership perception is influenced by their ethnic identity such that the employee develops a sense of identity with their organisation.

Understanding how to foster an employee’s sense of identity with the organisation is a core focus for organisational behaviour and organisational psychology (Ahmed, Rasheed, & Jehanzeb, 2012; Dawkins, Tian, Newman, & Martin, 2017). Although the concept of psychological ownership is relatively new compared to other behavioural constructs, significant attention has been given to it. Psychological ownership is used to explain how one comes to get emotionally attached to a target or object, such that one identifies and defines one’s self by the target (Pierce, Jussila, & Li, 2017). In this thesis, psychological ownership is
used to describe how an employee may become emotionally attached to an organisation, such that the organisation becomes a source of identification for the employee.

While extant studies have focussed their attention on the consequences of psychological ownership and the use of psychological ownership as a mediating variable, less attention has been given to how psychological ownership is formed. This thesis contributes to this gap in literature. The thesis draws on a review of existing literature to explain how psychological ownership perception is formed and highlights the components of psychological ownership. In explaining how psychological ownership is formed, the thesis focuses on how ethnicity influences employees’ perceptions of their organisation. This focus contributes to management literature in two important ways. First, it extends psychological ownership theory discourse by highlighting the effect of ethnic identification on psychological ownership. Secondly, the thesis extends the discussions on ethnic diversity from the normative perspective to a relational perspective.

Existing studies and legislation suggest that having employees from various ethnic compositions of the society fosters an inclusive environment -an environment in which every employee feels like they have a stake or own the organisation (Andrews & Ashworth, 2015). The reality is that this is not the case for most organisations, especially those within multi ethnic societies (Olatokun & Nwafor, 2012). Evidence suggests that in the empirical context of Nigeria, ethnic diversity has resulted in fractionalisation -a situation where an employee’s loyalty to their ethnic group comes first before their organisation (Agbiboa, 2012).

Nigeria was chosen as the empirical context because of its considerably large number of ethnic groups (Oruwari, Owei, & Jev, 2004). Prior to its independence, the country was delineated into different regions and protectorates by the colonial administrators (Nyambegera, 2002). Upon independence, successive administrations have further divided the country into states and local government areas (LGA) to ease the burden of governance (Ukiwo, 2007). In Nigeria, ethnic identification is manifested more in terms of one’s region
People are unintentionally psychologically attached to their ethnic identity and seek society or organisation acceptance; yet maintaining their ethnic identity (Adeosun, 2011; Kendhammer, 2014). This is especially severe for bureaucracies because they are run by bureaucrats on behalf of the public, the problem that persists for employees is deciding whether to further society wide interest first or that of their ethnic group (Agbiboa, 2012).

To date, the process that may encourage employees to extend their loyalty from their ethnic group to their organisation has received limited attention. This study attempts to explain the process through which ethnic diversity in an organisation influences employee psychological ownership perception. Psychological ownership theory is used to explain the constructs of employee ownership perception (Peng & Pierce, 2015). Self-identity theory is used to explain the relational processes that may encourage employees to extend their loyalty from their ethnic group to their organisation (Wang, Gan, & Wu, 2016).

Secondly, existing psychological ownership theory literature had focussed mainly on how the ownership perception is influenced at the individual identity level, with little known on how ownership perception is influenced at the collective identity level (Dawkins, Tian, Newman, & Martin, 2017; McKay & Avery, 2015). Individual level psychological ownership examines ownership perception as an outcome of variables that affects the individual employee (Kim, Kim, Jeon, Jun, & Kim, 2016). For example, pay, promotion, and leadership (Ogbonnaya, Daniels, & Nielsen, 2017). Psychological ownership at the collective identity level explains employee ownership as an outcome of group identification and interaction with others in the organisation (Dawkins et al., 2017). With the growing composition of multi ethnic employees in organisations, it is important to consider how interaction among different employees may be explored to the advantage of the organisation (Stone & Deadrick, 2015).

In the relational process that is investigated in this thesis, co-worker social support and interpersonal fairness are mediating variables that explain the relationship between ethnic...
identity and employee psychological ownership perception. Co-worker social support explains employees’ willingness to provide extra role support to their colleagues (Chughtai, 2016). Interpersonal fairness highlights employees’ perception of fair treatment by members of their organisation irrespective of their ethnic identification (Barak, Cherin, & Berkman, 1998). These variables are products of interactions and relationship in an organisation and is especially important when the organisation has an ethnically diverse employee composition.

This thesis makes theoretical and practical contributions. Theoretically, this thesis provides a relational framework for influencing employee psychological ownership perception (EPOP). It unbundles the concept of psychological ownership and explains how each component of EPOP is determined by ethnic identification. Unbundling EPOP has shown that while effect of ethnic identification positively influences the three EPOP components, its effect is stronger for organisational self-identity and employee voice components. For ethnic diversity, this thesis takes the discussion from the macro and organisational level to focussing how ethnic identification influence employee perceptions. This thesis pays attention to ethnic identification because of its influence on co-worker social support. Co-worker social support is important because it influences employees’ psychological ownership perception. Additionally, in view of the importance of ethnicity to people from Nigeria (Adeosun, 2011) and current lack of literature that explores how ethnic identification influences employees’ perception in the country, this study contributes to the ethnic diversity and organisational behaviour literature in the country.

Building on this introduction, the rest of this overview chapter is structured as follows: first, the chapter highlights the need for the study; next, it presents the research aims, questions and objectives. Thereafter, the chapter provide the justifications for this study, brief description of the methodology, scope and limitations, as well as definition of key terms.
1.2 Research Problem

Despite several governments’ initiatives aimed at ensuring that organisations are representative of the society and the successes achieve so far, less attention has been paid to the discussion of how representativeness in itself, especially ethnicity might influence employees’ ownership perception (Andrews & Ashworth, 2015). Furthermore, there is growing disquiet from minority employees working in the public and private sector suggesting that there is widespread ethnic/racial discrimination (Creegan, Colgan, Charlesworth, & Robinson, 2003). Thus, recent representative organisation debates have reached an inconclusive position on the implications of ethnic diversity on employees’ sense of belonging and psychological attachment to the organisation (Olickers & Zyl, 2016).

Whereas the proponents of representative organisation suggest that it will foster inclusiveness (Sayed, 2000), the opposing arguments suggest that it results in distrust among employees (Selden & Selden, 2001). These studies have considered the implications of ethnic diversity from a numerical representation perspective. Thus, there may be a need to look beyond numerical representation in the quest to influence employee psychological ownership perception (Bond & Pyle, 2001; McKay & Avery, 2005). This thesis attempts to go some way towards bridging the gap between the debates to provide some form of resolution to the current ambivalent results.

1.3 Research Aims, Objectives, and Questions

1.3.1 Research aims

The aims of this study are to:

i) Investigate empirically a relational framework through which ethnic identity is linked to employee psychological ownership perception.
Furthermore, the study extends the psychological ownership literature by unbundling the concept of psychological ownership; highlighting the various components that makes up psychological ownership. To achieve this, the study aims to:

ii) Adopt a multi-theoretical approach to explain each component of psychological ownership and how they relate to ethnic identity. In this study, psychological ownership components are conceptualised in line with Peng and Pierce (2015) as follows: efficacy, as employee’s self-efficacy; self-identity, as organisational self-identity; and having a place or territoriality, as employee’ voice.

Lastly, to provide a rationale for linking ethnic identity to employee psychological ownership perception, the third aim is:

iii) Investigate the mediating roles of co-worker social support and interpersonal fairness on the relationship between ethnic identification and employee psychological ownership perception.

1.3.2 Research objectives

In line with the research aims, the objectives are listed below as follows:

i) To unbundle the components of psychological ownership and examine their relationships in the formation of employee psychological ownership perception.

ii) To empirically test a relational framework for linking ethnic identity and employee psychological ownership perception.

iii) To determine the mediating roles of co-worker social support and interpersonal fairness on the relationship between ethnic identity and employee psychological ownership perception.
iv) To test the theoretical relationships empirically in the context of Nigeria using employees from selected public and private sector organisations operating in Rivers State.

**1.3.3 Research questions**

Building on the preceding discussions, the following research questions direct future empirical study towards achieving the research objectives:

i) To what extent are the components of employee psychological ownership perception related in the formation of the construct?

ii) To what extent are employee psychological ownership perceptions influenced by ethnic identity in the organisation?

iii) To what extent is the relationship between ethnic identity and employee psychological ownership mediated by co-worker social support and interpersonal fairness?

The focus on employee perception is premised on the proposition that employee perception is a key consideration in the determination of diversity management practices (Kamoche, 1997).

**1.4 Significance of the research**

Building on to the already enumerated problems, this study is significant in terms of theory and implications for practitioners in the following ways:

**1.4.1 Contribution to trend in psychological ownership theory literature**

Within recent decades, organisations have continued to seek ways to influence employee psychological ownership perception. This has led to an increase in the literature focussing on how to influence employee ownership perception and the various forms of ownership to implement (See Table 1 in Appendix 1). Forms of ownership include formal ownership,
example worker/producer, direct ownership, and employee share ownership; and informal ownership, for example social ownership (Pierce, Rubenfeld, & Morgan, 1991). This study discusses ownership in the context of social/informal ownership. This is because the formal dimension of ownership gives the employees certain rights and privileges that may not be applicable in the public sector and in some private sector organisations.

The study makes a contribution to the literature by undertaking a review of existing psychological ownership theory literature. Findings from a review suggests that literature linking informal ownership schemes to organisational commitment is on the increase. This review was done to determine the importance of this study in the psychological ownership discourse. With the aid of Google Scholar, an online search was conducted on existing literature from the period 1980 to 2012. The phrase ‘psychological ownership theory’ was inputted in the search engine. Findings from the abstracts reviewed are provided. Results are shown in Figure 1, whilst the summary of the articles is presented in Appendix 1.

The summary of findings shows that there is a paradigm shift in the focus from formal ownership schemes to informal or pro-social actions that may foster ownership perception. Informal ownership schemes focus on various relational and contextual issues within an organisation that has the potential to foster a deep sense of attachment between the employee and the organisation. A reason for this shift in paradigm is that financial or econometric reward packages have temporary effects on the employee and do not necessarily improve employee ownership perception. For example, in Kohn (1993) it was noted that financial incentives alone are failing to influence employee ownership perception. Other non-financial or reward processes, such as participation in decision making, job security, and training targeted at boosting employees’ competence in addition to financial incentives may influence employee perception (Kohn, 1993). This thesis therefore contributes by providing further literature on an informal process that may influence employee psychological ownership perception.
1.4.2 Introduction of ethnic identification as a determinant of employee psychological ownership perception.

Existing studies support the need for employee ownership schemes for their ability to influence employees’ psychological attachment to the organisation (Gera, 2016). The focus has however been on how financial or econometric antecedents have engendered employees’ ownership perceptions (Blasi, Freeman, & Kruse, 2016; Jirjahn, 2016). In an attempt to further the existing debates on psychological ownership, scholars have considered the implications of non-financial factors individual such as leadership, job control, job satisfaction, perception of justice, and participation in decision making as antecedents to employee ownership perception (Lin, David Lamond, Pan, Qin, & Gao, 2014; Md-Sidin, Sambasivan, & Ismail, 2010; Peng & Pierce, 2015; Pierce, Jussila, & Cummings, 2009; Yildiz, Alpkan, Ates, & Sezen, 2015). In contributing to the non-financial factor antecedents to EPOP, this study attempts to establish a link between ethnic diversity in employee composition and EPOP.

1.4.3 Appropriateness of psychological ownership theory on empirical context

Relating this theory to the empirical context, ethnic groups through the various states believe in their separate territorial boundaries, part possessors of the national resources, and hence their desire to control what is accruable to them from the federation (Wegenast & Basedau, 2016).
especially in their representation in government organisations. In addition, ethnic groups seek balance representativeness in the composition of government bureaucracy in the hope that members will influence policies and programmes that will benefit them (Andrews & Ashworth, 2015). This innate desire for ethnic representation in public organisations suggests that people unintentionally express psychological ownership toward their ethnicity (State). The goal of this study is to suggest how to extend such ethnic loyalty to the organisations where the individuals work.

The context upon which this study is focused (Nigeria) is an example of a collectivist setting, and within collectivist settings, there is an interdependent relationship between individuals (Adisa, Osabutey, Gbadamosi, Nickson, & Nickson, 2016). This relationship forms constructions upon which perception of self is formed (Markus & Kitayama, 1991). Collectivism possesses the ability to influence one’s innate attributes including one’s abilities, opinions, judgement and personality as the individuals view the environment as an extension of themselves (Markus & Kitayama, 1991).

1.4.4 Introduction of a relational perspective to ethnic identity in organisation:

A common denominator of representative organisation legislation in many countries for example Nigeria (Mustapha, 2007), UK (Andrews & Ashworth, 2015; Creegan et al., 2003), and South Africa (Olckers & Zyl, 2016) is the need for employees working within the public to feel a sense of belonging otherwise referred to in this study as employee psychological ownership perception. The focus however among existing literature has been on a macro perspective (affirmative action tool to pacify minority groups)(Mustapha, 2007), or a meso-perspective (organisational justice and inclusion)(Lin et al., 2014; Yildiz et al., 2015).

Existing studies suggest that these action plans are not enough to influence employees perceptions (Creegan et al., 2003), as they do not consider the relational issues within the organisation upon which EPOP may emerge (Creegan et al., 2003). In addition studies suggest
that there is gap in the literature explaining the causal mechanism between ethnic diversity and employee ownership perception (Olckers & Zyl, 2016). The limitations of existing representativeness literature further justify the need for this study.

This study considers the micro perspective by examining the implication of mediator variables of co-worker social support and interpersonal fairness. These variables account for the interactions and relationships that exist at work that may positively influence EPOP. Thus, affirming the importance of this study in achieving the goal of representative organisation literature. Also, within the micro perspective, ethnic diversity is considered in terms of employee ethnic identification.

1.4.5 Person organisation stereotyping

Existing social identity literatures suggest the representation is associated with employee stereotyping. Employee stereotyping is a situation where employees with similar identities relate better with themselves and may be sometimes regarded as a closed group within a group. The premise of ethnic diversity in this study suggests that ethnic representation may result to a reduction of such stereotypes within the organisation. This is because ethnic identification when accepted, may improve employees’ perceptions of organisational ownership; a situation where the employees define themselves by their organisation’s identity. This study refers to this situation as person organisation stereotyping and uses self-identity theory to investigate this further.

1.4.6 Contribution to private sector organisations in Nigeria

There is a lack of focus on the concept of employee ownership in the private sector in Nigeria. This is because employee ownership schemes are non-existent. However, in the light of the insights from this thesis linking ethnicity to psychological ownership, private sector organisations may gain from the implication for practice as do their counterparts in the public sector.
1.4.7 Empirical analysis of Nigerian employees’ perceptions of ethnic diversity

This study breaks a new ground on ethnic diversity literature in the Nigerian context by providing an in-depth analysis of the perception of employees in the public and private sector on ethnic diversity. Using Rivers State as a case study for the country, analysis shows the perceptions in relation to employees from Rivers and those who are not from the state. In view of the large sample size utilised for this study, the findings may be generalisable country wide. This empirical study provides human resource management practitioners with information on how to manage employees from various ethnic groups in the country, in addition to adding to the body of ethnic diversity management knowledge.

1.4.8 Implication for practitioners in the public sector

The civil service drives the policies and programmes of the government and serves people from different ethnic backgrounds (Anazodo, Okoye, & Chukwuemeka, 2012), and as a result, should reflect as much as possible the ethnic groups of the society in its employee composition (King et al., 2011). The lack of commitment exhibited by civil service employees has warranted a surge in literature on ownership perception improvement of civil servants with different suggestion for attaining ownership perception. For example, job design (Dimitriades & Maroudas, 2007); improved pay, promotion, communication, and leadership (Young, Worchel, & Woehr, 1998).

In Nigeria several commissions have been set up in the past to proffer solutions to improve the perception of civil servants, suggestions such as improved grading and salary structure, introduction of minimum wage, introduction of management by objectives, unifying grading systems in line with private sector (Anazodo et al., 2012). This study provides practicable ways that public sector managers may adapt to influence employees’ perception of ownership.
1.5 Research methodology

The philosophical paradigm of this study is that of positivism. The research adopts a structured analytical method to examine constructs that are perceived differently by individuals (Scotland, 2012). The unit of analysis is the individual employees of public and private sector organisations in Nigeria. Employees are drawn mainly from organisations within public and private sectors in Rivers State. This is because the organisations present a good sample of representation of various ethnic groups in their employee composition. To validate the findings of the study, the study controls for differences in sector of employment and other demographic attributes. The research questions are designed in a causal relationship format to ascertain the intrinsic relationships between ethnic diversity and EPOP within an organisation. For data collection, questionnaires were printed and distributed in paper format. This procedure is chosen for lack of ICT infrastructure within the organisations.

1.6 Research design

This study uses a deductive approach to examine the role of ethnic diversity in the emergence of employees’ psychological ownership. This was arrived at following extensive review of relevant literature and is in response to the limitations as noted by prominent proponents of psychological ownership theory for example Pierce, Kostova, and Dirks (2003), and Peng and Pierce (2015).

The choice of the empirical context of the study is aimed at extending the application of the theory in a collectivist society, and of the sample population, public sector has been scarcely researched. The diagram below illustrates the logical reasoning of the study.
1.7 Delimitations of scope and key assumption

This section describes the basis upon which generalisations are framed. These delimitations are chosen on the premise of the aims, objectives and the research design of this thesis.

1.7.1 Theory

This study focuses on employee perceptions of psychological ownership using Pierce, Kostova, and Dirks’ (2003) psychological ownership theory. According to Pierce et al. (2003), employees’ perception of psychological ownership is achieved when they feel a sense of self-efficacy, self-identity, and voice in the organisation. The reason for focusing on psychological ownership theory is because of its suitability to explain the relationship between ethnic diversity and employee psychological ownership perception.
1.7.2 Organisational Representation

In discussing organisational representativeness (mirror organisation), the thesis focuses on the component of ethnicity. This is premised on the fact that the empirical context upon which this study is conducted experiences more organisational conflict as a result of societal ethnic struggles that have trickled into the organisations (Eposi & Orock, 2012).

1.7.3 Sector

Within multi-ethnic societies, organisations generally face challenges because of the multiethnic composition of their employee. With these issues affecting both public and private sectors, this thesis focuses on organisations in both sector. The reasons being that although private sector organisations are mostly profit oriented and are constantly seeking ways to increase business presence locally and globally, the challenges of ethnicity still affect employees within the sector. Private sector organisations however, have an advantage over public sector organisations. This is because they provide greater incentives for cosmopolitan behaviour (DiTomaso & Hooijberg, 1996). Public sector organisations on the contrary, are owned by the public, with every ethnic group seeking equal participation in the organisations (Wang, 2009). Also, public sector organisations are faced with the issue of lack of ownership behaviour among employees (Fowler & Cordery, 2015).

1.7.4 Location

Although this thesis reviews literature on a global scale to fully investigate the impact ethnic diversity on public sector organisation, data is collected from both public and selected private sector organisations in Rivers State Nigeria. For the public sector, data is collected from organisations in the Rivers State Civil Service (RSCS), Nigeria. The reason for focusing on Rivers State in addition to the implementation of Federal Character Principle, is that the State in a major cosmopolitan city in Nigeria with employees from various states in the country. Data was collected from the state capital in Port Harcourt. The data generated by this study
may be useful for further analysis of issues relating to ethnic diversity in both public and private sector employees in Nigeria.

1.7.5 Validation of Study

In order to validate the findings, data is collected from private sector organisations, to enable the comparison of employee psychological ownership perception (EPOP) between public sector and private sector. The purpose for this comparison is to control whether EPOP will be higher because of the implementation of different programmes applicable within the private sector. Other control variables utilised in this study are the demographic attributes; gender, qualification, Local Government Area, position, and tenure in employment.

1.8 Outline of the Thesis

Building on this introduction chapter, the rest of the thesis is structured as follows; the second chapter provides the literature review. It examines extant ethnic diversity and psychological ownership literature to enable the development of the theoretical framework chapter. In the third chapter, a theoretical framework is developed to enable an empirical investigation of ethnic identity as a determinant of employee psychological ownership perceptions. To further understand why the empirical analysis was conducted in Nigeria, a brief on the Nigeria context is presented in chapter four. Research methods and design are presented in the fifth chapter, leading to descriptive data analysis in the sixth chapter. Chapter seven presents inferential data analysis while discussion of findings is presented in chapter eight. Contributions to theory, implications for practice, limitations and conclusions are present in the last chapter.
1.9 Key Terms

This section defines some key terms that are recurrent in the thesis. These key words are,

**Perception:** Perception is used in this study to explain the notion an individual, in this case an employee has on a particular issue of interest within an organisational context (Lee, Park, & Lee, 2013).

**Balanced ethnic representation (BER):** Balanced ethnic representation refers to practical social responsible diversity management action taken by organisation to ensure as much as possible, that employees are recruited at different levels based on merit and with attention
to ensuring that ethnicities are represented as much as possible (D. R. Brown, 1999; W. A. Brown, 2002; Syed & Kramar, 2009).

**Perceived ethnic representation (PER):** Perceived ethnic representation refers to degree or extent to which employees are aware of the numerical representation of the various ethnic groups or state in the employee composition of their organisations (Lee et al., 2013).

**Organisational ownership:** Organisational ownership is discussed using the psychological ownership theory. The theory of psychological ownership is relatively new compared to other human resources management theories (Md-Sidin, Sambasivan, & Muniandy, 2010). However, it has continued to receive the attention of management scholars interested in exploring the behaviour and attitude of employees (Hou, Hsu, & Wu, 2009). This is because it is inherent in individuals to feel a sense of ownership (Peng & Pierce, 2015), and this creates a strong bond between the individual and the object of interest (Asatryan & Oh, 2008).

Psychologically, ownership may exist as a result of a relationship between a person and an object (Beggan, 1992). Owner-object relationship is formed if the object meets predetermined characteristics set up by the owner, and as a result the object can be used to define the owner (Beggan, 1992). In other instances, ownership can be experienced in relation to an idea, a creation of art, and people (Pierce et al., 2003). A central question in psychological ownership perception is ‘what do I feel is mine’ (Pierce, Kostova, & Dirks, 2003).

**Mirror Organisation:** This study defines the concept of mirror organisation using Pierce et al. (2003) psychological ownership theory, as an organisation where employees feel perceptions of ownership as a result of its representation of the various ethnicities in the workplace. Having employees from the various ethnicities influence employees. This makes employees see the organisation as a reflection of them, and work hard to improve organisational outcome. Greater organisational performance improves the image of the employee.
**Diversity:** Diversity refers to the different visible and nonvisible traits among employees, such as ethnicity, religion, gender and age. (Stahl, Maznevski, Voigt, & Jonsen, 2010).

**Diversity management:** Diversity management is an organisational approach intended at creating a climate that promotes employees’ potentials by valuing employee differences (Syed & Kramar, 2009). It is aimed at understanding the various forms of differences in the employees and how it affects the organisation (Nkomo & Cox Jr, 1999). The focus of diversity management is on business benefits, with less emphasis on evaluation of outcomes on the employees, and sometimes having no concentration on a specific group. Therefore, inclusion of social responsibility to diversity management will enable organisation to achieve both business benefits and enhanced social equity. (Syed & Kramar, 2009).

**Ethnic diversity:** Ethnic diversity refers to the different groups of employees in the organisation that are bound by unique identities and values as a result of their relatedness in language, culture, origin and territory (Alesina & Ferrara, 2005; Muttarak & Heath, 2010). Within the study, ethnic diversity is conceptualised in terms of ethnic identity.

**Ethnic identity:** Ethnic identity explains employees’ willingness to overtly identity with their ethnic groups at work (Barron, Hebl, & King, 2011).

**Ethnicity perception:** Ethnicity perception refers to how employees who identify with their ethnic groups perceive that they are treated because of the their ethnic ties (Barron et al., 2011).

**Organisation:** Organisations are institutions comprised of groups of individuals at various levels, usually from the board of directors to the operational teams connected by common goals. Workforce diversity may enable organisations to develop creative ideas and achieve greater market share (Andrevski, Richard, Shaw, & Ferrier, 2014).
**Self:** As a construct, self enables individuality and therefore allows employees to define themselves with respect to reality (identity, image, and value) (Escalas & Bettman, 2005). Such reality forms a label with which employees define themselves in relation to the group (Conover & Feldman, 1981). Self is however defined within the interdependent view, emphasising how much an individual defines in relation with environmental contexts; this is especially how they see that they are treated differently from others.

**Self-efficacy:** In explaining self-efficacy, this study suggests that it refers to employees' beliefs in their ability and competence to achieve tasks assigned to them at work (Tafarodi & Swann, 2001; Zimmerman, Bandura, & Martinez-Pons, 1992).

**Organisational self-identity:** In line with the interdependent view of self, organisational self-identity explains the extent to which employees define themselves by the aspirations, values, and goals of their organisation (Van der Werff, Steg, & Keizer, 2013).

**Voice:** Employee voice refers to employees willingness to make constructive suggestions that will improve work outcomes (Ng & Feldman, 2012)

**Co-worker social support:** This construct refers to positive behaviour from co-workers that is targeted at assisting employees to achieve tasks assigned (Kuhar & Cross, 2013).

**Interpersonal fairness:** This refers to a situation within the organisation where employees are treated fairly. Irrespective of their age, sex, ethnicity or race, employees’ experience of politeness, dignity and respect is fairly perceived across board (Grover & Coppins, 2012).

**1.10 Chapter Summary**

This chapter provides an overview of the thesis. It sets out the aims, objectives and research questions. The subsections provide focus for the entire research. The chapter provides justifications for this research and defines the key terms that are recurring as the study progresses. The scope and delimitations are also provided in this chapter, as well as a brief
description of the research method and design. On these premises, the thesis proceeds with the literature review in the next chapter.
Chapter 2
Literature Review

2.1 Introduction

This chapter provides a review of literature in line with the research objectives. In order to investigate ethnic identity as a determinant of employee psychological ownership perception, the chapter provides a review of ethnic diversity and psychological ownership theory literature. The contributions to ethnic diversity literature include; introducing a relational perspective to diversity management (Meier, 2014), enhancing the definition of active representation (Kennedy, 2014), and the inclusion of organisational identification as a determinant of employee values and the delineation of ethnic identity using geographical location. A review of psychological ownership theory literature shows that most scholars have considered the concept as an intervention and a stressor (Han et al., 2010). As an intervention, psychological ownership has been used to explain the mediation relationship between a desired employee state of mind and activity and as an organisational procedure (Ramos et al., 2014). As a stressor, research has shown that psychological ownership has positively influenced employees state of mind and activities (Knapp et al., 2014).

There is however no literature that focusses on the emergence of psychological ownership perception. There is also a lack of literature that focuses on the component of psychological ownership perception and how they are influenced. This review also shows that there is a lack of literature that focusses on how collective identities and groupings at work may influence employee perception. Thus, the objective of unbundling the concept of psychological ownership and explaining its formation process. In unbundling psychological ownership, the thesis provides an explanatory mechanism through which each component emerges in the formation process using self-identity theory. Self-identity theory is important
because it underpins how self-identification extends to organisational identification. In this chapter also, psychological ownership is presented as a composite construct that embodies other behavioural concepts such as employee commitment, employee identification, and internalisation.

Psychological ownership theory has been used by scholars to advance the understanding of the antecedents and outcomes of employee ownership perception. However, the concept of ownership perception still lacks clarity in terms of conceptualisation and focus (Peng & Pierce, 2015). Conceptually, existing studies have used ownership perception interchangeably with the outcomes of psychological ownership, whilst others have explained the effect of ownership perception as a mediator (Dawkins et al., 2017). In terms of focus, recent employee psychological ownership studies have been dominated by investigation of ownership perception at the individual identity level (McKay & Avery, 2015). Hence, there is a dearth in literature that explains psychological ownership at a collective or group identity level. In line with Dawkins et al. (2017) conceptualisation of collective or group identity level, ethnic identity is examined as a determinant of employee psychological ownership perception.

The aim of this chapter is to enable the development of a theoretical framework for linking ethnic identity to employee psychological ownership perception. The chapter is divided into two main sections. The first section explains the concept of ethnic diversity and highlights the contribution of this thesis to diversity management literature. The second section focusses on the first research objective by unbundling the concept of psychological ownership.

### 2.2 Ethnic Diversity

The ethnic diversity literature is reviewed in this section to clearly highlight the contributions of this study to diversity management literature. The origin of ethnicity as a terminology is traceable to the Greeks, and is translated as ethnos, from the root word ‘ethnikos’ or heathen (Jenkins, 1997, p. 19). Ethnicity has been a subject of research since the fourteenth century
in Britain, and America (Purwoko, 2015). During the Second World War, ethnicity was widely used to describe Jews, Italians and others that were generally regarded as a lower class of people in comparison with the British (Purwoko, 2015). However, in recent times, the concept of ethnicity has been used to describe a group of people with a shared heritage or identity (Purwoko, 2015).

The demographic compositions of organisations have continue to change as a result of globalisation; this is evidenced by the employment of people from different ethnic and racial identities (Cascio & Boudreau, 2016). This trend has attracted the attention of scholars because of the importance of employees’ identities to their behavioural patterns within the organisation (Nyambegera, 2002). Ethnic diversity refers to the differences that exist in a group in relation to a common identity (Festus, 2015). The identities may be as a result of their cultural values and history (Chrobot-Mason, 2004), for example, age, gender, language, sexual orientation, social class and education (Festus, 2015). Employees from similar ethnic groups may share a common language, culture, origin and territory (Muttarak & Heath, 2010), and may behave in a peculiar way towards others (Festus, 2015).

Ethnic traits influence behavioural patterns at work (McCauley, 2014), this warrants a need for diversity management policies to tap into the advantages as well avoid the disadvantages of a diverse workforce (Ashikali & Groeneveld, 2015). Diversity management policies are planned programmes targeted at ensuring representation of groups that have not been fully represented in the organisation (Verbeek & Groeneveld, 2012). These policies are important not only for improved performance, but for fostering a socially responsible and inclusive organisation (Pepple, 2016). Previous studies on ethnic diversity have in most cases reached a conclusion of zero-direct-relationship or mixed effect. For example, Stahl et al. (2010) posited that ethnic diversity was negatively related to convergence and positively related to divergent teams, and Alesina and Ferrara (2005) noted that while ethnic diversity positively influences innovation and creativity, it negatively influences conflict, communication
and delayed decision making. Other scholars have focused on the macro effect of ethnic diversity, regarding its usefulness mainly for correction of under-representation (Asante & Gyimah-Boadi, 2004). This study focuses on the individual employees’ perception of ethnic representation in the organisation.

As organisations continue to embrace an ethnically diverse workforce, the likelihood exists for employees to carry their personal values to the workplace (Messarra, 2014). This study focuses on the organisational demographic component of ethnicity because of its relevance to organisational activities and employee wellbeing (Smith & Elliott, 2002). It emphasises the need to recognise and value ethnic representation within the organisation (Barak, Cherin, & Berkman, 1998), with a view to harnessing it to improve employees psychological ownership perceptions (Wyatt-Nichol & Antwi-Boasiako, 2012).

The origin of the concept of ethnic representativeness in the public sector is associated with the notion that bureaucracies should be a reflection of the major ethnic group in the society (Kingsley, 2003). Kingsley (2003), argued that major ethnic groups have more stake in the society and thus should be entrusted to running the bureaucracy on behalf of the society. The earlier notion of government bureaucracies have continued to evolve over time with scholars calling for government organisations and organisations in general that are more reflective of the demographic composition of the society they serve, as well as their values (Long, 1952; Van Riper, 1958). A review of public and private sector representativeness discourse show that the concept of organisational representativeness has been enlarged to include both ensuring that the bureaucracies mirror the society, and that their outcomes are felt throughout the larger society with the minority groups included (Andrews, Ashworth, & Meier, 2014; Meier, 2015).

2.2.1 Background of ethnic diversity

With the increase in globalisation, countries, societies and organisations are increasingly becoming diverse, with employees of different ethnic and racial backgrounds interacting and
relating with each other (Andrevski et al., 2014). Employees’ ethnic and racial identities may affect their actions and interactions at the workplace, hence the need for research on workforce diversity and its management (Nyambegera, 2002).

Although the concept of diversity management originated from the United States (Syed & Özbilgin, 2009), it is relevant to almost all countries and continents. Existing studies suggest that despite the global predominance of diversity management issues, the impact may be more challenging for Africa, and this is because some of the world’s ethnically diverse countries are in Africa. For example, Das and DiRienzo (2014) in their cross-country research on diversity highlight that 33 out of 69 of the world’s most diverse countries are in Africa. Also Easterly and Levine (1997) note that 14 out of 15 of the world’s most ethnically fractionalised countries are in Africa. In an attempt to explain why Africa accounts for the most ethnically diverse continent, this study suggests in line with Green (2013) that even though ethnic diversity in Africa predates colonisation, the advent of colonialism highlighted and at times exacerbated the issues of ethnic diversity. Examples of African countries affected by such implication of colonization are Kenya, Uganda, and Nigeria (Nyambegera, 2002).

Within the countries with high ethnic fractionalisation, governments are faced with the conflict arising from ownership and distribution of resources amongst the federating ethnic groups or states (Turgeon & Gagnon, 2013). This ethnic diversity conflict affects individuals at the societal and organisational leading to diversity management policies that institutionalise representation of ethnic groups or states in the employee composition of both political and bureaucratic organisations (Mustapha, 2007).

2.2.2 Current Literature on ethnic diversity in organisations

Prior studies on organisational representation have focused on ethnic representation implication as an affirmative action instrument for example (Lippert-Rasmussen, 2008; Turgeon & Gagnon, 2013). In a recent study, Hong (2016) noted the importance of ethnic representation in the bureaucracy as it relates to crime reduction. Hong (2016) suggested
that ethnic representation in the police force improves the integrity of the force and citizen coproduction.

Hong (2016) undertook a longitudinal study spanning over a period of 10 years. The study was premised on ascertaining whether the 10-year policy introduced by the government to make the police force a representation of the society would reduce the crime rate within the locations where the police force had minority ethnic group underrepresentation. By means of secondary data provided by the police force, Hong (2016) made the following findings: that organisational police representation does result in officers acting with integrity and reduce discriminatory behaviour towards minority citizens; and, that police civility towards ethnic minority results in the coproduction of efforts that will enable the police force to meet its objects.

Whereas Hong (2016) provides an insight and contributes to the representative bureaucracy discourse, it focussed on societal impact of a representative police force, and did not provide evidence of how representative bureaucracy may influence organisational integrity. Other similar studies on representative bureaucracy have also towed the lines of Hong (2016) in terms of focusing on the macro (societal benefit) and meso (organisational benefit). For Andrews et al. (2014), representativeness is useful as it enables the organisation make better decisions from a wide range of ideas and experiences, and for the organisation to enjoy societal goodwill following the employee profile that mirrors the society.

Moving from affirmative action, some scholars have attempted to link ethnic representativeness to fostering diversity climate and inclusiveness. For example, Andrews and Ashworth (2015) examined implications of ethnic and gender representation on public sector employees perception of inclusiveness. The authors defined inclusiveness as the extent to which employees are considered as insiders in the organisation they work. Andrew and Ashworth’s (2015) work was premised on the lack of literature highlighting the exclusion of minority employees from opportunities and resources within the organisation.
Using secondary data provided by the Civil Service People Survey (CSPS) 2010, Andrews and Ashworth (2015) undertook a statistical analysis to test their hypothesis. The survey provided robust data for their study with over 300,000 responded drawn across the UK. Their findings support already existing arguments (Choi & Rainey, 2010; Pitts, 2009; Selden & Selden, 2001) that ethnic and gender representation in bureaucratic organisations reduces workplace discrimination and bullying, and hence, is perceived to be inclusive by employees.

The use of secondary data appears to be more frequent in research on employee perceptions of diversity management in the public sector. For example, in their review of literature on the widely used Federal Employee Viewpoint Survey (FEVS), Fernandez, Resh, Moldogaziev, and Oberfield (2015) suggested that employees that perceive that their organisation manages diversity well experience job satisfaction, low job turnover, and score their team performance high.

Also, studies suggest that employee desires for ethnic representativeness are as a result of the ambition sensitiveness of the employees (Lippert-Rasmussen, 2008) and the dominance of power and politics within organisation (Zigarmi et al., 2015). Employees from various ethnic groups pursue higher numerical representation of their group members in positions of authority for several reasons such as status, perceived value to the organisation and higher respect (Binning & Unzueta, 2013). Some employees also view the representation of their ethnic group in organisational hierarchy as a form of social capital—an opportunity for growth as a result of their interrelationship with the top (Ossenkop et al., 2015). Other employees attribute job satisfaction (Wyatt-Nichol & Antwi-Boasiako, 2012), perceived organisational fairness (Choi, 2013), promotion (Kay & Gorman, 2012), to representation of their ethnic group in authority.
2.2.3 Limitations of current literature on ethnic diversity in organisations

Although the concept of ethnic diversity in organisations has been well researched, with contributions made that have enhanced the working of organisations, some organisations still experience ethnic conflicts and tensions among their employees (Hong, 2016). This is evidenced by the findings from existing studies that suggest that representation of a minority group positively influences the groups in question. For example, in a recent review, Kennedy (2014) pointed out that 73% of the studies concluded that the role of minority representation was to influence policy that will improve their minority group. The review reveals the lack of literature that investigates the linkage between ethnic representation to the broad objectives of the organisation and society at large, thus, highlighting a gap in studies that link ethnic diversity to organisation wide goals.

Drawing on the systematic review of Kennedy (2014), the definition of active representation as presented in existing literature is limited to the introduction of policies that benefits the underrepresented minority group. For Kennedy (2014), active representation entails ensuring that the underrepresented are given due representation in the organisation, as well as the opportunity to make decisions for their respective groups. This study utilises Self-identity theory to extend the definition of active representation (Yang et al., 2013). Thus, the concept of organisational identification is included such that the employees focus on the broad goals of the organisation as against the ethnic group.

Whereas ethnicity is defined in terms of shared identities such as race, religion, and location, Kennedy (2014) highlights a scarcity in literature that links employee ethnic identity to employee perception. This lack of literature on the implications of employees’ identification with their ethnic groups suggests the need consider ethnicity from a relational perspective. Furthermore, of the 93 studies that were systematically reviewed, none of them utilised the demographic component of location, such as state, country or region in their analysis. According to Grissom, Nicholson-Crotty, and Nicholson-Crotty (2009), location is a very
important factor to consider in the context of how employees perceived representativeness in the organisation. Table 1 provides a summary of the future direction of this study based on the existing gap in ethnic diversity literature.

Table 1: Summary of contributions to ethnic diversity literature

<table>
<thead>
<tr>
<th>Direction</th>
<th>Existing study</th>
<th>Supporting citations</th>
<th>Study contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanding ethnic diversity to relational perspective</td>
<td>Focus on ensuring that organisations mirror the society</td>
<td></td>
<td>Establishing a link between ethnic identification and employees’ perception.</td>
</tr>
<tr>
<td>Expanding the definition of active representation</td>
<td>Focus on how ethnic representation results to introduction of policy improve the lot of their ethnic group</td>
<td>Kennedy (2014)</td>
<td>Focus on how ethnic diversity influences organisational identification and broad goals of the society</td>
</tr>
<tr>
<td>Determinants of employee values</td>
<td>Socialisation experiences focus on how demographic linkage influence employee values</td>
<td>Meier (2014)</td>
<td>Focus on how Self-identity theory will enable employees’ values to be linked to their organisational identity</td>
</tr>
<tr>
<td>Demographic focus of representation</td>
<td>Race, ethnicity, gender, status</td>
<td>Kennedy (2014)</td>
<td>Region or location- attempt to explain ethnicity in terms of representation of employees from various States and Local Government Areas in Nigeria</td>
</tr>
</tbody>
</table>

2.3 Ethnic diversity in organisation, employee psychological ownership perception: a multi-sectoral challenge

A major challenge for organisations within societies with diverse ethnicities is the promotion of employees’ perception of organisational ownership (Ng & Sears, 2014). This is because employees may perceive themselves as being discriminated as a result of their ethnicity tend
to feel demoralised and lose confidence in the system (Brown, 1999). Although this problem persists for both public and private sector, the implications are more severe for public sector bureaucracies (Oberfield, 2016).

Private sector organisations are able to initiate organisational ownership schemes that may improve employees’ shared interest with the organisation (Wagner, Parker, & Christiansen, 2003). These initiatives require certain formal commitments from the organisation that bestows rights and responsibilities to the employees, and are more practicable by private sector organisation (Wagner et al., 2003). However, public sector organisations (bureaucracies) are run by the government on behalf of the public (Gera, 2016), and may be unable to implement formal employee ownership schemes. This may lead to the problem of how to influence employees’ ownership perceptions in the public sector (Brown, 1999).

Employee ownership refers to employees’ personal attachment to the organisation which results to the employees’ feeling and behaving like they own the organisation (Peng & Pierce, 2015). This feeling is often shared by both the employee and employer, and as such results in their focus on a single goal; the organisation’s continued survival (Wagner et al., 2003). Organisations that implement employee ownership schemes may perform better because of the employees’ shared interest with the organisation (Wagner et al., 2003). Examples of such schemes include employee share ownership programme (Gamble, Culpepper, & Blubaugh, 2002), profit sharing schemes (Blasi et al., 2016), and performance pay (Jirjahn, 2016).

Although private sector organisations’ employee ownership schemes are expected to provide a buffer against diversity management challenges (Brown, 1999), studies suggest that formal employee ownership schemes have failed to influence employees’ perceptions (Kohn, 1993). Therefore, there is a need to look beyond formal employee ownership schemes and introduce a relational framework to influence employees’ ownership perceptions. Hence,
making this study useful to scholars interested in employee ownership perception irrespective of the organisational sector.

2.4 Psychological ownership theory

Psychological ownership theory posits that ownership is a means of defining one’s self, one’s possession, and one’s territorial boundary (Pierce et al., 2003). Psychology of possession is innate in every individual such that they sometimes define themselves by what they possess (Hou et al., 2009; Peng & Pierce, 2015). Possession may be material or immaterial and the effect of ownership perception may reflect in employees’ behavioural, emotional and psychological patterns (Peng & Pierce, 2015).

According to psychological ownership theory, ownership perception is rooted in efficacy, self-identity, and having a place (Peng & Pierce, 2015). Efficacy is used to explain the need for one to have control over one’s possession, while self-identity underpins the notion that possessions serve as a means of self-identity because of the value placed on such objects or possessions (Peng & Pierce, 2015). Having a place explains the need for individuals to own a territory such that they can invest themselves in the organisation, as well as come to intimately understand the organisation (Peng & Pierce, 2015).

There exists a cause and effect relationship between perceptions of ownership and the organisation (Jussila, Tarkiainen, Sarstedt, & Hair, 2015). This is summarised by Jussila et al. (2015) as the stimulation and activation effect. Explaining further, Jussila et al. (2015, p. 124), suggested that the stimulation effect required ‘need activation and arousal are among the motivational forces that drive individual to use possessions, think of them, observe them, care for them, and when required, to defend them’.

The component construct of employee psychological ownership perception is conceptualised in line with Peng & Pierce (2015) as follows: efficacy -as employee self-efficacy; self-identity-as organisational self-identity; and having a place or territoriality- as
employee’s voice. Within organisational self-identity, employees come to define themselves in their organisation. Such employees consider the success or otherwise as theirs. In the voice component, having an understanding and of the control of the organisation may give the employee in a voice in that organisation.

As discussed in the scope of this thesis in chapter one, organisations can influence psychological ownership in employees using both formal ownership schemes and informal ownership schemes. The thesis focuses on the latter. This is in line with the organisational focus of the thesis (public and private sector sector), and the requirements that underpin the practice of formal ownership. This thesis refers to informal ownership as employees’ feelings and behaviour of ownership of the organisation as a result of the organisational context such as fairness and support from colleagues and managers (Borgogni, Dello Russo, Petitta, & Vecchione, 2010).

2.4.1 Origin of psychological ownership
Psychological ownership theory discourse is relatively recent when considered alongside other human resource management and organisational behaviour theories (Van Dyne & Pierce, 2004). Among the earliest contributors to this theory are Pierce et al. (1991). Prior to the introduction of psychological ownership theory as a unique management theory, the concept was discussed under the employee ownership programmes introduced by organisations to increase employees’ participation and contribution to the organisation (Derrick & Phipps, 1969; Pierce et al., 1991; Quarrey, Blasi, & Rosen, 1986).

The works of these researchers were widely influenced by the number of organisations in the United States of America that have increasingly introduced employee ownership schemes. For example, Pierce et al. (1991), noted that between the mid-1970s to the later 1980s, the number of organisations that were practicing employee ownership schemes rose from 1,000 companies to well over 10,000 companies. This was also the case for employees, as the number of employee owners themselves rose to well over 10 million. An explanation for the
increased participation of organisation within the first decades of the introduction of employee ownership schemes was the findings that associated employee ownership schemes to improved performance from employees. For example, Pierce et al. (1991) found that employees within organisations that implemented employee ownership schemes witnessed greater participation, less feelings of alienation, lesser absenteeism and lesser turn over intension.

Within the employee ownership discourse historical perspective, the main focus has been to highlight the consequences of employee share ownership schemes operated within different organisations. Gamble et al. (2002) noted that organisational theorists at that time posited that although employee ownership schemes are formal, they create psychological expression in the behaviour of employees. Thus, the early employee ownership view held that the concept was a composite construct.

In recent times, scholars have sought to explain the factors that affect individual employees’ willingness to participate in employee ownership schemes. For example, Brown, Landau, Mitchell, O’Connell, and Ramsay (2008) noted that the attributes of the organisation may influence whether an employee participates or not. Examples of such attributes include; the design of the employee ownership plan, and how the plan is communicated in the organisation and the organisation’s profile in general. Others include; the demographic attributes, the financial risk perception, the level of education of the employees, their previous experiences of similar schemes and the nature of employees’ work (Brown et al., 2008).

2.4.1.1 Limitations of early views of employee ownership

Although, a lot of headway was made during the early theorisation of employee ownership, the concept was limited in the way the phenomenon was conceptualised. For example, psychological ownership was seen as an outcome of formalised ownership schemes that presented certain rights, influence, information and equity to employees (Pierce et al., 1991).
Others held that the form of the employee ownership scheme in the place in the organisation was an antecedent to psychological ownership (Toscanol, 1983). Furthermore, another feature that was considered as a key factor for psychological ownership to emerge was the attributes of the form of employee ownership schemes. For example Rhodes and Steers (1981) noted that employees who participated in meetings where decisions on the future of the organisations were decided experience greater psychological ownership.

These propositions were supported by cross sectional studies during the late 1980s that found no direct linkage between employee ownership of employees’ positive behaviour and commitment (Klein, 1987). Thus, within the period when the theory was introduced, psychological ownership was limited to explaining the effect of formal ownership. That is, employee ownership was considered more from an agency theory perspective, with the supposition that financial or other incentives being core for the formation of psychological ownership. A major drawback for the early view was the lack of literature explaining the component of psychological ownership, and other antecedents that were not formalised within organisations.

2.4.2 Psychological ownership in the current era

The agency theory premise that formed the basis of employee ownership has been flawed by existing studies for failing to explain emotional attachment to their organisation (Mahto, Ahluwalia, & Khanin, 2014). For example, Mahto et al. (2014) alluded to the notion that formal ownership had a dual effect on employees such that it influences employees’ perceptions, as well as decreases such positive perceptions if the organisation is not doing well. Mahto et al. (2014) noted that for employees that have share ownership in the organisation, any dwindling in the company’s fortune, such that its share price is reduced, such outcome may result in negative perception from the employees. This therefore suggests that formal ownership is transitory and evolves with situations.
Following the challenges of early theorists on employee ownership, recent scholars have attempted to explain the emergence of employee psychological ownership from both formal and informal antecedents. For example, Guery (2015) suggested that the value an organisation places on human capital development by investing in its employees has a positive relationship with psychological ownership perception. Others have indicated that the level of autonomy that an employee has on the job, the complexity of the job, the type of leadership, and the structure of the work environment (Bernhard & O'Driscoll, 2011; Mayhew, Ashkanasy, Bramble, & Gardner, 2007; O’driscoll, Pierce, & Coghlan, 2006; Pierce, O’driscoll, & Coghlan, 2004). These antecedents are generally regarded as job based psychological ownership.

The other antecedents of psychological ownership are focused on employees’ perceptions of the organisational climate. Thus, they are classified under organisation based psychological ownership antecedents. They include leadership in the organisation, the inclusion of employees in the decision-making process of their organisation, and organisational justice (Avey, Avolio, Crossley, & Luthans, 2009; Avey, Wernsing, & Palanski, 2012; Bernhard & O'Driscoll, 2011; Knapp, Smith, & Sprinkle, 2014; Sieger, Bernhard, & Frey, 2011; Zhu, Chen, Li, & Zhou, 2013).

Recent studies have shown that employee psychological ownership perception has had great impact on organisations. These include increased employee commitment to their organisations (Bernhard & O’Driscoll, 2011; Chen, Chen, Hou, Hsu, & Wu, 2009; Han, Chiang, & Chang, 2010; O’Driscoll, 2011), employee job satisfaction, organisational based self-esteem, organisational identification and lower turn-over intention (Kuhar & Cross, 2013; Liu, Wang, Hui, & Lee, 2012; Song, David, Pan, Qin, & Gao, 2014; Van Dyne & Pierce, 2004; Zhu et al., 2013). At the individual employee level, studies have reported that psychological ownership has resulted in organisational citizenship behaviour, and extra role behaviour (Park, Kim, & Song, 2015; Ramos, Man, Mustafa, & Ng, 2014).
2.4.3 Components of psychological ownership perception

A core objective of this thesis is to unbundle the construct of psychological ownership. As mentioned in the previous section, psychological ownership is a formative construct. It is used to explain employees’ emotional attachment to their organisations such that they begin to associate themselves with their organisational goals (Zhu et al., 2013). Psychological ownership is rooted in employees’ desire for territoriality, identification with their organisation, and their ability to do their jobs (Song et al., 2014). These roots have been conceptualised in this thesis as the formative components respective as follows; employee voice, organisational self-identification and employee self-efficacy. Each of these components are discussed below.

2.4.3.1 Territoriality need and employee voice

Territoriality need underpins individual needs to exert control on their target (Peng & Pierce, 2015). This desire emanates from an emotional attachment to the target or object. Reflecting this concept on organisational behaviour discourse, targets or objects are the organisations that employee work in. Employees who immerse themselves in their work may get emotionally attached to it (Zhu et al., 2013). This may be as a result of their improved competencies and the duration spent on the job. Such groups of employees may want to have increased control in the way that their jobs are designed. They may also want to be involved in the decision-making process in their organisations. The component of territoriality is explained as voice because employee voice is the process through which territoriality is manifested. Employee voice may further be classified into two, namely; protective voice and promotive voice (Yildiz et al., 2015).

Protective voice is associated with employee needs to withhold information from the organisation because they consider such information as a bargain of their continued employment or relevance (Morrison & Milliken, 2003). Another way to explain protective voice is when employees engage in extra role behaviour in their organisation to avoid being
discharged from their job. Overall, protective voice is employee self-centred and may have the potential to harm the organisation. Protective voice is highly likely to manifest within context where there is an obvious lack of protection of employees right. Another factor that boosts protective voice is the increased rate of unemployment in the society.

On the other hand, promotive voice emanates from employees’ desires to further the objectives and aspirations of their organisation (Liang, Farh, & Farh, 2012). Promotive voice is selfless in nature and it is displayed without any ulterior motive. Employees who display promotive voice at work have a strong emotional connection to their organisations that is deeper than the incentives that they receive from the jobs. Promotive voice may emanate as a result of employees’ love for their job and the organisational climate within which work is done (Liang et al., 2012). This thesis focusses on the organisational climate by investigating how ethnic identification at work influences employee voice.

In this thesis, employees’ voice involves a social trade-off between the employee and organisational climate. An organisation that provides an enabling environment that fosters open communication in exchange for employees’ contribution to the growth and development of the organisation may trigger a trade-off of voice behaviour. Within organisational climate, issues to consider include work settings, guidelines and organisation welfare programmes.

Within workplace settings, Cropanzano and Wright (2001) explain employees’ reactions as a result of organisational antecedents such as rules and norms of exchange, resource exchanges, and relationships that emerge from exchange. Furthermore, Cropanzano and Mitchell (2005) stated that rules and norms of exchange explain the reciprocal relationship that may occur such as trust, loyalty and mutual commitments as a result of the rules, guidelines that are agreed by parties in the relationship. The resources of exchange consider how employees’ reactions are influenced by socio-economic exchange such as love, status, information, money, goods, and services (Cropanzano & Mitchell, 2005; Foa & Foa, 1974). The third foundation of social exchange relationships emanates from employees when they
perceive that their employers initiate programmes that care for them (Cropanzano & Wright, 2001).

2.4.3.2 Self-identity as organisational self-identity

Individuals who place much emphasis on what they possess, tend to identify themselves by what they own (Avey et al., 2009). Within the discussion of self-identity, possession serves as a means of identification. Individuals generally have the need to acquire objects and targets (Bambale, 2013). These include need to work, need for recognition, and the need for reward (Blasi et al., 2016). Individuals who place high value on their possession, speak and act positive to protect their possession. This thesis conceptualises self-identity as organisational self-identification because the target object of interest for organisations is for employees to consider themselves as owners of the organisation. Organisational self-identification underpins the desire for employee to extend their sense of identity to their organisation. When this occurs, employees begin to associate themselves with the organisation, such that they are happy when the organisation succeeds.

Within the context of this study, unbundling the components of employee ownership, and investigating how each of the component constructs are influenced is very important in the organisational self-identity discourse. In the light of the theoretical framework, ethnic identification is considered very deeply within the empirical context. This is because ethnicity serves as a means of personal identification. Thus, discussing self-identity as organisational self-identity highlights the need for employees to extend the same sense of ethnic loyalty and identification to their organisation. Organisational self-identity is influenced by the organisational climate issues (Knapp et al., 2014). This suggests that identification with the organisation may be as a result of interpersonal or interactional and procedural relationships at work (Dijke, Cremer, Bos, & Schefferlie, 2009).
Interpersonal relationships are the day-to-day interactions between colleagues, while procedural relationships are employees' interpretations of the implementation of rules and regulations in the workplace (Bies & Moag, 1986; Cornelis, Hiel, & Cremer, 2006). Reflecting on ethnic identification, interaction relationships underpin employees' feelings of acceptance among their co-workers irrespective of their ethnic heritage. Procedural relationships underpin employee feelings of not being differentiated in the organisation as a result of their ethnic heritage (Choi & Rainey, 2014). Organisational policies that value diversity are key motivators of procedural relationships.

2.4.3.3 Efficacy as employees’ self-efficacy

This component of employee ownership perception is used to explain employee needs to have a grip on their jobs (Boyd & Vozikis, 1994). Having a grip explains employees’ ability to do their job. The goal of employing people into the organisation is to achieve tasks that are contributory to the success of the organisation. Thus, indicating how important employees are. Within employee self-efficacy, organisations are required to employ qualified persons to work. Self-efficacy need underpins employee needs to have the capacity to do their job.

Capacity to do their jobs hinges on both technical competence and emotional stability. Within technical competence, efficacy covers antecedents such as training, on-the-job mentoring, assignment of tasks that meet employees’ competence, clear sets of tasks and targets and education (Consiglio, Borgogni, Tecco, & Schaufeli, 2016). Emotional competence is influenced by the level of support available at work. These may include open communication within the organisation, leadership style, on organisation’s value of employees’ worth and the feeling of acceptance by colleagues (Borgogni et al., 2010). Emotional competence may need due to their perception of the social context within the organisation.

Perception of social context refers to an individual’s perceived role requirements and expectations set up by the organisation’s social system within job group (colleagues), and
organisational hierarchy (supervisors and managers) (Borgogni et al., 2010). Explaining the perception of social context, Stevens and Fiske (1995) suggest that creativity is influenced by employees’ feelings of belonging, ability to trust and understand colleagues including supervisors and managers, control, and self enhancement potentials. Perception of social context is summarised in this study as employees’ feeling of support from their colleagues (job group) and support from management (organisational hierarchy). The study defines support from colleagues as the willingness for colleagues to co-operate and help each to better perform their jobs and improve their relationships (Chughtai, 2016). In this thesis, employee self-efficacy is investigated by assessing the effect of an emotional antecedent. The thesis examines the effect of ethnic identification on employees’ ability to their do their jobs.

**2.4.4 Psychological ownership as a composite construct for explaining other psychological constructs**

This section highlights how various organisational behaviour related constructs relate with employee psychological ownership perception. The section draws on a comparison in Table 4 as posited by Pierce, Kostova, and Dirks (2001). Pierce et al. (2001) present eight dimensions upon which psychological ownership differs from commitment, identification, and internalisation. These dimensions include, the conceptual basis, the questions posed to individuals with regards to ownership of possessions, how each of the construct is developed, the types of state of each construct, the potential outcomes of the constructs, rights associated with the employee feelings and the responsibilities that ensue following the feelings.

The aim of this section is to emphasise how composite the concept of psychological ownership is, and to show that when considered closely, these concepts are parts of the composite nature of psychological ownership. This further reaffirms the earlier notion that psychological ownership is a formative construct. The following discussion further contributes to the organisational behaviour discourse by highlighting the commonalities of these attributes to the component constructs of psychological ownership. Thus, suggesting that
while these attributes can be examined separately, in relation to psychological ownership, they are components and may further be investigated as such. Discussions in the following sub-sections are made following the conceptualisation of psychological ownership as presented by Pierce et al. (2001, p. 306).

2.4.4.1 Psychological ownership and commitment – employee voice

According to Pierce et al. (2001), employee commitment is different from psychological ownership because it focusses on employees’ desire to remain affiliated with the organisation as against to the possessive feeling posited by psychological ownership. On the individual question, while commitment feelings contemplate membership of the organisation, psychological ownership considers the organisation as a target object or possession. On the motivational basis dimension, commitment focusses on employee needs for security, feelings of a sense of belongingness and on their beliefs and values. Commitment is developed when employees decide to become member of the organisation. The state of commitment feeling is affective, and results in employees’ outward manifestations of organisational citizenship behaviour, lower absenteeism and job retention.

A closer look at the explanations of the component of psychological ownership perception suggests that commitment is closely related to the voice component of psychological ownership. Within the component employees display territorial behaviour as well as promotive behaviour. This thesis argues that for employees to get to a point of becoming actively involved in the organisation such that they exhibit extra role behaviour such as organisational citizenship, such employees have decided to main affiliation and membership with the organisation. Thus, in the light of this argument and reflecting on the similarities between employee voice and commitment feeling, this thesis suggests that employee commitment is a component of psychological ownership.
2.4.4.2 Psychological ownership and identification - organisational self-identity

Identification is premised on the use of one’s place of work to define oneself (Pierce et al., 2001). It answers the question of who the employee is. Antecedents of identification include; attraction need, need for affiliation, need for self-enhancement and holism. When the feeling of identity develops, employees desire to categorise themselves with their organisation. The outcomes of identification in organisations includes; providing support for the organisation, active participation in the organisation, reduced stereotyping, frustration, stress, and alienation. Identification impresses on employees to maintain the status of the organisation (Pierce et al., 2001).

In line with the aim of this subsection, identification is explained parallel with the psychological ownership component of organisational self-identity. The dimensions of identification mentioned in Table 2 are similar attributes of organisational self-identity. Within the organisational self-identity component, employees extend their organisation’s identity to themselves. This results in their decision to maintain membership with the organisation. For such employees, who they are is a reflection of who their organisation is. Thus, they provide support and participate actively to improving their organisation especially because the organisation is an extension of self. While this may reduce alienation, there is an increased likelihood for stress and frustration upon employees when their organisations are not doing well (Mayhew et al., 2007).

2.4.4.3 Psychological ownership and internationalisation - employee self-efficacy

Internalisation emphasises employee needs to share their organisational goals and objectives. This is usually more effective when such goals are in line with employee beliefs. The process of internalisation is influenced when employees feel it is right for them to intervene in their organisation. The developmental process of internalisation involves an adoption of organisation’s goals and objectives. As a consequence of internalisation, employees exhibit
organisational citizenship behaviour, and increased feelings to remain in the organisation. Internalisation impresses upon employees to do their best to protect and achieve organisational goals and objectives.

A review of the component of psychological ownership presented above illustrates that these dimensions of internalisation are reflective of the psychological ownership component of self-efficacy. Within employee self-efficacy, employees are motivated to do their best to improve or protect the object of ownership which in this instance is the organisation. Their increased competence and emotional support reduces their intention to leave the organisation. See Figure 4.

**Figure 4-Components of psychological ownership**
<table>
<thead>
<tr>
<th>Dimension of Distinctiveness</th>
<th>Psychological Ownership</th>
<th>Commitment</th>
<th>Identification</th>
<th>Internalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptual core</td>
<td>Possessiveness</td>
<td>Desire to remain affiliated</td>
<td>Use of elements of ones’ organisation to define oneself</td>
<td>Shared goals or values</td>
</tr>
<tr>
<td>Questions answered for individuals</td>
<td>What do I feel is mine?</td>
<td>Should I maintain membership?</td>
<td>Who am I?</td>
<td>What do I believe?</td>
</tr>
<tr>
<td>Motivational bases</td>
<td>Efficacy, self-identity, need for place</td>
<td>Security, belongingness, beliefs and values</td>
<td>Attraction, affiliation, self-enhancement, holism</td>
<td>Need to be right, beliefs and values</td>
</tr>
<tr>
<td>Development</td>
<td>Active imposition of self on organisation</td>
<td>Decision to maintain membership</td>
<td>Categorisation of self with organisation, affiliation, emulation</td>
<td>Adoption of organisation’s goals and values</td>
</tr>
<tr>
<td>Types of state</td>
<td>Affective/cognitive</td>
<td>Affective</td>
<td>Cognitive/perceptual</td>
<td>Cognitive/objective</td>
</tr>
<tr>
<td>Select consequences</td>
<td>Rights and obligations, promotion of resistance to change, frustration, stress, withholding information and knowledge, workers integration, alienation</td>
<td>OCB, reduction of employee turnover, improved attendance</td>
<td>Support for organisation and participation in activities, intent to remain, frustration/stress, alienation and anomie</td>
<td>OCB reduction of intention to leave, in-role behaviours</td>
</tr>
<tr>
<td>Rights</td>
<td>Stewardship and OCB, rights to voice, burden sharing, protecting</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Responsibilities</td>
<td>Caring for and nurturing others, and growing/enhancing</td>
<td>None</td>
<td>Maintain the status of the admired attribute</td>
<td>Goals and value protection</td>
</tr>
</tbody>
</table>

Source: Pierce et al. (2001, p. 306). OCB- Organisational citizenship behaviour
2.4.5 Current application of psychological ownership theory to employee perceptions

In this section, the literature review attempts to discuss the first research objective. Discussions here are aimed at further explaining the concept of psychological ownership and explain how each component relates together for employee psychological ownership perception to emerge. The literature review presents the current position of the theory as well as highlights the need to examine the relationship between the antecedents of psychological ownership and the components of ownership perception in the formation of EPOP. The thesis reviews recent applications of psychological ownership literature and makes reflections to where psychological ownership have similar conclusions with past literature. The aim is to highlight the relevance of the future direction and contribution that this thesis brings to the psychological ownership discourse.

Peng and Pierce (2015) typify the relationship and outcomes of job and organisation based psychological ownership. Peng and Pierce (2015) noted that whereas extant psychological ownership theory focused on job and the organisation, there is little literature explaining the relationship between job and organisation-based psychology and focussed their work on how employee feelings of work and organisation emanated. In their empirical analysis, job based psychological ownership and organisation based psychological ownership were used to mediate the relationship between experienced job control and organisational outcomes of job satisfaction, knowledge with holding, organisational citizenship behaviour and turnover intentions.

Although the research of Peng and Pierce (2015) was carried out in China; a developing country and collectivist setting, their findings were consistent with similar studies carried out earlier in Malaysia (Md-Sidin, Sambasivan, & Muniandy, 2010), as well as other western publications (Mayhew, Ashkanasy, Bramble, & Gardner, 2003; Van-Dyne & Pierce, 2004; Vandewalle, Van-Dyne, & Kostova, 1995) supporting a strong positive relationship between
job ownership and organisation ownership and job satisfaction, organisational citizenship behaviour.

Further findings on intention to remain in the organisation show that whereas job-based ownership was positively related to intention to remain in the organisation, organisation-based ownership has a negative relationship, suggesting that psychological ownership may result in employees feeling more attached to their job than to their organisation. The findings of Peng and Pierce (2015) also support other exist psychological ownership and job satisfaction literature for example Dawkins et al., (2017).

Around the same time that Peng and Pierce (2015) made their contribution on the linkage between job and organisation based psychological ownership and job satisfaction. Park et al. (2015) investigated the mediating effect that psychological ownership has on leadership and in-role performance relationship. Their study was conducted in non-profit public-sector organisations in Korea.

Findings from Park et al. (2015) suggest that there is a positive relationship between ethical leadership and employees’ behavioural performance. Park et al. (2015) explained that employees will behave in a positive or desirable manner if they perceive that the actions of their leader are ethical. Their findings corroborate other extant psychological ownership literature that has investigated the relationship between leadership and organisational outcomes in the lens of psychological ownership theory. From the review of Park et al. (2015), this thesis suggests that the leader-member focus of the study is a limitation, as the study did not consider other relationships within the organisation such as employee–employee relationship that may influence behavioural performance.

A number of recent studies were conducted on psychological ownership theory in addition to Peng and Pierce (2015) and Park et al. (2015). These studies focussed on the relationship between psychological ownership and person organisation fit, perception of justice, and
participation in decision making. For example, in their studies that examined the relationship between participation in decision making and psychological ownership, Liu et al. (2012) highlighted the importance of employees’ participation in decision making as critical for both organisation and job based psychological ownership.

Findings from Liu et al. (2012) investigation of 313 respondents from two telecommunication companies in China reaffirm that usefulness of psychological ownership as a tool to predict and understand employee perception. Further analysis of Liu et al. (2012) finds that psychological ownership exhibits a strong mediating relationship between decision making and organisation based self-esteem and organisational citizenship behaviour. Although their findings support that notion that participation in decision making resulted in employees’ voice behaviour, the study did not explain the relational mechanism through which ownership perception relates to voice.

Other studies suggest that psychological ownership perception and participation in decision making have a strong positive relationship (Chi & Han, 2008; Han et al., 2010). For example, Han et al. (2008) noted the route to organisational commitment was a strong relationship between participation in decision making and organisation based psychological ownership. In a similar vein, Chi and Han (2008) suggested that participation in decision making influences employees’ perceptions of procedural justice.

The literature review presents the current position of the theory as well as highlighting the need to examine the relationship between the antecedents of psychological ownership and its components. The thesis reviews most recent applications of psychological ownership literature and makes reflections to where they have similar conclusions with past literature. The aim is to highlight the relevance of the future direction and contribution that this study brings to the psychological ownership discourse. To further summarise existing literature on the antecedents and outcomes of psychological ownership, this thesis adapts the findings from the recent review of Dawkins et al. (2017) in Tables 3 and 4.
<table>
<thead>
<tr>
<th>Focus</th>
<th>Antecedents</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation-based psychological ownership</td>
<td>Leadership</td>
<td>Avey et al. (2009); Avey et al. (2012); Zhu et al. (2013); Bernhard and O’Driscoll (2011)</td>
</tr>
<tr>
<td></td>
<td>Participation in decision making</td>
<td>Chi and Han (2008); Han et al. (2010); Liu et al. (2012); Jon L Pierce et al. (2003)</td>
</tr>
<tr>
<td></td>
<td>Autonomy to managers and employees</td>
<td>Henssen, Voordeckers, Lambrechts, and Koiranen (2014); Mayhew et al. (2007); O’driscoll et al. (2006)</td>
</tr>
<tr>
<td></td>
<td>Job control</td>
<td>Peng and Pierce (2015); McIntyre, Srivastava, and Fuller (2009)</td>
</tr>
<tr>
<td></td>
<td>Procedural justice</td>
<td>Sieger et al. (2011)</td>
</tr>
<tr>
<td></td>
<td>Organisational identification</td>
<td>Knapp et al. (2014)</td>
</tr>
<tr>
<td>Job based psychological ownership</td>
<td>Autonomy, job, complexity, leadership, the structure of the work environment, and employees’ spiritual and emotional intelligence</td>
<td>Mayhew et al. (2007); Bernhard and O’Driscoll (2011); O’driscoll et al. (2006); Pierce et al. (2004)</td>
</tr>
<tr>
<td></td>
<td>Spiritual and emotional intelligence</td>
<td>Kaur, Sambasivan, and Kumar (2013)</td>
</tr>
</tbody>
</table>

**Source:** Adapted from Dawkins et al. (2017)
Table 4: Outcomes of psychological ownership and psychological ownership as mediator

<table>
<thead>
<tr>
<th>Focus</th>
<th>Positive outcomes</th>
<th>Citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological ownership and individual attitudes</td>
<td>Organisational commitment</td>
<td>Han et al. (2010); M.-H. Chen et al. (2009); Van Dyne and Pierce (2004); Vandewalle et al. (1995); Liu et al. (2012); Mayhew et al. (2007); Sieger et al. (2011); Avey et al. (2012); Bernhard and O’Driscoll (2011)</td>
</tr>
<tr>
<td></td>
<td>Affective commitment</td>
<td>Knapp et al. (2014); McKay et al. (2007); Peng and Pierce (2015); Sieger et al. (2011)</td>
</tr>
<tr>
<td></td>
<td>Job satisfaction</td>
<td>Liu et al. (2012); Song et al. (2014); Van Dyne and Pierce (2004)</td>
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<td></td>
<td>organisation-based self-esteem</td>
<td>Ramos et al. (2014)</td>
</tr>
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<td></td>
<td>Work engagement</td>
<td>Organisational identification</td>
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<td></td>
<td></td>
<td>Turn over intention</td>
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<tr>
<td>Psychological ownership and individual behavior</td>
<td>Organisational citizen behaviour</td>
<td>Bernhard and O’Driscoll (2011); Park, Song, Yoon, and Kim (2013); Ramos et al. (2014); Van Dyne and Pierce (2004); Vandewalle et al. (1995); Zhu et al. (2013)</td>
</tr>
<tr>
<td></td>
<td>Helping behaviour</td>
<td>Van Dyne and Pierce (2004)</td>
</tr>
<tr>
<td></td>
<td>Voice behaviour</td>
<td>O’driscoill et al. (2006); Mayhew et al. (2007)</td>
</tr>
<tr>
<td></td>
<td>Higher job performance</td>
<td>G. Brown, Pierce, and Crossley (2014); Mayhew et al. (2007); Van Dyne and Pierce (2004); Wagner et al. (2003)</td>
</tr>
<tr>
<td></td>
<td>Negative outcomes</td>
<td>Kaur et al. (2013)</td>
</tr>
<tr>
<td></td>
<td>Burnout</td>
<td>Han et al. (2010); Peng and Pierce (2015)</td>
</tr>
<tr>
<td></td>
<td>Knowledge holding</td>
<td>Negative territorial behaviour</td>
</tr>
</tbody>
</table>

**Source:** Adapted from Dawkins et al. (2017)
2.4.6 Limitations of existing studies and contribution to theory

Despite their contribution to the job and organisation based psychology discourse, Peng and Pierce (2015) did not consider the relational dynamics within the work setting, hence supporting the limitations expressed in their study. In extending the discussions this study provides a composite construct of employee psychological ownership perception (EPOP) that covers aspects of job and organisation-based psychology and the relational processes upon which EPOP emerges is suggested.

The majority of investigations on psychological ownership theory have limited EPOP’s focus to job and organisation objective (individual level). Dawkins et al. (2017) review suggests an expansion in the focus of the object of interest in psychological ownership antecedents. This study responds to this limitation by examining the relational processes for examination of psychological ownership at collective level. This is achieved by linking EPOP to employees’ perceptions of ethnic representation in the organisation (Dawkins et al., 2017; McKay & Avery, 2015).

A review of existing studies on psychological ownership (Dawkins et al., 2017) notes that identity is key in understanding the dynamics of psychological ownership. Thus, an alternative theoretical approach is suggested to further explain the mechanism through which psychological ownership emerges. Their suggestions include social identity theory and social exchange theory.

In response to this limitation, this study adopts a multi theoretical approach to explaining the measure of the components of psychological ownership and how they interact for EPOP to emerge. However, rather than utilising social identity theory for the explanation of employee concept of self, the study utilises the self-identity theory. The reason being that whereas social identity theory focuses on the individual categorisation based on the group characteristics (McKay & Avery, 2015), self-identity theory focuses on identity construction as a result of social interaction (Jackson & Johnson, 2012).
Existing studies have utilised different scales to measure psychological ownership, notable among the scales is Van Dyne and Pierce's (2004) seven item scale, and Avey et al. (2009) 16 item scales. The challenges associated with these scales are as follows; measurability—the seven item Van Dyne and Pierce (2004) scale has been criticised for lack of clarity in measuring each of the components of psychological ownership perception, conceptualisation—the 16 item scale by Avery et al. 2009 has been criticised for including two additional variables to the psychological ownership construct (accountability and territoriality)(Dawkins et al., 2017). Dawkins et al. (2017) review study on psychological ownership notes that within the psychological ownership literature conceptualisation, three components (Self-efficacy, organisational self-identity and having a place) are generally accepted and those extant studies consider the additional constructs as outcomes rather than constructs of psychological ownership.

In ensuring that the limitations highlighted in existing studies are not evident in this study, the concept of employee ownership perception is discussed in line with existing studies (self-efficacy, organisational self-identity and voice to represent having a place) (G. Brown et al., 2014; Pierce et al., 1991). The empirical study adapts three validated scales to measure self-efficacy, organisational self-identity and voice. This will ensure that there is clarity in the measurement of each component, and thus, enabling the examination of the relationship between each component in the formation of EPOP.

From the review of Park et al. (2015), the study highlights the importance of psychological ownership perception for both public and private sector employees. They suggested that employees’ feeling of possessiveness of their organisation may influence positive work outcomes. The lack of employee ownership opportunities in the public sector as suggested by Park et al. (2015) supports the organisation sector focus of this thesis. Whereas private sector organisations introduce formal employee ownership opportunities to influence ownership perception, public sector organisations are not able to do so, hence they depend on informal
organisational processes. Hence this study provides practical implications for human resources practitioners in the public sector. A suggested research agenda for investigating ethnic diversity and EPOP relationship is shown in Table 5.

**Table 5: Summary of future direction/contribution of this study from literature review**

<table>
<thead>
<tr>
<th>Direction</th>
<th>Focus</th>
<th>Supporting citations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical underpinning</td>
<td>Multi theoretical</td>
<td>Dawkins et al. (2017)</td>
</tr>
<tr>
<td></td>
<td>Expansion of theory to collective ownership perception- Ethnicity</td>
<td>Dawkins et al. (2017); McKay and Avery (2015)</td>
</tr>
<tr>
<td></td>
<td>Conceptualisation of employee ownership perception</td>
<td>Peng and Pierce (2015)</td>
</tr>
<tr>
<td>Methodology</td>
<td>Organisational context- Public sector and private sector</td>
<td>Park et al. (2015)</td>
</tr>
<tr>
<td></td>
<td>Societal context- collectivist</td>
<td>Peng and Pierce (2015)</td>
</tr>
<tr>
<td></td>
<td>Measures- focus on defined conceptualisation of psychological ownership</td>
<td>Dawkins et al. (2017)</td>
</tr>
<tr>
<td></td>
<td>Measures- scale that allows for measurement of each component of psychological ownership</td>
<td>Dawkins et al. (2017)</td>
</tr>
<tr>
<td></td>
<td>Measures- SEM analysis to investigate the relationship of ethnic diversity and the component constructs of employee psychological ownership perception.</td>
<td>Dawkins et al. (2017)</td>
</tr>
</tbody>
</table>

*Note: SEM=structural equation modelling*

2.4.7 Re-conceptualization of employee psychological ownership perception

In re-conceptualising psychological ownership perception, this study considers the limitation presented by existing studies. For example, Peng and Pierce (2015) noted that existing psychological ownership studies investigated ownership perception as a concept that results either by job based or organisational based context. Peng and Pierce (2015) highlighted the need for studies that explain the relationship between job based and organisation based
psychological ownership in the outcome of ownership perception. Their study did not explain the relationship between job based and organisation-based antecedents in the emergence of ownership perception. EPOP conceptualisation in this thesis attempts to link both job based and organisation-based antecedents to the components of EPOP.

In explaining employees’ feeling of ownership, this thesis discusses the antecedents of EPOP within the purviews of: job based psychological ownership -self-value (self-efficacy); organisation based psychological ownership-self-identity; voice -both job based and organisation based psychological ownership antecedents. The thesis refers to antecedents in line with Peng and Pierce (2015) as contextual processes that make employees feel ownership perception. When employees feel like owners because of job context, for example job control, it is regarded as job based psychological ownership. Whereas, when they feel like owners as result of organisational context, for example, fairness, it is regarded as organisation based psychological ownership. See Figure 5.

**Figure 5- Re-conceptualising employee psychological ownership perception using self-identity theory**

![Diagram](image-url)

**Note:** JBPO=Job based psychological ownership; OBPO=Organisation based psychological ownership. **Source:** Adapted from Peng and Pierce (2015) and Yang, Johnson, Zhang, Spector, & Xu (2013).
2.5 **Self-identity theory and the emergence of psychological ownership**

In unbundling the concept of psychological ownership, this section addresses the second part of the first research objective. This is done by adopting a multi theoretical approach to explain the emergence of EPOP. Psychological ownership theory breaks down the components of ownership perception, whilst self-identity theory is used to explain the antecedents and interaction of the components of psychological ownership in the formation of ownership perception. The use of multiple theories to explain a phenomenon is often referred to theoretical pluralism (Modell, 2009). Although it is possible to use a single theory to explain a phenomenon, studies suggest that there isn’t a monopoly of theory that may be deployed to fully explain the organisational practices (Hoque, Covaleski, & Gooneratne, 2013).

Theoretical pluralism suggests that each theory has potential to individually and as a group provide a better explanation of organisations’ social, economic and cultural practices (Hopper & Hoque, 2006; Lounsbury, 2008). In order to examine the relationships between ownership perception components and how each of them measure or relate with ownership perception, the use of multiple theoretical perspectives to examine ownership perception comes in handy (Hoque et al., 2013).

Self-identity theory explains identity within the interdependent view of identity construction as individuals view themselves in relation to social interaction in the environment (Andersen & Chen, 2002; Fehr & Gelfand, 2010; Jackson & Johnson, 2012). The interdependent view of self describes self-identity as a construction of the surrounding context of the individual (Markus & Kitayama, 1991). It is exemplified more by individuals within the collective cultural settings such as Asia, southern Europe, and Africa (Markus & Kitayama, 1991). This study conceptualises employee identity as process by which organisational identification serves as a means defining the employees’ concept of self (Das, 2012).
Existing studies show that organisations are constantly seeking ways to influence employees’ concept of self within organisational identification because of the advantages that it portends such as organisational citizenship behaviour, co-operative behaviour, lower attrition, reduction in employee turnover (Feather & Rauter, 2004). Self-identity theory is therefore very appropriate to explain how employee psychological ownership perception may emerge. Central to the self-identity theory is that employees’ concept of self is defined by their organisation’s goals and aspirations (Das, 2012).

Self-identity theory suggests that employees identify themselves psychologically at different levels in response to the organisational context, such that a change in the organisational context will affect their identity (Markus & Wurf, 1987). Each of the three levels of categorisation is used to explain the relational process that may be employed to influence each component of psychological ownership perception. Using the self-identity theory categorisation of self (Yang et al., 2013), employee identity may be grouped at three levels within the organisation; collective identity level, relational identity level, and individual identity level. In the next section, these levels are used to explain how the components of psychological ownership may emerge.

2.5.1 Collective identity level and employee voice

At the collective identity level, employees view their identity in relation to the social context within their organisation. When identity at the collective level is high employees immerse themselves within the organisation’s norms and goals, and as a result define themselves by how successful the organisation is (Jackson, Colquitt, Wesson, & Zapata-Phelan, 2006). For employees to identify themselves with the goals and objectives of the organisation and do their best to contributing towards its success, the organisation has to provide the enabling environment (Cropanzano & Mitchell 2005).

Building on Cropanzano and Mitchell’s (2005) call for an enabling environment, this study suggests that influencing employees’ voice requires an understanding of between the
supervisor or manager and the employee. Employees’ voice results as a trade-off between the employee and supervisor or manager. Employees are regarded as members of the organisation, while supervisors, managers and generally authority figures in the organisation are regarded as leaders (Wang et al., 2016). Employees’ voice therefore involves a social trade-off between the leader and the members of the organisation, and members and other members. The leader provides an enabling environment that fosters open communication in exchange for employees’ contribution to the growth and development of the organisation. The members refer to other employees that the individual interacts with at work also (Pepple, Davies, & Davies, 2017).

Cropanzano and Mitchell (2005) suggests that collective identity may result as a reciprocal relationship that may occur such as trust, loyalty and mutual commitments because of the rules, guidelines that are agreed by parties in the relationship. Also, employees that perceive that their leaders care about them, and ensure that socio-economic exchange such as love, status, information, money, goods, and services taken seriously may display more voice behaviour (Cropanzano & Mitchell, 2005; Foa & Foa, 1974).

Linking employee identity at the collective level to employee voice is in recognition of the contributions from employees to the survival of any organisation. Organisations therefore need to foster a climate that will encourage employees to voluntarily contribute to the policies and programmes, as well provide feedback (Milliken, Schipani, Bishara, & Prado, 2015). Employees’ voice is defined as actions, principles, and practices that highlight the need for employees to constructively challenge with a view of improving work rather than merely criticising (Farh, Zhong, & Organ, 2004; Van-Dyne & LePine, 1998; Wang et al., 2016).
2.5.2 Relational Identity level and organisational self-identity

At the relational level, self-identity is used to explain how relationship among colleagues can influence employees’ concept of self. The relationship is influenced by the organisation’s position on the welfare of employees (Cropanzano & Mitchell, 2005; Foa & Foa, 1974). Findings from previous studies show that employees’ self-identity is influenced such that employees in turn identify with the organisation when the organisation’s corporate code of ethics supports equality and responsible employee policies (Winkler, 2012).

Another way to influence identity at the relational level is the way that organisational policies are interpreted and implemented. Irrespective of hierarchical structures within the organisation and other categorisation, organisations that downplay differences between employees in their codes of ethics and communicates same, create a sense of company community (Fairclough, 2003). The aspect of the code of ethics that highlights the role of employees in the actualisation of the goals and values of the organisation, and affirms the interdependence of employees signals an inclusive organisation (Winkler, 2012). Conceptualising the code of ethics in this manner signals a collective responsibility and creates positive employee identity (Winkler, 2012).

From the above discussion, at the relational level, employee who perceive that everyone within the organisation is treated fairly, rules and policies applied fairly across board, may develop a sense of organisation self-identity. When employees develop a sense of organisational self-identity, they value the work of their organisation, and define themselves by the success of their organisation (Choi, 2013).

Organisational self-identity perception studies employees’ sense of belongingness to the organisation (Asatryan & Oh, 2008). In satisfying self-identity perception needs, employees desire in-group inclusion while maintaining their ethnic uniqueness (Chattaraman & Lennon, 2008; Sorrentino, Seligman, & Battista, 2007). Self-identity therefore requires an optimal distinctiveness (Sorrentino et al., 2007), where the employee sees themselves as being part
of the organisation, and yet as representatives of their various ethnic groups (Johns, 2004; Ries, Hein, Pihu, & Armenta, 2012).

Recognising that employees’ from different ethnic groups share common characteristics among themselves also forms part of self-identity (Weisskirch, 2005). It has been argued that ethnic identities are significant sources of self-identification (Doan & Stephan, 2006), and self-identification will result to ownership psychology (Asatryan & Oh, 2008). Contributing to Doan and Stephen’s (2006) argument, this study examines how ethnic diversity in an organisation may influence employees’ feeling of organisational self-identity.

This study adopts the phrase interpersonal fairness to represent fair treatment and fair application of policies irrespective of ethnic affiliation (Yang et al., 2013). Thus, at the relational level, this thesis empirically investigates the role of interpersonal fairness and co-worker social support in the relationship between ethnic diversity and organisational self-identity.

**2.5.3 Individual identity level and employee self-efficacy**

The individual level highlights the employees’ need for uniqueness (Yang et al., 2013). Organisational policies that support employees’ culture, and values may influence how the employee identifies themselves with the environment (Yang et al., 2013). The need for incorporating employee personal values is premised on studies that suggest that personal motives and personal identity have the potential to influence and shape individual perception of self-efficacy (Magidson, Roberts, Collado-Rodriguez, & Lejuez, 2014).

Similarly, Wigfield and Eccles (2000) note that gender and cultural stereotyping, social beliefs, attitudes, and previous achievements are determinants of an individual’s perception of self-efficacy. Organisations that downplay differences among colleagues and reward cooperative behaviour may influence employees’ perceptions of social context (DeLancey, 2013, p. 3564). Perception of social context refers to an individual’s perceived role
requirements and expectations set up by the organisation’s social system within job group (colleagues), and organisational hierarchy (supervisors and managers) (Borgogni et al., 2010).

Unbundling the perception of social context, Stevens and Fiske (1995) suggest that creativity is influenced by employees’ feeling of belonging, ability to trust and understand colleagues including supervisors and managers, control, and self enhancement potentials. Perception of social context is summarised in this study as co-worker social support (job group) and support from management (organisational hierarchy).

In line with the categorisation of employee identity at the individual level, this study defines employee self-efficacy as employees’ feelings of importance to the organisation (Galvin, Lange, & Ashforth, 2015), and creative ability or competence as a result of organisational context and individual values (Rice, 2006). Creativity refers to the employees’ perceived ability to initiate and implement new and useful ideas (Heinze, Shapira, Rogers, & Senker, 2009), and it may sometimes be founded upon life, society, and culture (Furlong, 2009).

Employee self-efficacy in this study focuses on efficacy as a social construct that examines employees response to the organisation’s environment, for example ethnic composition (Rice, 2006). This is because organisational environment is a key influence for employee creativity (Gumusluoglu & Ilsev, 2009). The importance of examining variables that may influence employees’ perceptions of self-efficacy is premised on the findings that suggest that self-efficacy perception influences the amount of effort or contribution an employee makes to improve the organisation (Pajares, 2002). Thus, this study charts a new course by investigating the role of co-worker social support, interpersonal fairness and lead member exchange in the relationship between ethnic diversity and employee self-efficacy.
2.6 Summary

This chapter highlights the contribution of this study within ethnic diversity literature and organisational psychology discourse. This is evidenced by the future direction that this thesis proposes in the relationship between ethnic identity and employee psychological ownership perception. In line with the existing trend of discussions on the antecedents of psychological ownership, this study adapts self-identity theory to explain the relational processes within an organisation with diverse ethnic groups upon which psychological ownership may emerge.

The model presented in Figures 5 provides a unique insight into the concept of psychological ownership. This study contributes to psychological ownership literature discourse by providing the relational perspectives that influences psychological ownership at the job and organisational based levels. In addition, relational perspectives enable the explanation of the relationships that result in the employees’ psychological ownership (employee voice, organisational self-identity, and employee self-efficacy). Building on the discussions in this theory chapter, the next chapter presents literature for developing a theoretical framework upon which investigations into the relationship between ethnic diversity and employee psychological ownership is framed.
Chapter 3
Development of a theoretical framework

3.1 Introduction

Psychological ownership is influenced by both collective and individual identity antecedents (Peng & Pierce, 2015). The individual antecedents are variables that are closely associated with an employee’s job, such as pay, training, mentoring, and participating in decision making (Bernhard & O’Driscoll, 2011). At the collective identity level, the focus is on interaction and interrelationships among people in the organisation (Avey, Avolio, Crossley, & Luthans, 2009). Following the effect of globalisation, organisations are consistently employing people of different identities to meet the demands of the society (Andrevski et al., 2014). Findings from the literature review chapter show that there is a lack of research into the effects that employee identities such as ethnicity have on their perception or emotional attachment to their organisation (Kennedy, 2014).

The chapter covers the first three research objectives of this thesis. It provides literature upon which the theoretical framework is developed to empirically test the relationship between ethnic identity and employee psychological ownership perception in later chapters. Specifically, the theoretical framework unbundles the concept of psychological ownership and provides a rationale for empirically investigating ethnic identity as a determinant of employee psychological ownership. Significant in the theoretical framework is that each component of employee psychological ownership perception is investigated individually with ethnic identification. In attempting to explain the rationale for linking ethnic identification to employee psychological ownership perception, co-worker social support and interpersonal fairness are presented as mediating variables in line with the third research objective. At the end of the theorisation in this chapter, hypotheses deduced from the literature are presented in line with the research objectives.
The theoretical model specifies each component of psychological ownership and proposes mediated mediation (serial mediation) to explain the relationship between ethnic identification and employee psychological ownership perception. The first section presents literature supporting propositions that investigate the first research objective. While the rest of the chapter presents literature that supports the second and third research objectives.

**3.2 Formative constructs of psychological ownership**

Psychological ownership is evidenced by employees’ self-efficacy, self-identity and voice. This study provides a centric model that suggests that psychological ownership evolves from three components such as the cognitive, affective and behavioural components (Wagner et al., 2003). The study posits that all three components are required for psychological ownership perception to emerge. The cognitive component may lead to the affective, and the affective component to the behavioural component. Cognitive and affective levels are more covert, while the behavioural are overt.

Linking the centric model to the dimensions of psychological ownership, the cognitive component is located at the self-efficacy level in Figure 6. Employee cognitions are feelings that they are able succeed in their task as a result of the support system within the organisation (Hsieh & Wang, 2016). The affective component is used to explain organisational self-identity; it highlights employees’ identification with the organisation as a result of their feelings of being treated fairly at work (Hsieh & Wang, 2016). Employees’ cognitive and affective feelings lead them to behave as owners of the organisation (Wagner et al., 2003). One such action includes employees’ willingness to make constructive contributions to the progress of the organisation otherwise referred to in this study as employee voice. In summary, employees that feel like owners of the organisation believe that support is available, feel like that they are treated fairly, and make positive contributions for the improvement of their work. Thus, the following hypothesis;
**Hypothesis 1.1:** Employee self-efficacy has a direct positive relationship with organisational self-identity.

**Hypothesis 1.2:** Organisational self-identity has a direct positive relationship with employee voice.

**Hypothesis 1.3:** Employee voice has a direct positive relationship with employee self-efficacy.

### 3.3 Ethnic identification and employee psychological ownership perception

In this section, the study sheds light on the second objective as stated in the second research question. Having explained the components of EPOP, the discussion here is presented with a view of establishing the role of employee ethnic identification in the formation of employee psychological ownership perception (EPOP).

Ethnic identification in an organisation is important in the determination of how employees perceive themselves as psychologically attached to the organisation. For example, Andrews and Ashworth (2015), and Selden and Selden (2001) suggested that an inclusion and acculturation process is fostered within a fairly ethnically diverse organisation. Within an ethnically diverse organisation, employees may identify with their ethnic groups. This warrants a need to examine how this process occurs.

Other scholars have supported the need for an ethnically diverse organisation. For example, Pelled, Ledford, and Mohrman (1999) suggested that a possible explanation for inclusion and psychological attachment is that within an ethnically diverse organisation, differences between minor and major ethnic groups are largely contained. Hence, creating an avenue for employees to connect with each other, and breaking down barriers associated with trust among employees from all ethnic groups (Selden & Selden, 2001).
On the contrary, ethnic diversity in an organisation does not always portray positive effects on the perception of employees (Alesina & Ferrara, 2005). This is because there are negative consequences that may sometimes be associated with employees from different ethnicities working together (Choi & Rainey, 2010). For example, whereas the minority groups welcome ethnic diversity, the majority group may view it as discrimination, and as an affirmative action tool to support the minority groups (Mustapha, 2007). This may result in suspicion and mistrust among employees, leading to a situation where certain groups feel left out or discriminated in the organisation (Selden & Selden, 2001).

Whereas existing studies have considered ethnic diversity in terms of having employees from different ethnic groups at work, this study considers the interactions and relationships that arise as a result of various ethnic identifications. This is in order to take the discussions on ethnic diversity from the normative perspective (fair representativeness) to the relational perspective (employees feeling of sense of belonging because of their ethnic identity).

### 3.3.1 Employee ethnic identification

Within multi-ethnic organisations, employees may feel a deep sense of commitment to their ethnic heritage (D'Hondt, Eccles, Van Houtte, & Stevens, 2017). This involves employees making effort to get to know their ethnic background better, as well as the values and emotional significances of being part of their ethnic group (Tajfel, 1974). Thus, employee ethnic identity involves employees’ behavioural manifestation of their ethnic heritage (Barron et al., 2011). Employees feel more comfortable to display their ethnic identities when they are among fellow employees of same ethnic group. The challenge that arises however, is how they are perceived when they relate with others outside their ethnic group (Barron et al., 2011).

As a consequence of the manifestation of one’s ethnic group in an organisation, other employees may perceive such an employee to be alert to discriminatory behaviour (Branscombe, Schmitt, & Harvey, 1999). Thus, instead of resulting in discrimination and
negative treatment, ethnic identification results in pro-social behaviour among employees of different ethnic groups (Branscombe et al., 1999). This is because employees will not want to be seen prejudicial to employees of other ethnic groups (Hardin, Higgins, Sorrentino, & Higgins, 1996). Perceptions of not wanting to be prejudicial make employees of different ethnic backgrounds respond favourably with each other (Hilton & Darley, 1985). Such favourable responses include supporting each other, treating each other fairly and a cordial exchange between employees and their supervisors/managers.

To be able to link employee ethnic identification to employee psychological ownership perception, social identity theory is applied (McKay & Avery, 2015). The theory suggests that employees’ identification with their organisation is subject to the social interaction they have at work (Jackson & Johnson, 2012). The reason for this is because employees spend more time with colleagues at work and as such, their sense of belonging may be influenced the interactions among colleagues. Within organisations that have multi-ethnic employee compositions, the tendency for employees to categorise themselves with individuals who are similar to them may exist. However, where employees perceive that their co-workers treats them fairly irrespective of their ethnic differences, they may feel a sense of belonging among their colleagues and by extension with their organisation. This study therefore suggests that employees’ ethnic identification will result in prosocial behaviour and makes the following propositions:

**Hypothesis 2.1:** Employee ethnic identity has a direct positive relationship with co-worker social support.

**Hypothesis 2.2:** Employee ethnic identity has a direct positive relationship with interpersonal fairness.
3.3.2 Ethnic identity and interpersonal fairness

In this thesis, interpersonal fairness describes employees’ reaction to perception of fair treatment that employees receive in their organisation as a result of their ethnic identity (Barak, Cherin, & Berkman, 1998). Employee ethnic identification explains prosocial behaviour within the organisation because of employees’ outward manifestation of their ethnicity. While employees that perceive that they are treated fairly irrespective of the ethnicity feel a sense of acceptance and belonging because of their identification. Organisations are at risk if employees perceive that their organisation does not care for or support them (Jessor, Van Den Bos, Vanderryn, Costa, & Turbin, 1995). Employees that sense ethnicity based discriminatory behaviour may feel devalued and alienated from the organisation (Wong, Eccles, & Sameroff, 2003). Thus, while employee ethnic identity may result in prosocial behaviour, its effect may be limited by employees’ perception of acceptance.

A common concept underpinning self-identity suggested by Yang et al. (2013) and Winkler (2012) is the issue of interpersonal fairness; a situation where an employee perceives the organisation to treat everyone fairly and in a respectable manner. Existing studies show that interpersonal fairness enables employees to focus attention to get work done and reduces conflicts arising from attribution (Bies & Moag, 1986; Cropanzano & Mitchell, 2005; Eisenberger, Stinglhamber, Vandenberghhe, Sucharski, & Rhoades, 2002), thus identifying themselves with their organisation (Yang et al., 2013).

Interpersonal fairness consists of feelings that employees have regarding work place interactions and relationships, and is summarised as follows. Procedural justice (fair application of company procedure), interational justice (dignity and respect from authority figures), and interpersonal justice (when colleagues treat themselves with respect, dignity and sensitively) (Conner, 2015; Skarlicki, Van Jaarsveld, & Walker, 2008; van-Dijk et al.,
Accordingly to Skarlicki et al. (2008), employees who perceive unfairness treatment at any of these levels may resort to sabotage behaviour.

Employees that sense ethnicity based discriminatory behaviour may feel devalued and alienated from the organisation (Wong et al., 2003). Thus, it is important to investigate how employee ethnic identity may result in prosocial behaviour. In line with the above theorisation, the process through which employees exhibiting their ethnic identity react favourably with their organisation is when they perceive that they have treated fairly. The following hypotheses are therefore suggested:

Hypothesis 3: Interpersonal fairness mediates the relationship between employee ethnic identity and co-worker social support.

3.4 Relational perspective of employee psychological ownership perception (EPOP)

The discussions in this section is directed at establishing a link between ethnic diversity and EPOP. This is to provide literature addressing the second research question. In establishing the link, the section extends the proposed outcomes in hypothesis 1 and 2, by investigating their effect on EPOP. These propositions are made based on suggestions made by existing studies that suggests that positive psychological processes are likely to result to EPOP (Hofhuis, Rijt, & Vlug, 2016).

3.4.1 Co-worker social support

The study defines co-worker social support as the willingness for colleagues to co-operate and help each to better perform their jobs and improve their relationships (Chughtai, 2016). Building on the earlier discussions on the component of EPOP, this study defines self-efficacy as the belief or expectation that employees will feel creative and competent if they perceive the social context within the organisation to be supportive. Recent studies indicate that perception of social context highlights a strong relationship with employee feelings of self-efficacy (Consiglio et al., 2016; Rice, 2006). Employees that experience support from their
colleagues may also identify with their organisation. Voice behaviour may also be associated with support from colleagues, as employees may be motivated to return the favour to their colleagues by helping them improve their work.

In explaining more about social context, Hwa (2012, p. 119) suggested that support from colleagues fosters a ‘positive working environment,... that will enable employees to cope better with job stressors and their sense of personal control’. Employees are able to assert personal control of their work and achieve assigned task following each ones’ willingness to share their knowledge and expertise, and the provision of support and encouragement to one another (Joiner, 2007).

3.5 Proposed relational framework for linking ethnic diversity to employee perception of psychological ownership

The study proposes a relational framework that highlights the mediating roles of co-worker social support on the linkage between ethnic diversity and EPOP. In line with previous discussions, the relational framework is as follows; first, employees overtly identify with their ethnic identity and feel a sense of belonging to it. Next, in line with the self-identity theory, such sense of belonging may be transferred to colleagues who have different ethnicities as a result of the interpersonal fair treatment experienced from colleagues. The framework also suggests that employees who perceive that co-workers treat them fairly irrespective of their ethnic identification end up supporting each other at work. This positive feeling among co-workers may influence how employees feel about their organisation at large. Overall, employees that identify with their ethnic groups and enjoy fair treatment from colleagues may feel a sense of belonging with their co-workers. For such employees, work becomes interesting and may serve as a sense of identification. Thus, leading to their feeling of psychological ownership. Within the relational framework, the study hypothesises as follows:

Hypothesis 5: Co-worker social support mediate the relationship between employee ethnic identity and employee perception of psychological ownership.
**Hypothesis 6:** Interpersonal fairness further mediates the relationship between employee ethnic identity and employee perception of psychological ownership.

**Hypothesis 7:** Employee ethnic identity has a direct positive relationship with interpersonal fairness.

**Hypothesis 8:** Interpersonal fairness has a direct positive relationship with co-worker social support.

**Table 6: Proposed Relational Framework Explaining the Relationship Between Ethnic Diversity and EPOP**

<table>
<thead>
<tr>
<th>Employee Ethnic identity</th>
<th>Interpersonal fairness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Support</td>
<td>Lesser Discrimination</td>
</tr>
<tr>
<td>Workspce Civility</td>
<td>Co-worker social support and interpersonal fairness</td>
</tr>
<tr>
<td>Willingness to share ideas</td>
<td>Procedural justice</td>
</tr>
<tr>
<td>Task and target within employee capacity</td>
<td>Interactional justice</td>
</tr>
<tr>
<td></td>
<td>Interpersonal justice</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Psychological Ownership Perception</td>
<td>Org. Self-efficacy</td>
</tr>
<tr>
<td></td>
<td>Voice</td>
</tr>
</tbody>
</table>

3.6 Hypothesised model

The hypothesised model explains the theoretical framework of this study in a diagrammatic format, showing how the independent variables relate to the dependent variables. A serial mediation approach (mediated mediation) is used to explain the link between ethnic identification in an organisation and employee psychological ownership perception. Ethnic identification is the independent variable (MacKinnon, 2011).

Figure 6-Theoretical framework

Source: Adapted from Peng and Pierce (2015), Wong et al., (2003) and Yang et al. (2013).

From the hypothesised model, this thesis proposes that employee ethnic identity may result in prosocial behaviour from other colleagues and supervisors. Also, in the implementation of organisational policies, managers may be cautious of the overt ethnic identities to avoid being
discriminatory. Thus, in the sequence of the model, the mediators of co-worker social support and interpersonal fairness are intervening variables.

However, the process by which employees exhibiting their ethnic identity perceive that they are supported by colleagues, treated fairly and provided with an enabling environment by their leaders to make contribution is through interpersonal fairness at work. Thus, this thesis empirically investigates the relationship between employee ethnic identification and interpersonal fairness. Having two mediating variables explaining the relationship between ethnic identification and employee psychological ownership perception, suggests a mediated mediation approach. See Figure 6.

3.7 Justification of mediated mediation mechanism

Mediator mechanisms are processes commonly used in psychology and social science research (Magill, 2011). A major focus for most psychology and social science research is to attempt to explain cause and effect relationships (Wu & Zumbo, 2008). Mediators serve as a bridge for understanding and explaining the causes of a change in the dependent variable because of the independent variable (MacKinnon, 2011). Thus, mediators enable the investigation as to why and how there is a response because of the stimulus (Baron & Kenny, 1986; Frazier, Tix, & Barron, 2004).

The application of a mediation mechanism is suggested if literature does not make a strong causal relationship between the stimulus and the response variables (Rose, Holmbeck, Coakley, & Franks, 2004). Reflecting on the mediation mechanism proposed in this study, there is a relationship between ethnic identification and EPOP. However, this relationship remains unexplained. There is an existing conflict in opinion among behavioural psychologists and social scientists on the outcome of ethnic diversity. Thus, the inference of this study is the possibility of a third variable to provide a possible explanation for the effect of ethnic diversity on EPOP.
Mediating variables are often presented as a temporary state of mind that arouses certain behavioural patterns when exposed to stimulus. The mediators introduced in this study (co-worker social support and interpersonal fairness) are psychological reactions that have the potential to evoke EPOP, when exposed to ethnic diversity variables. In terms of sequence of interaction, the mediator should be able to respond to stimulus from the independent variable, and well as evoke feelings or changes to the dependent variable when exposed to it. Literature supports the positive relationships between the independent variable and mediating variables (co-worker social support, interpersonal fairness and leader-member exchange). There is also literature that supports a strong relationship between these mediators and EPOP.

3.8 Summary

This empirical literature chapter has provided foundations upon which investigations are carried out in the subsequent findings, analysis and discussions chapters. The propositions linking ethnic diversity to employee psychological ownership perception extends the diversity management discourse to the relational perspectives. This is evidenced by the literature supporting the mediating roles of co-worker social support, interpersonal fairness, and leader-member exchange on the relationships between ethnic diversity and EPOP.

It is important to note that the discussions in the study focus on how the mediators best relate to the components of EPOP, for example, how co-worker social support and interpersonal fairness interact with employee self-efficacy, organisational self-identity, and employees’ voice respectively. Findings from empirical analysis however provides the overall effect of each of the mediators on EPOP as well as the various other components of EPOP.

The focus on ethnic diversity is premised on the fact that within empirical settings with diverse ethnicities, employees experience more organisational conflict as a result of societal ethnic struggles that have trickled into organisations (Eposi & Orock, 2012). Empirical investigations in subsequent chapters control for the relationship between ethnic diversity
and EPOP in the private sector. Findings are used to determine whether EPOP is higher within organisations in the private sector.
Chapter 4
The Nigeria Context

4.1 Introduction

In a highly polarised country like Nigeria, ethnicity has a deep meaning for individuals (Agbiboa, 2012). Stereotyping and discrimination may abound among people of different ethnic groups (Olatokun & Nwafor, 2012). Although this problem seems to persist in the country there is a dearth of literature within the Nigerian context that explains the effect of ethnic diversity on employees’ perceptions. The focus of ethnic diversity has been to serve as a buffer for minority ethnic groups by ensuring that they have a quota in employment positions (Mustapha, 2009). While this has been enforced within public sector organisations, private sector organisations have not considered ethnic diversity issues in their human resource management strategy for influencing employees’ perception. The implementation of ethnic diversity at work has mainly focussed on its societal benefit without considering its effect on employees’ perceptions (Carl & Olokooba, 2014).

This background chapter draws on existing studies to highlight the ethnic diversity issues in the Nigerian public and private sectors. As a result, in Nigeria, there is a lack of focus by private sector organisations on ethnic diversity needs of their employees, and the lack of attention to employees’ perceptions in the implementation of ethnic diversity policies in the public sector (Atiku & Fields, 2015). This supports the need for this investigation. This chapter explores current ethnic diversity management issues in Nigeria. The aim is to position this study by highlighting its contribution to existing ethnic diversity management and psychological ownership discourse in Nigeria. The chapter is structured to achieve the objectives of presenting literature to support the importance of psychological ownership to both public and private sector. Second, to provide a background to the ethnic diversity
situation in the empirical context. The aim is to further highlight the importance of this discourse within the Nigeria Context.

4.2 The Nigeria context

In most traditional African countries, especially Nigeria, individuals consider themselves in the light of their ethnic groups or extended family, and loyalty to it comes first in the scheme of things (Agbiboa, 2012). This ethnocentric consideration is evident within all spheres of life, including work and warrants a need to study how to extend employees’ individual or ethnic group loyalty to their organisation.

Furthermore, although the thesis presents data from employees from both private and public sector organisations, information from the public sector in this study is very useful following the suggestion of Agbiboa (2012) that the numerical ethnic representation in the Nigeria civil service has resulted in the polarisation of the service where each civil servant is more interested in attracting resources to their ethnic groups or states. Hence, the service is facing a challenge of collaborative culture (Olatokun & Nwafor, 2012). The use of psychological ownership theory to explain employees’ attachment in their organisations is apt. This is because psychological ownership may also be used to explain employees’ emotional connection their ethnic heritage. The challenge that exists, is how to get them to extend such loyalty or emotional connection to their organisation. The later part of this study puts forward a relational framework to solve this challenge.

This section focuses on contributing to the literature of employee ownership within the public and private sector context. It highlights the literature on ethnic diversity in Nigeria, and links the performance of the civil service to the collective culture and ethnic polarisation of the country. This section also highlights the challenges of the civil service, and reviews the current employee ownership perception literature in Nigeria. Lastly, the section highlights the
focus of private sector human resource managers on the issue of improving employee perception.

4.2.1 Ethnic diversity in Nigeria

The concept of ethnicity is a composite one and as such has been interpreted differently by scholars (Oruwari, Owei, & Jev, 2004). Oruwari et al. (2004) highlighted two key reasons why a clarification in the meaning of ethnicity is required. In the first instance, ethnicity has been explained as arising from ethnic pluralism. Although there exists an etymological linkage between ethnicity and multiple ethnic groups, ethnicity is much more than a group of ethnic groups (Oruwari et al., 2004). The focus of ethnicity is more on the interactions and interrelationships that exists when people of diverse ethnic groups converge (Oruwari et al., 2004). Another reason for asserting that ethnicity is more than a group of different ethnic groups is that concept is interpreted ideologically within African contexts (Oruwari et al., 2004). For example, Mafeje (1997) noted that ethnicity within African contexts is used to describe the way power is shared between different ethnic groups.

With a population estimated at over 170 million people (Ubhenin, 2015), Nigeria is regarded as Africa’s most populated nation, with 36 states and the federal capital territory. The country has about 374 tribes and ethnic groups, and about 500 languages; predominantly distributed among Igbohs (eastern part), Hausa-Fulani and the Kanuri’s (northern part), Yorubas (western part), the Ijaws and Ibibios (southern part), and the Tivs (middle belt part) (Ukiwo, 2007). This study focuses on diversity management in Nigeria because the country has a multi-ethnic and multi-religious population, with people from different ethnic and faith groups struggling to be represented in organisations and society at large (Eposi Ngeve & Tabe Egbe Orock, 2012). See Figure 7 for a map of major ethnic groups in Nigeria.
Barring a few exceptions, ethnic diversity in the Nigeria context concurrently reflects religious diversity due to dominant religious affiliations of ethnic tribes of Muslims and Christians in the population (Higazi & Lar, 2015). For example, 52% of the population are Muslims, while 46% are Christians (Green, 2011), and given that the country is divided into major ethnic groups such as Igbo (eastern part), Hausas (northern part), Yoruba (western part) and the Ijaw (southern part) (Ukiwo, 2007), and also in view of the religious militancy in recent decades (such as the Boko Haram) and the associated ethnic/religious tensions and contestations, there is a need to examine their implications for workforce diversity in Nigeria. There is a need to examine how the issues relating to ethnic diversity affect organisations.
Diversity management as a concept is gradually gaining reputation among Nigerian managers who are currently seeking ways to eliminate discrimination such as stereotyping and prejudice, ethnocentrism, favouritism, and religious conflict (Carl & Olokooba, 2014). Islam and Christianity are the two major religious in Nigeria, although there are four major ethnic groups, religion has divided the country into the two; Muslims in the north and Christians in the south (Uzoma, 2004). The religious diversity is spread across the ethnic groups as follows, Hausas in the north (predominantly Muslims), Yorubas in the west (mixture of Muslims and Christians) Igbos in the east (Christians) Ijaw in the south or Niger Delta (Christians)(Paden, 2015).

The diversity situation of the Nigeria is unique, in that in addition to the issue of identity of ethnic groups, there is also the issue of control of resources (Orogun, 2010; Wegenast & Basedau, 2014). With the various ethnic and religious groups through the federating states having equal rights to ownership and control of resources, the country continues to experience conflict arising from the distribution of resources. The Ethnic conflict arising from discrimination in the distribution of resources has also affected business organisations (Turgeon & Gagnon, 2013; Wegenast & Basedau, 2014).

To avoid workplace discrimination and conflict arising from under-representation of ethnic groups and states in federal government establishments, the Federal Character Principle (FCP) was legislated. FCP was enacted in 1979 as affirmative action Law to strategically correct the ethnic imbalance in appointment and employment in the public sector (Mustapha, 2009).

4.2.2 Employee psychological ownership perception (EPOP) literature in Nigeria

Although most developed countries have been implementing employee ownership schemes such as share ownership programmes, with the outcome widely discussed, the reverse can be said for EPOP schemes in less developed or newly developing countries (Wright, Pendleton,
Studies suggest that one reason for this is the lack of statistics and other literature on the activities of firms that operationalise the EPOP schemes (Wright et al., 2000). Another reason for the delay in widespread implementation is that as it is with the case of other African countries, the majority of the economic activities are run by state owned enterprises in Nigeria (Wright et al., 2000).

Within the Nigerian context, the terminology employee ownership perception is not widely known, however existing studies have discussed the antecedents of ownership perception with most of them focussing on financial employee ownership schemes. This subsection discusses the focus of existing literature on employee ownership perception, and the terminologies used.

For example, Ahmed et al. (2012), Obiageli, Uzochukwu, Leo and Angela (2016) and Ugwu and Amazue (2014) suggested that psychological ownership factors affected employee work engagement and organisation goal achievement or performance. These studies did not focus on the emergence of psychological ownership perception on employees but examined the effect of psychological ownership as a mediating factor for work engagement and performance.

Whereas the work of Ahmed et al. (2012) was conceptual, Ugwu and Amazue (2014) did not find a causal relationship between psychological ownership and work engagement. Ugwu and Amazue (2014) also noted that their study was limited to the employee job group that participated in the survey, which did not allow for investigation of the effect of psychological ownership from employees on different job groups.

Other studies in Nigeria have considered the implications of pay, work conditions, staff training, participation in decision making, servant leadership and information sharing on EPOP related terms such work motivation, job satisfaction, organisational citizenship behaviour and organisational commitment (Bambale, 2013; Elele & Fields, 2010; Tella, Ayeni, & Popoola, 2012).
A common denominator in the findings was the absence of a causal relationship between EPOP component constructs and their antecedents. Following the dearth of EPOP literature, this study makes very useful contribution to EPOP in the Nigerian context.

4.2.3 The Civil Service in Nigeria

The civil service is the functional arm of government saddled with the responsibility of carrying out the policies and programmes of government (Alesina & Ferrara, 2005; Sekwat, 2002). In line with federal system of government operating in Nigeria, the civil service structure covers: The Federal Civil Service, State Civil Service, and the Local Civil Service. The proceeding sections explain the structure and working if each of the tier of civil service in Nigeria.

4.2.3.1 Federal Civil Service

The Federal Civil Service is vital for the running of the government at the federal level (Magbadelo, 2016). The current Federal Civil Service is described as product of Nigeria’s political and historical reforms (Magbadelo, 2016). These reforms have been initiatives of the Bureau of Public Service Reforms (BPSR, 2005). The main reasons why the Bureau was set up was to bring about initiatives that will improve the processes and quality of services provided by the civil service (BPSR, 2005).

The reforms were necessary because the Federal Civil Service has been associated with so much decadence, inefficiency, laziness, absenteeism, and wastefulness (Anazodo et al., 2012). From independence in 1960 to date several governments civilian and military alike have continued to seek ways to improve the performance of the civil service. This has resulted in setting up several committees to review the workings of the civil service and proffer workable solutions to improve the service. For example, 1963- Morgan Salaries and Wage Commission, 1961-Adebo Commission, 1974-Udoji Public Service Review Commission, 1988-Dotun Phillips Civil Service Reform Commission, and 1995- Allison Ayida Civil Service Reform commission (Anazodo et al., 2012).
In addition to the commissions set up, and reform programmes instituted by the Federal Civil Servants, the Nigerian government have resorted to privatising some state owned enterprise with a view to refocusing them to perform better (Ehigie & Otukoya, 2005). However, not all state-owned enterprises can be privatised for example the civil service bureaucracy. The Nigerian civil service is owned by the government and enjoys operational monopoly, and by its nature continue to experience poor performance and organisational malfunctioning (Ehigie & Otukoya, 2005).

Despite the reforms recommended by the committees, the performance of the civil service has continued to depreciate. For example African public management capacity survey conducted in 2011 by Mo Ibrahim, scored Nigeria low in corporate governance issues relating to public management, infrastructure, and human development (Adamolekun & Olowu, 2015). Also Obriki,(2013) noted that the impact of government is not visible, as civil servants continues to display irresponsibility, lack of commitment, and lack of dedication. Table 7 shows a summary of reforms that were implemented to improve employee commitment in the Nigeria Federal Civil Service.

**Table 7: Public service reforms (1963-1999)**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Government</th>
<th>Committee</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nnamdi Chukwuemeka Azikiwe</td>
<td>Morgan Salaries and Wages Commission</td>
<td>Review the employee grading system and salary structure. Introduce minimum wage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commission (1963)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Yakubu Dan-Yumma Gowon</td>
<td>Adebo Commission (1971)</td>
<td>Set up public service commission to review remuneration</td>
</tr>
<tr>
<td>4</td>
<td>Ibrahim Badamasi Gabangida</td>
<td>Dotun Philips Civil Service Reform Commission (1988)</td>
<td>Introduction of management by objective. Unified grading system in line with the private sector Ministers to serve as both chief executive officer and accounting officer of each ministry. The merging of the ministry of finance and national planning. Self-administration of each ministry</td>
</tr>
</tbody>
</table>
Source: Anazodo, Okoye, & Chukwuemeka (2012)

A review of Table 7 indicate that the focus of the government has been mainly on monetary incentives. These reforms lack insight on relational issues that influence employees’ behaviour within the civil service.

4.2.3.2 State Civil Service

Nigeria is a federated country with 36 states and the federal capital territory (Ubhenin, 2015). Each of the federating states has its own state civil service. The state civil service is the backbone of each of the states, and is saddled with the roles of initiating, analysing, implementing, monitoring and evaluating the programmes of the state government on behalf of the its citizens (Popoola & Oluwole, 2007).

4.2.3.3 Local Civil Service

The third tier of the Nigerian federal system is the local government. The 36 federating state alongside the federal capital territory are further broken down into 774 local government areas (LGA) (Agba, Akwara, & Idu, 2013). The functions of the local governments areas are summarised as follows: to liaise with the local communities for the provision of services; to be a channel for the implementation of federal and state policies; to assist with conflict resolution at the local community level; and to serve a training mechanism for local, state and national participation in political affairs (Agba et al., 2013).
4.2.4 Institutionalisation of Ethnic diversity in the Nigerian Civil Service

The Nigerian civil service is plagued with conflict arising from discrimination and under representation of ethnic groups and states in federal government establishments, for which the Federal Character Commission was set up in 1994 as an affirmative action institution to strategically correct (Turgeon & Gagnon, 2013; Ugoh & Ukpere, 2012; Umezurike, 2008). Interestingly, the existing literature has only focussed on the macro impact of the Federal Character Principle, with no mention of its implication on employees’ perceptions.

4.2.4.1 Federal Character Principle 1979

In order to avoid ethnic and sectional conflicts within government bureaucracies, politicians believe that national cohesion can be achieved by establishing a formula that balances political power among ethnic groups (Osaghae, 1988). The balancing formula otherwise referred to as Federal Character is manifested in the way that societal pluralism and diversity is reflected in the composition of political and bureaucratic offices (Mustapha, 2007).

Nigeria’s quest for national cohesion is traceable to the period of the creation of the nation as a British colony in 1914 (Osaghae, 1988). The British divided the nation into regions for easy administration; leading to the incorporation of a government based on a federal system in 1954 (Adeosun, 2011). A major challenge with the Federal System introduced by the British was that the regions were unevenly populated; with the north having a greater percentage of people than the southern part (Osaghae, 1988). Although the country gained independence in 1960, and has undergone various structural changes such as creation of more states and dividing them into geopolitical zones, there still exists ethnic conflicts arising from agitation for more representation (Mustapha, 2009).

In response to the agitations from the various ethnic groups, and the need to foster loyalty from the various ethnic groups to the state, the government led by Olusegun Obasanjo passed the Federal Character Principle (FCP) Act in 1979. The 1979 constitution provided for
a national integration of the various states in the country to enable citizens to feel a sense of belonging, foster loyalty, and legitimise the government (Osaghae, 1988). To achieve national integration, the constitution made it a legal requirement for political office holders and state bureaucracy to operate a quota system that provided for representation of the various states based on their population size (Mustapha, 2007).

4.2.4.2 Federal Character Commission 1994

In 1994, the Federal Character Commission (FCC) was set up to operationalise the Federal Character Principle legislated in 1979 (Mustapha, 2009). With effect from 1994 when the Federal Character Commission was created, all employment and appointments into the Federal Civil Service were done using the formula agreed upon by the Federal Character Principle law to ensure equal representation in the service (Mustapha, 2009).

The main task of FCC was to ensure as much as possible that the government mirrors the population of the country (state and ethnic group representation) in its appointments and employment into public institutions (Festus, 2015; Kendhammer, 2014; Kirk-Greene, 1983). The purpose of implementing the Federal Character Principle is to foster national unity, encourage citizens’ loyalty and sense of belonging to the nation (Kirk-Greene, 1983). Loyalty and a sense of belonging are behavioural outcomes of ownership perception (Pierce et al., 2003).

Currently, the targets of the FCC in Nigeria are summarised as follows: ensuring that fresh recruitment into federal bureaucracies follow FCP guidelines on equitable distribution of posts; attainment of at least 20% reduction of the imbalance in government bureaucracies by July 2019; and to ensure that at least each federating states including the Federal Capital Territory (Abuja) is given equal representation (2.5%) by 2020 (FCP, 2016). With over thirty years of the legislation and implementation of the FCP, the focus has been on achieving numerical representation. FCP lacks a policy or framework to manage employees’ ethnic
identification and perception. A major flaw of the FCP is its insensitivity to the ethnic identification issues that arise within a multi ethnic setting (Ugoh & Ukpere, 2012).

4.3 Ethnic diversity in Rivers State

This section presents a brief review of the demographic composition of Rivers State. The aim is to shed light on the ethnic issues that affect the public and private sector organisations in the state. Also, empirical data was collected from Rivers state, thus, an understanding of the ethnic identification issues in the state may further provide a justification for the choice of Rivers State.

Rivers state is one of the 36 states in the southern part of Nigeria. The state was created in 1967 by General Yakubu Gowon (Suberu, 1991). Before the formal creation of Rivers State, the geographical location was called Oil Rivers. This was because of the economic activities that took place within the geographical location. Being surrounded by rivers such as Bonny, Orashi, Sombreiro and Santa Barbara, the state became a rallying point for the exportation of timber and palm oil. Today, the state is known as the treasure base of the nation. Endowed with abundant oil and gas deposits, the state accounts for half of Nigeria’s oil and gas export (Osaghae, 1995).

Rivers State has a population of over 5 million people (National Population Commission, 2006). The State has a multi ethnic heritage that can be linked to the diverse groups of people involved in economic activities. The State is divided into 23 Local Government Areas (LGA) grouped into 18 major ethnic groups. Abua/Odual, Andoni, Engeni, Etche, Ibani, Ikwerre, Kalabari, Ndoni, Ogba, Ogoni, Okirika, Bille, Eleme, Saro, Ekpeye, Kula, Nkoroo, and Kula (RVSG, 2017). These ethnic groups are further classified into Upland and Riverine. This Upland ethnic groups account for 61% of the population, while the Riverine ethnic groups have 39% (RVSG,2017). See Figure 8 for map of Rivers State showing the 23 LGAs.
4.3.1 Rivers State Civil Service

The Rivers State Civil Service was established in 1967, the same year that the State was created (Suberu, 1991). The Service has over 40,000 employees (NBS, 2013). Since its creation, the State Civil Service has undergone different reforms to enable the service meet its obligation of implementing the policies and programmes of the state government (Naetor, Iheriohanma, & Chukwuma, 2016). One of the major challenges of the Rivers State Civil Service in the area of managing workforce diversity is to achieve workers’ effectiveness (Naetor et al., 2016). Naetor et al. (2016, p. 27) suggested that ‘a cursory observation indicates that there appears to be a compelling evidence of deterioration about the work standard in the Rivers State Civil Service as a result of the behaviour of workers which is characterised by such attitude as hostility to co-workers and members of the public. There also appears a challenge in managing, training and effectively motivating diverse employees.
so that they can contribute effectively to the state’s civil service goals through improved productivity.

As a vehicle for conveying government policies and programmes, Rivers State Civil Service may be unable to achieve its objectives following employee issues plaguing the Service as because of the diverse employee composition (Bande, 2001). These issues include; different work ethics, differences in cultural norms and values, and different motivations (Owoyemi, Elegbede, & Gbajumo-Sheriff, 2011). This is linked to the composition of employees from different ethnic groups within the state (Naetor et al., 2016). Naetor et al. (2016) further noted that the inability of the State Civil Service administrators to manage the ethnic diversity within the service has resulted to conflict between employees. Thus, employees feeling alienated among themselves.

Whereas ethnic representation within an organisation plays a vital role in positively influencing the outcomes of any organisation, Naetor et al. (2016) suggests that the Rivers State civil service is facing a daunting task of integrating and managing employees from diverse Local Government Areas with diverse multicultural and traditional background. Following the diversity management issues raise in this section, there is need for further studies in workforce diversity management focusing on linking employee ethnic representation and employees’ positive attitudes. This study considers employees positive attitude in relation to employee psychological ownership perception.

**4.3.2 Challenges of employee ownership perception in Rivers State Civil Service**

In addition to the description of the civil service in Nigeria, Porter and Watts (2016, p. 3) summarised the current state of affairs in the civil service as ‘... a perfect storm of contentious politics, a massively corrupt and ineffective system of fiscal federalism and robust deficits and dysfunctions...’ Also, Potter & Watts noted the civil service is failing in its duties because of its inability to reward superior performance. Their suggestion was further reiterated in the
work of Agbiboa (2012), noting that lack of effective incentive administration accounts for 40% of the ineffectiveness of the civil service.

Reiterating the previous position that the civil service by its nature and structure is unable administer financial ownership schemes, as well as the inherent challenges of ethnic representation within the service, there is therefore the need to examine how civil servants can feel perceptions of ownership.

4.4 Private sector organisation in Nigeria

Within private sector organisations in Nigeria, the concept of employee ownership is non-existent. This however, does not mean that organisations have not been seeking various ways to improve the efficiency and effectiveness of employees. For most private sector organisations in the country, developing a relationship between the organisation and the employee centred on enhancing employees’ capacity to do work, knowledge development, and skill improvement (Atiku, Fields, & Abe, 2017; Pangil & Othman, 2016).

Although the country highly values ethnic diversity, especially with the proliferation of ethnic groups, organisational cultures within private sector organisations do not place high significance on ensuring that they mirror the society. A review of literature on organisational culture in the private sector in Nigeria suggest that diversity issues, ethnicity inclusive is not emphasised (Atiku et al., 2017; Inyang, Enuoh, & Ekpenyong, 2014).

4.4.1 Focus of organisational culture in the private sector

Organisational culture in the private sector in Nigeria is categorised into four as follows; the culture of competitive advantage, the culture of entrepreneurial success, the culture of bureaucracy and culture of consensual agreements (Atiku & Fields, 2015; Guest, 1997). The focus of competitive advantage in on the organisations’ need to acquire employees with the right competencies to enable them out perform their competitors (Katou & Budhwar, 2010). Organisational culture that centres on entrepreneurial success emphasises the need to focus
on innovativeness, proactively projecting the market trend to stay one step ahead (Atiku et al., 2017). Bureaucratic values emphasise the levels of formalisation the organisation, rules, and standardisation of operating procedures (Deshpande & Farley, 1999). Lastly, consensual culture is emphasised in organisations that value the contribution of employees in the decision making process within the organisation (Boselie, Dietz, & Boon, 2005).

4.4.2 Human resource practices for influencing employee ownership

Reflecting on the organisational culture discussed above, existing human resource management practice presupposes that influencing employee ownership is transactional. That is, it focusses on extraneous variables as antecedents for influencing employee behaviour. The practice is best described using Nohria, Groysberg and Lee's (2008) conceptualisation. For Nohria et al. (2008), employees are driven by four key factors in influencing their perception or behaviour. These are; the desire to acquire, the desire to bond, the desire to comprehend and the desire to defend. On the part of human resource managers, Nohria et al. (2008) suggested parallel reactions to these employee drivers as follows; provision of rewards, organisational culture, well defined job design and a bias free system for performance management and appraisals. These are further explained below in line with Bello, Ogundipe, and Eze (2017).

4.5.2.1 Acquisition vs reward system practice

For private sector organisations, the notion is that employees are motivated to align themselves more to the organisation if their needs are met. Such needs include higher pay and other fringe benefits that employees consider important for their well-being in general (Nohria et al, 2008). Employers respond by instituting reward systems that will enable the determination of high performers and rewarding them for their performance. They also link the rewards employees receive to the efforts they put into the organisation. Furthermore, organisations are constantly reviewing the industry pay rate to ensure that they are at par or better to avoid losing valuable personnel (Bello et al., 2017).
4.4.2.2 Bond vs culture

Organisations appreciate employees’ desires to bond. This involves employees’ desires to be emotionally attached to their jobs especially because they spend most of their lives at work (Nohria et al, 2008). Employees desire to have a feeling of sense of belonging and value in their organisation. Employees who are valued in their organisations react positively by feeling proud of their organisation and are highly motivated individuals. In responding to employees’ bonding needs, organisations have introduced internal organisational cultural practices and policies that foster mutual co-existence, solicit and value the contributions of employees and adhere to stipulated best practice (Bello et al., 2017). Mutual co-existence culture is manifested in employees overtly appreciating the work and contribution of everyone in the organisation. It also emphasises the need for friendliness, respect and cooperation.

4.4.2.3 Comprehension of job requirement vs job design

Comprehension of job requirement needs emphasises the need of employees to fully understand what the organisation requires of them. This is because for employees to contribute towards the success of their organisations, they will need a clear set of tasks and targets. This way, employees will not feel that they are over-burdened. Management reaction has been to set out clearly defined job design which states the employees job description, task and targets and employee description. Employees who meet their task and target often feels a high sense of contribution to their organisation (Bello et al., 2017).

4.4.2.4 Defend vs performance management

Within the drive to defend, employees hold on to their values and norms, they are supportive of the organisation if everyone is treated equally irrespective of their background. Such employees also place significant value on the organisations value of their opinion and contribution at work. Employers may react by ensuring that organisational processes are
transparent, that policies and implemented fairly and that rewards systems are just (Bello et al., 2017).

**Table 8: Current framework for influencing employee ownership perception**

<table>
<thead>
<tr>
<th>Employee drivers</th>
<th>Employee ownership perception</th>
<th>Current HRM approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition need</td>
<td></td>
<td>Reward system</td>
</tr>
<tr>
<td>Bond need</td>
<td></td>
<td>Organisation culture</td>
</tr>
<tr>
<td>Comprehension need</td>
<td></td>
<td>Job design</td>
</tr>
<tr>
<td>Defend need</td>
<td></td>
<td>Performance management</td>
</tr>
<tr>
<td>Ethnic diversity need- Gap</td>
<td></td>
<td>Support of ethnic identification - Gap</td>
</tr>
</tbody>
</table>

Source: Bello et al. (2017)

### 4.4.3 Gap in HRM practices in the private sector

Reflecting on extant employee behaviour discourse in Nigeria, the framework above suggest that there is a gap in literature that focusses on the implications of ethnic diversity for employees’ perception. Nigeria is a highly collectivist society and its people place a significant value on their ethnic heritage (Oruwari et al., 2004). Organisational theorists are yet to explore the effect of ethnic diversity on employees’ behaviour. Also, the practice of formal employee ownership schemes is not popular in the country, and rarely operational. Thus, there exist a need to discuss this concept and investigate its operationalizability within the country.

### 4.6 Chapter summary

With this background, this thesis charts a new course in the ethnic diversity literature. The thesis takes discussions from the normative perspective to the relational perspective. The limitations highlighted from the current ethnic diversity studies clearly justify the need for this study; thus, giving this study a voice in the ethnic diversity management discourse. This
background chapter also provides evidence within the Nigerian context that highlights the importance of the study.

A review of the roles of the federal, state and local civil services in Nigeria indicates their activities are similar, with the main difference being on the geographical scope that these activities cover. Also, because of the lack of incentives that has been highlighted as a major factor influencing their commitment, it is important to undertake this study to determine viable ways to influence their perception of ownership. Evidence from the private sector discourse presented also show that ethnicity has not been given attention.

The above review highlights the evident lack of literature on the concept on employee ownership in Nigeria. This study pioneers the discussion on employee ownership perception in Nigeria. The comparative analysis from the data collected highlights the differences in the perception of psychological ownership of employees from the public sector and the private sector.

Also, the limitations suggested by the literature within the Nigerian context call for studies that further attempt to explain the causal relationship of psychological ownership perception on employees’ commitment. The relational perspective focus of this study responds to this limitation, as well provides literature on the innate process within a collectivist setting that psychological ownership may emerge. The next chapter presents the methods chapter.
Chapter 5
Methodology

5.1 Introduction

This chapter addresses the methodological approach used to test the hypothesis outlined in Chapter three. In the first part, philosophical considerations are addressed. Thereafter, the measurement of variables is described, followed by a description of the conduct of survey of Nigerian employees.

5.2 Research philosophy - positivism

The rationale for the methodological choices adopted was considered using the framework of Frels and Onwuegbuzie (2013). To test the hypothesis outlined in the previous chapter, it was necessary to measure the concepts of employee psychological ownership, ethnic identification, interpersonal fairness and co-worker social support. Accordingly, quantitative approaches were considered most appropriate for this investigation. (Mkansi & Acheampong, 2012). The scales used to measure the variables are derived using scientific method and as such this thesis holds a scientific or positivist paradigm.

Positivist paradigm is apt because the thesis aims at explaining a causal relationship between ethnic identity and employee psychological ownership perception (Creswell, 2009, p. 7), and to provide a basis for generalising such relationships. Determining a causal relationship requires that variable measurement has methodological rigour. Therefore, this study adopts a survey approach in which each variable in this study is measured using validated scales. Data were collected by means of a structured questionnaire and analysed using well established software. To further explain the positivist paradigm, the positivist ontology and epistemology is presented next.
5.2.1 Ontology-realism
Ontological consideration relates to the views of reality. Employee psychological ownership perception, ethnic identification, co-worker social support and interpersonal fairness constructs are considered in this approach as real and discoverable. They are thus perceived differently by each individual employee and are explained by interventions of employee perception (Scotland, 2012). The inquiry into how these variables influence participants is assessed independent of the researcher’s views. Thus, because these variables are considered as existent, measurable and discoverable, this study can be considered to have adopted a realistic ontology. Within the positivist paradigm, investigations of the variables are based on theoretical deductions (Scotland, 2012).

5.2.2 Epistemology-objectivism
In this research, data were collected, measured and analysed using a structured analytical process. The researcher maintained an independent position throughout the survey-based data collection exercise and was not involved in the process of respondents making sense of the data. The data collection instrument was designed in line with hypotheses. In this approach, the researcher was neutral to the emotional interpretations of the respondents and used scientific analysis to interpret findings. In line with the above, the epistemological position of the thesis is that of objectivism (Cohen, Manion, & Morrison, 2007, p. 7). Objectivism in the sense that the researcher maintains an independent and neutral stance in the analysis and interpretation of reality (Saunders, 2011).

5.4 Variables of the study
The dependent variable employee ownership perception was measured using three components- employee self-efficacy, organisational self-identity and employee voice. The independent variable is employee ethnic identity. Co-worker social support and employee interpersonal fairness were considered as mediating variables. Demographic variables were included as controls.
5.5 Measures of variables

This subsection provides explanations for the ways that the variables in the hypothesis were to be measured. These scales were adapted from previous studies.

5.5.1 Employee Ethnic Identification

Ethnic identification provides a general measure of ethnic diversity across a wide range of ethnic groups. The study adopts a revised multi group ethnic identity measure (RMEIM) scale proposed by Phinney (1992) and revised by Phinney and Ong (2007). The scale is made up of six items on a 5-point Likert scale, from strongly disagree at (1), to strongly agree at (5). Statements used in the scale to measure ethnic identification include: I consider my LGA affiliation important, I have spent time trying to find out more about my LGA, such as its history, traditions, and customs, I have a strong sense of belonging to my LGA and I understand pretty well what my LGA membership means to me. The seven items gave a Cronbach alpha coefficient of 0.84.

5.5.2 Interpersonal fairness

In measuring interpersonal fairness, this study adopts Mor Barak et al. (1998) Diversity Perception Scale (DPS). DPS measures the overall impression that an employee has as a result of working in an environment that has a different demography (Mor Barak et al., 1998). Although the scale used in the original study included gender, this study has adopted it mainly to reflect the experiences that employees from different ethnic groups will feel towards their organisation’s diversity climate. Statements used in the scale include; in my organisation employment and promotion is done objectively irrespective of LGA, in my organisation, supervisors give feedback objectively irrespective of LGA, and, Decisions to lay off workers are made objectively irrespective of people’ LGA.

The scale was adopted because it covers the various aspects of interpersonal relationships; from interactional, procedural, informational and interpersonal treatments. The
scale focuses on employees’ experiences as a result of their differences in ethnic identification. Examples of existing studies that have utilised DPS are Hobman, Bordia, and Gallois (2004), McKay, Avery, and Morris (2008), McKay et al. (2007). Cronbach alpha of 0.80 was reported for the thirteen-item scale.

5.5.3 Co-worker social support
This variable is used to determine whether employees’ expectation of ability to deliver on task assigned is influenced by the support they derive from their colleagues. As a mediator variable, it examines if employees from different ethnic groups within an organisation are able to deliver more on their task as a result of the support from their colleagues. A widely used five item instrument is adapted from the co-worker social support scale provided by Caplan, Cobb, and French (1975, pp. 251-252).

The instrument is adapted using a 5-point Likert scale with (1), as strongly disagree, and (5) strongly agree. This scale has been utilised by a wide range of studies measuring co-worker social support, for example Beehr, Jex, Stacy, and Murray (2000), Blau (1981), and Jayaratne and Chess (1984). Example statements in the scale include; "I know I can rely on me colleagues when things get tough at work", "I find it very easy to talk to my colleagues at work", "my colleagues are willing to listen to my personal problems" and "my colleagues go out of their way to do things to make my work life easy for me". Cronbach alpha of 0.75 was reported for the five-item scale.

5.5.4 Employee self-efficacy
This employee self-efficacy measures employees’ feeling of competence to handle the daily routines and task associated with getting work done (Judge, Erez, Bono, & Thoresen, 2003). An 11 item instrument scale was adapted from the work of Sherer et al. (1982). Examples of statements used in this scale includes; ‘I give up on things before completing them’, ‘I avoid facing difficulties’, ‘if something is too complicated’, ‘I will not even bother to try it’, ‘when unexpected problem occur’, ‘I don’t handle them well’, ‘I avoid trying to learn new things
when they look difficult to me’, ‘I give up easily’. Cronbach’s alpha reported for the eleven items was 0.91.

### 5.5.5 Organisational self-identity

Organisational self-identity is used to measure whether employees will define themselves by their organisation’s successes or otherwise. Items listed in the instrument seek to investigate employees’ emotional attachment to their organisation. The study adopts a five item organisational identification (OID) scale (Mael & Ashforth, 1992). Items are presented on a 5-point Likert scale, with 1 representing strongly disagree and 5, strongly agree. Examples of statements in this scale include: When I talk about my organisation, I usually say ‘we’, rather than ‘they’, ‘my organisation’ success is my success and when someone praises my organisation’, ‘it feels like a personal compliment’. The OID scale has been used by a number of existing studies (Farooq, Rupp, & Farooq, 2016; Feather & Rauter, 2004). The five items reported a Cronbach’s alpha of 0.79.

### 5.5.6 Employee voice

The third dependent variable investigates the employees’ willingness to make constructive suggestions that will improve work. If the leader creates the right atmosphere, employees are treated fairly and supported by their colleagues, it is expected that the employee will respond by making contribution to the progress of work. The study adopts a three item scale for measuring voice by Farh et al. (2004) to investigate the employee’s willingness to make positive contributions at work as a result of the organisational context. Example statements include; I am actively offering suggestions to improve my work procedures and processes, and, I am actively bringing suggestions to help my organisation run more efficiently and effectively. Examples of studies that adopted this scale to measure voice include Liao, (2015)and Wang et al. (2016). Cronbach’s alpha reported for the three items was 0.73.
5.5.7 Control variables

The following variables were included as controls: tenure in employment, sector, position in organisation, gender, highest qualification and state of origin. Analysis of variance was conducted to determine how the differences in the categorisation of the control variables affected participants’ responses. Table 9 shows how the control variables are coded by category and how each category is dummyed to enable the effect of each category to be measured.
### Table 9: Coding and dummy coding of control variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dummy code per category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt; 2 years</td>
</tr>
<tr>
<td>Tenure</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Code</td>
</tr>
<tr>
<td>&lt; 2 years</td>
<td>1</td>
</tr>
<tr>
<td>2-5 years</td>
<td>2</td>
</tr>
<tr>
<td>5-7 years</td>
<td>3</td>
</tr>
<tr>
<td>7-10 years</td>
<td>4</td>
</tr>
<tr>
<td>10 years and above</td>
<td>5</td>
</tr>
<tr>
<td>Sector</td>
<td>Code</td>
</tr>
<tr>
<td>Public</td>
<td>1</td>
</tr>
<tr>
<td>Private</td>
<td>2</td>
</tr>
<tr>
<td>Position in organisation</td>
<td>Code</td>
</tr>
<tr>
<td>Junior staff</td>
<td>1</td>
</tr>
<tr>
<td>Senior staff</td>
<td>2</td>
</tr>
<tr>
<td>Manager</td>
<td>3</td>
</tr>
<tr>
<td>Director</td>
<td>4</td>
</tr>
<tr>
<td>Gender</td>
<td>Code</td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
</tr>
<tr>
<td>Highest qualification</td>
<td>Code</td>
</tr>
<tr>
<td>GCSE</td>
<td>1</td>
</tr>
<tr>
<td>Diploma</td>
<td>2</td>
</tr>
<tr>
<td>Bachelors</td>
<td>3</td>
</tr>
<tr>
<td>Masters &amp; above</td>
<td>4</td>
</tr>
<tr>
<td>State of origin</td>
<td>Code</td>
</tr>
<tr>
<td>Rivers</td>
<td>1</td>
</tr>
<tr>
<td>Non-Rivers</td>
<td>2</td>
</tr>
</tbody>
</table>

### 5.6 Questionnaire sample

The questionnaire is found in section 5.0 in Appendix 2.
5.6.1 Piloting the questionnaire

The study followed the recommendations of Berdie et al. (1986) to ensure the questionnaire’s validity and reliability. Factor loading was used to test that the questions loaded on the correct variables. Confirmatory factor analysis provided information to determine whether variables are measuring different aspect of ownership perception (Muthén & Muthén, 2002; Yang et al., 2013) and are presented in the following chapter.

5.6.2 Outcome of pilot exercise

Following the determination of the data collection instrument, and the approval from the ethics committee of the Business School, 70 survey booklets were distributed to employees of the Rivers State Civil service. 55 participants completed and returned the survey.

Of the 55 questionnaires received, 36 were analysable. Others were incomplete or provided more than one answer to the statements. It was identified that the grammar needed to be simplified to enable proper understanding of the items in the questionnaire. One item was simplified (item 62). It initially read ‘when I set important goals for myself, I rarely achieve them’. The word ‘rarely’ was interpreted as ‘really’. The item was simplified to read ‘When I set important goals for myself, I am unable to achieve them’. Furthermore, the pilot study provided information as to whether the Civil Service had the information communication facility for an online study. Following the lack of ICT facilities, paper surveys were used for the main data collection.

From the outcome of the pilot study, statements in the questionnaire were further simplified for easy comprehension. Also, the meaning of each of the scales in the questionnaire was printed on each page of the survey booklet. Extra care was taken during the collection of the booklets from participants during the main data collection exercise. The researcher tried as much as possible to review the booklets when collecting from the employees to ensure that they were filled properly. The duration of the main data collection
exercise was revised from one month to two months to give time for the completion of the exercise.

Preliminary analysis from the pilot exercise analysis was not considered meaningful as the sample size was not adequate. The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy result ranged from 0.20 to 0.37 for the factor analysis. Ideally, KMO test for sample adequacy should be above 0.6. However, the data was used to practice the use of the statistical software (SPSS, AMOS and Hayes Process plugin) deployed for this study.

### 5.7 Questionnaire response rate

The questionnaire achieved 69% response rate. A total of 2500 survey booklets were distributed; 1500 to employees of the Rivers State Civil Service and 1000 to private sector organisations. Of this number, 1715 questionnaires were returned. 190 of them were not usable for the following reasons; incomplete filling, having more than one answer to a question, inconsistent response with questions reworded or reversed. At the end of the data screening exercise, 1525 questionnaires are used for analysis in this study. Further details are provided in the descriptive statistics section of chapter 6.

### 5.8 Questionnaire design

Reliability underpins the need for the questionnaire to convey the same meaning when interpreted by different persons in a population (Choi, 2004). Validity confirms the accuracy of the questionnaire (Berdie et al., 1986), and in addition confirms that the instrument can measure the same traits when using different methods (Choi, 2004). The study considered Saunders’ (2011) suggestion as follows:

#### 5.8.1 Content validity

The questionnaire was designed, and prior to administration, preliminarily tested within a pilot group, with revisions made from feedback.
5.8.2 Criterion-related validity

To achieve criterion-related validity, data collection instrument comprised validated scales that have been widely used to measure the variables of interest. The study adopts structural equation modelling to test whether the outcome of the responses clearly predicted the variables of the study. Structural equation model enables the investigation of relationship for models with multiple outcomes (Kline, 2011).

5.8.3 Construct validity

Construct validity checks is ensures that scales measure the constructs utilised in the study (Saunders, 2011). To achieve this, the scales were pre-tested during a pilot exercise. A further consideration was needed to ensure that the meanings interpreted by the respondents within the context of the study would be the same if the questionnaire is administered in a different context. Thus, construct validity aims to allow for generalisation of measurement instrument (Saunders, 2011). The use of validated scales satisfies this requirement.

5.9 Determination of sample size

Sample size is important in understanding and explaining significances, relationships and interaction of variables (Peers, 2006). The sample size was determined using Cochran’s (2007) sample size formula for categorical data. Cochran’s (2007) minimum sample size formula was adopted to determine sampling adequacy as it makes provision for margin of error and variances that may exist in the data (Barlett, Kotrlik, & Higgins, 2001). The formula explains the analytical procedure for determining sampling adequacy (Hashim, 2010). In this study, the population size is considered to be categorical, as the number of participants in the population is finite.
5.9.1 Minimum sample size calculation

**Equation 1-Cochran’s determination of sample size for categorical data above 120**

\[
N = \frac{(t)^2 \times (p)(q)}{(d)^2}
\]

Cochran’s assumptions

- \(t\)-value for alpha level of .05 is 1.96 for population above 120
- \((p)(q)\)- Estimate of variance (5%) (5%), \(d\)- acceptable margin of error.05

\[
N = \frac{(1.96)^2 \times (.5) (.5)}{(0.05)^2} = 384
\]

\(N\)= sample size

Source: Barlett et al., (2001)

The choice of categorical data formula is premised on the fact that this thesis examines the differences in response based on employees’ local government areas, gender, position in the organisation, educational qualification and sector of employment. These variables are considered as control factors in the study design.

**5.10 Data collection strategy and analytical approach**

**5.10.1 Data collection**

Paper surveys were collected because the organisations sampled did not have adequate internet facility in all the offices. Survey distribution followed ethical guidelines. Participation was voluntary and participants were assured of their anonymity. The questionnaire is shown in Appendix 2.
5.10.2 Data storage
Returned questionnaires were screened, input into excel and stored in a drop box folder shared with the research team (Researcher and Supervisor) throughout the duration of the study.

5.10.3 Quality control
Each questionnaire was coded in a unique way agreed upon by the research team to avoid double entry.

5.10.4 Organisation access
A letter of introduction was sent to the Head of Service of the Rivers State Civil Service. Meetings were held with senior officials of the Rivers State Civil Service, resulting in the approval of the study. A letter of authority was provided from the office of the Head of Service to the heads of departments and ministry. This letter indicated that due approvals were received for the conduct of the study and requested for cooperation from staff and management. Organisational participation forms were sent to private sector organisations as well and approval received before data collection. Following the introduction letter submitted to the heads of the human resource department of the respective organisations, the HR heads signed an organisation consent form that was attached to each of the questionnaires distributed. For both sectors, the attachment of the organisational consent form or letter gave credence to the research.

5.10.5 Description of organisations
Of the 1,525 participant responses, 908 are from the public sector. Participants are drawn from employees of the Rivers State government. In order to protect their identities, the employing ministries were not indicated in the survey. These participants are drawn from various ministries in the state government including education, health, power, and local government administration. From the private sector, 617 valid responses are used for data analysis. These participants are drawn from organisations in manufacturing, large retail
shops, education and banking. From both sectors, 40% of participants are drawn from organisations in the education sector. See Table 10. The organisations sampled were fairly representative of the various LGAs in the state. This is in line with the Federal Character Principle (FCP) practiced by public sector organisations in Nigeria (Adeosun, 2011; Kendhammer, 2014). FCP mandates all government owned organisations to employ people from various LGAs in a state (Mustapha, 2007; Osaghae, 1988). Appendix 2 shows the LGA spread of the employees sampled in this study.

5.10.6 Analytical approach

Data were collected and analysed using SPSS statistical software. Data were screened for outliers, incomplete questionnaire with missing data were excluded. Amos statistical package was used to run a confirmatory factor analysis which was used to ascertain the fitness and adequacy of the hypothesised model derived from the theoretical framework in chapter 3. Structural equation modelling (SEM) with Amos tested the relationship between ethnic identity and employee psychological ownership perception. SEM enabled the investigation of the dependent variable (psychological ownership) at the individual component level (self-efficacy, organisational self-identity and employee voice).

A further parallel analysis is presented using Hayes SPSS plug-in to determine the accuracy of the Amos results. The results were consistent. Bootstrapping the sample at 10,000 using both techniques also provided similar findings to suggest that the results were generalisable. Bootstrapping involves running an analysis repeatedly with different larger sample sizes (Falk & Biesanz, 2016).
5.11 Summary

This chapter considered the methodology used in this research. It provided justification for the choice of methodology. Paper surveys were the main data collection method used to achieve the objectives of the research. Quantitative methods are used to deductively analyse data in the next chapter.
Chapter 6  
Descriptive data analysis

6.1 Introduction

This chapter presents analysis of the data collected from over 1,525 participants using survey method described in the chapter five. The structure of the chapter is as follows; first, the chapter describes properties of the theoretical model and presents findings from a confirmatory factor analysis to determine the adequacy and validity of the model. To determine whether to give consideration to the effects of control variables in the discussions chapter, the chapter presents analysis of variance to examine the variances and effect sizes of the difference among the main variables that is attributable to each control variable. Findings from this chapter shows that the theoretical model is adequate and valid to examine the hypothesis (presented in the next chapter).

6.2 Description of measurement model

This section shows how the degree of freedom of the model was achieved. To achieve the degree of freedom, the number of distinct parameters are subtracted from the number of distinct sample moments (Rigdon, 1994). Variance, covariance and sample means are included in the distinct sample moment (Byrne, 2016). It is usual for the sample parameters to have lower number compared to the sample moments. This is because distinct parameters do not incorporate fixed parameters. See Table 10 for output from the computation of model degrees of freedom from SPSS-Amos.
Table 10: Computation of degree of freedom

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of distinct sample moments:</td>
<td>324</td>
</tr>
<tr>
<td>Number of distinct parameters to be estimated:</td>
<td>96</td>
</tr>
<tr>
<td>Degrees of freedom:</td>
<td>228</td>
</tr>
</tbody>
</table>

In this default result summary of the model, the results show that the model fitted successfully, thus the message reiterating ‘minimum as achieved’. The probability level $p<0.001$ signifies that the distributional assumptions are appropriate; this suggests that the model is correctly depicting the theoretical framework. A probability level of $p<.05$ normally suggests that the distributional assumptions are appropriate for the model (Bollen & Long, 1993). Bollen and Long (1993) however, question the idea of depending on the $p$ value of the model to determine the model fitness and other criterion assumption. Thus, other tests are done in the later sections to determine model fit and reliability.

6.3 Model variable summary

Table 11 shows the classification of variables in this study. The Table shows the six variables in the model (1 independent and 5 dependent). See Figure 6.

Table 11: Classification of variables

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-worker social support</td>
<td>Employee ethnic identity</td>
</tr>
<tr>
<td>Interpersonal fairness</td>
<td></td>
</tr>
<tr>
<td>Employee psychological ownership perception variables represented by</td>
<td></td>
</tr>
<tr>
<td>Employee self-efficacy</td>
<td></td>
</tr>
<tr>
<td>Organisational self-identity</td>
<td></td>
</tr>
<tr>
<td>Employee voice</td>
<td></td>
</tr>
</tbody>
</table>
There are two mediation processes in the model. The first highlights the effects that co-worker social support have on the relationship between employee ethnic identity and EPOP. The second mediation process examines the mediation effect of interpersonal fairness on the relationship between employee ethnic identity and co-worker social support.

6.4 Reliability testing and confirmatory factor analysis

Reliability testing and principal component analysis were carried out with the aid of SPSS to determine whether the items loaded properly with each of the variables in the theoretical model. 53 items were initially presented in the instrument to measure the 6 variables as follows; ethnic identification (7 items), interpersonal fairness (16 items), co-worker social support (5 items), self-efficacy (17 items), organisational self-identity (5 items) and voice (3 items).
6.4.1 Reliability testing

From the reliability test, the variables ethnic identification (7 items), co-worker social support (5 items), organisational self-identity (5 items) and employee voice (3 items) had a Cronbach alpha values of 0.84, 0.75, 0.80, and 0.73 respectively. Analysis of the alpha co-efficient showed reduced scores if items were deleted and so for these scales, all items were retained for further analysis (Olckers & Zyl, 2016).

On the other hand, self-efficacy scale had 17 items initially and, item total analysis showed that deleting 6 items (Q66, Q73, Q61, Q71, Q59 and Q67) step by step enhanced the Cronbach alpha value from 0.86 to 0.91. A review of these questions show that they are similar and may be contributing very little to the scale. For example, items 61 and 66 reads; ‘if I can’t do a job the first time, I keep trying until I achieve’ and ‘when I have something unpleasant to do I stick to it till I finish it’. Thus, factor analysis was carried out for 11 items on the self-efficacy scale.

For interpersonal fairness had 16 items, 2 items (Q23 and Q17) were deleted step by step to improve the Cronbach alpha from 0.77 to 0.82, leaving 14 items for further analysis. See Table 12 and Appendix 4 for detailed scores.

Table 12-Reliability Statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic identification</td>
<td>0.844</td>
<td>0.845</td>
<td>7</td>
</tr>
<tr>
<td>Interpersonal fairness</td>
<td>0.819</td>
<td>0.819</td>
<td>14</td>
</tr>
<tr>
<td>Co-worker social support</td>
<td>0.745</td>
<td>0.743</td>
<td>5</td>
</tr>
<tr>
<td>Employee self-efficacy</td>
<td>0.912</td>
<td>0.912</td>
<td>11</td>
</tr>
<tr>
<td>Organisational self-identity</td>
<td>0.798</td>
<td>0.801</td>
<td>5</td>
</tr>
<tr>
<td>Employee voice</td>
<td>0.734</td>
<td>0.739</td>
<td>3</td>
</tr>
</tbody>
</table>
6.4.2 Confirmatory factor analysis

Results from a principal component analysis (PCA) show that for ethnic identification, the initial eigen value of the first component explained 52% of the cumulative total variance. For interpersonal fairness, the eigen value showed that the first component explained 29% of the variance, the second component 9.5% of the variance, the third 8.1% of the variance and fourth component 6.7% of the variance. Varimax and oblimin rotations were used to determine which item loaded poorly leading to the removal of item (Q19) and leaving 13 items with a cumulative total variance was 59.5%.

All items on the co-worker social support scale loaded on a single component and had a cumulative total variance of 50% on the first component. For self-efficacy scale, all 11 loaded on a single component with a total variance of 53% on the first component. Organisational self-identity loaded on a single component with a total variance of 56% and employee voice also loaded on a single component with a total variance of 66% on the first component. A total variance value of over 50% for all variables in the model suggest that the scales were reliable for investigating the relationships on the theoretical model (Olckers & Zyl, 2016). Also, the Kaiser-Meyer-Olkin measure of sample adequacy for each of the scales were > 0.6, more than the recommended value of 0.6. For each of the scales, Bartlett’s test of sphericity was significant; ethnic identification ($\chi^2 (21) = 3818.42, p < .05$), interpersonal fairness ($\chi^2 (78) = 4513.73, p < .05$), co-worker social support ($\chi^2 (10) = 1727.45, p < .05$), employee self-efficacy ($\chi^2 (136) = 10227.40, p < .05$), organisational self-identity ($\chi^2 (10) = 2336.41, p < .05$) and employee voice ($\chi^2 (3) = 1155.97, p < .05$).

6.4.2.1 Components of employee psychological ownership perception

Unbundling the construct of employee psychological perception (EPOP) is one of the objectives of this study. to achieve this, a PCA is conducted to determine if the three formative constructs of EPOP (employee self-efficacy, organisational self-identification and employee voice) are distinct constructs. The eigen value showed that the three constructs loaded on 3 components.
and that cumulatively they explain 57.9% of the variance in EPOP. From the rotated component matrix and total variance explained results, self-efficacy loaded on the first component and explained 35% of the cumulative variance, organisational self-identity loaded on the second component and explained 16.6% of the cumulative variance and employee voice loaded on the third and explained 6.3% of the cumulative variance. See Appendix 3 for detailed reliability and factor analysis scores.

6.5 Determination of measurement model validity

In addition to the above analysis that confirms that the model is adequate, there is need to determine the validity of the constructs of the model. Here the aim is to ascertain the extent to which the items used represent the unobservable variables in the construct (Hair, Sarstedt, Ringle, & Mena, 2012). The questionnaire sent to respondents is made of statements that should collectively represent the variables in the theoretical framework. Two methods utilised in this study that are frequently used to determine construct validity are: average variance extracted (AVE), and composite reliability index (CRI) (Hair et al., 2012).

Average variance extracted analysis is used to determine the variance existing in the construct alongside variance that occurs as a result of error in measurement (Fornell & Larcker, 1981). AVE analysis checks the consistency of the responses in the measurement scale. The goal is to ascertain the degree of correlation between items in a scale, as well as how the items correlate with the total (Bagozzi, 1981). The rule of thumb is for AVE results to be $\geq 0.50$ (Fornell & Larcker, 1981).

Composite reliability index (CRI) analysis is used to determine the extent to which group of different items converge to explain the variables. Estimates from CRI are usually more precise compared to that those generated from Cronbach Alpha generated from reliability analysis (Fornell & Larcker, 1981). This explains why it is preferred in this study. The minimum value generally accepted for a reliable construct is CRI $\geq 0.70$ (Fornell & Larcker, 1981).
14 shows the values of AVE and CRI, thus confirming the validity of the constructs used in the analysis. See Appendix 5 for average variance extracted and composite reliability index workings.

**Table 13: Construct validity**

<table>
<thead>
<tr>
<th>Items</th>
<th>Cronbach alpha (α)</th>
<th>AVE</th>
<th>CRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee self-efficacy</td>
<td>0.91</td>
<td>0.54</td>
<td>0.93</td>
</tr>
<tr>
<td>Organisational self-identity</td>
<td>0.80</td>
<td>0.56</td>
<td>0.86</td>
</tr>
<tr>
<td>Employee voice</td>
<td>0.73</td>
<td>0.67</td>
<td>0.93</td>
</tr>
<tr>
<td>Co-worker social support</td>
<td>0.75</td>
<td>0.50</td>
<td>0.83</td>
</tr>
<tr>
<td>Ethnic identification</td>
<td>0.84</td>
<td>0.52</td>
<td>0.88</td>
</tr>
<tr>
<td>Interpersonal fairness</td>
<td>0.81</td>
<td>0.62</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Note:

Factor loading and Cronbach Alpha are derived from SPSS output. Formula for AVE and CRI are present below.

**6.6 Descriptive statistics and correlation of model variables**

The descriptive statistics presented for the model variables include measurement for means and standard deviations. Alpha coefficient and correlation output for the measurement model is presented in Table 15. The results show that Cronbach’s alpha coefficient of the constructs were acceptable with values greater 0.70 (Olckers & Zyl, 2016). The correlation coefficients of some variables were strong. Thus, a multicollinearity analysis was done and reported the following variance inflation factors (VIF); ethnic identification 1.660, interpersonal fairness 1.518, employee self-efficacy 1.148, organisational self-identity 1.763 and employee voice 1.748. A VIF value lower than 3 suggest that there is no multicollinearity error.
Table 14: Descriptive statistics and correlation of model variables

<table>
<thead>
<tr>
<th>Model Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cronbach alpha (α)</th>
<th>No of items</th>
<th>Ethnic identification</th>
<th>Interpersonal fairness</th>
<th>Co-worker social support</th>
<th>Employee self-efficacy</th>
<th>Organisational self-identity</th>
<th>Employee voice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic identification</td>
<td>3.879</td>
<td>0.727</td>
<td>0.844</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpersonal fairness</td>
<td>3.778</td>
<td>0.619</td>
<td>0.807</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-worker social support</td>
<td>3.807</td>
<td>0.744</td>
<td>0.745</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee self-efficacy</td>
<td>3.284</td>
<td>0.962</td>
<td>0.912</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organisational self-identity</td>
<td>3.937</td>
<td>0.754</td>
<td>0.798</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee voice</td>
<td>4.047</td>
<td>0.843</td>
<td>0.734</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed). N=1525**
6.8 Demographic description

Of the (n =1525) responses used in this study, (n= 908) of them were from employees of the public sector, while (n= 617) were from private sector organisations. A summary of the description the participants are as follows; 78% of the employees have worked for the organisations for over 5 years. This implies that majority of the respondent had a good working knowledge of the employee relations issues presented in the survey instrument. 58% of the employees surveyed fall within the senior staff category, while about 14% are at the managerial levels. In view of this distribution, findings may represent the experience of employees within the senior staff category. It is also important to note that over 50% of the participants had been on their current position for more than five years. However, the study shall control for differences in response for employees at different level to establish its impact.

Although not planned, the sample has a fairly balanced gender distribution, with 55% males and 45% females. Findings highlight the effects that gender has on the relationship between the variables. The sample also shows that the participants had high levels of education: over 50% had a bachelor’s degree or higher. Also, of important significance is the ethnic group of the employees. 71% of them hail from Local Government Areas (LGA) in Rivers State, while 29% are non-Rivers indigenes. A subsection is dedicated to highlighting the findings of the differences because of employees’ state of origin. Tables 16 provide further information on the description of the participants.
### Table 15-Participants description (n=1525)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>Public</td>
<td>908</td>
<td>59.5</td>
<td>59.5</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>617</td>
<td>40.5</td>
<td>100</td>
</tr>
<tr>
<td>Tenure in employment</td>
<td>less than 2 years</td>
<td>263</td>
<td>17.2</td>
<td>17.2</td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>329</td>
<td>21.6</td>
<td>38.8</td>
</tr>
<tr>
<td></td>
<td>5-7 years</td>
<td>438</td>
<td>28.7</td>
<td>67.5</td>
</tr>
<tr>
<td></td>
<td>7-10 years</td>
<td>248</td>
<td>16.3</td>
<td>83.8</td>
</tr>
<tr>
<td></td>
<td>10 years and above</td>
<td>247</td>
<td>16.2</td>
<td>100</td>
</tr>
<tr>
<td>Position in Organisation</td>
<td>Junior staff</td>
<td>421</td>
<td>27.6</td>
<td>27.6</td>
</tr>
<tr>
<td></td>
<td>Senior staff</td>
<td>891</td>
<td>58.4</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>119</td>
<td>7.8</td>
<td>93.8</td>
</tr>
<tr>
<td></td>
<td>Director</td>
<td>94</td>
<td>6.2</td>
<td>100</td>
</tr>
<tr>
<td>Duration in position</td>
<td>less than 2 years</td>
<td>275</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>2-5 years</td>
<td>501</td>
<td>32.9</td>
<td>50.9</td>
</tr>
<tr>
<td></td>
<td>5-7 years</td>
<td>446</td>
<td>29.2</td>
<td>80.1</td>
</tr>
<tr>
<td></td>
<td>7-10 years</td>
<td>205</td>
<td>13.4</td>
<td>93.6</td>
</tr>
<tr>
<td></td>
<td>10 years and above</td>
<td>98</td>
<td>6.4</td>
<td>100</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>834</td>
<td>54.7</td>
<td>54.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>691</td>
<td>45.3</td>
<td>100</td>
</tr>
<tr>
<td>Qualification</td>
<td>High School leaving certificate</td>
<td>162</td>
<td>10.6</td>
<td>10.6</td>
</tr>
<tr>
<td></td>
<td>Ordinary national diploma</td>
<td>483</td>
<td>31.7</td>
<td>42.3</td>
</tr>
<tr>
<td></td>
<td>Bachelors’ degree</td>
<td>756</td>
<td>49.6</td>
<td>91.9</td>
</tr>
<tr>
<td></td>
<td>Masters’ degree and higher</td>
<td>124</td>
<td>8.1</td>
<td>100</td>
</tr>
<tr>
<td>State of Origin</td>
<td>Rivers</td>
<td>1084</td>
<td>71.1</td>
<td>71.1</td>
</tr>
<tr>
<td></td>
<td>Non-rivers</td>
<td>441</td>
<td>28.9</td>
<td>100</td>
</tr>
</tbody>
</table>

### 6.9 Description of model variables by demographic variables

Analysis here examines the extent to which socio-demographic factors affect the relationship between main variables (ethnic identification, interpersonal fairness, co-worker social support, employee efficacy, organisational self-identity and employee voice) in the model. Analysis of variance (ANOVA) for each of the scales used was presented. The ANOVA results for the difference were significant but the effect size (partial Eta squared) were small with exception of sector which had a large effect. Thus, the differences in the variables were not
attributable to the effects of the control variable. In line with Becker (2005) and Becker et al. (2016), analysis in chapter seven was carried out without these control variables as the control variables did not influence the interpretation of the findings. As Caesens, Stinglhamber, Demoulin, and De Wilde (2017) suggested, when findings from the control analysis is similar to the general results, they are not included in the structural equation model.

6.9.1 Analysis of variance (ANOVA) of main variables in relation to each categorical variable

Analysis of variance (ANOVA) presented in this section determines whether the differences in average scores and variation scores for each of the scales used in relation to control variables occurs due to chance. Average scores are presented in descriptive statistics tables while significance (p-value) and effect size (partial Eta squared) are reported in the ANOVA table. See Appendix 6 for details of scores.

6.9.1.1 ANOVA- Ethnic identification scale

A one-way analysis of variance was calculated for ethnic identification in relation to each category of the control variables. The results were significant for each control variable as follows; sector, $F(1,1523) = 316.21, \ p = .01, \ \text{partial } \eta^2 = 0.17$. Public sector employees showed higher perception of ethnic identification ($M = 4.13, \ SD = 0.67$) than private sector employees ($M = 3.51, \ SD = 0.65$). Tenure in employment, $F(4,1520) = 23.57, \ p = .01$, partial $\eta^2 = 0.06$. Employees who have spent over 10 years in their organisation showed higher perception of ethnic identification ($M = 4.20, \ SD = 0.70$) than those who have spent less than 2 years ($M = 3.68, \ SD = 0.71$). Position in the organisation, $F(3,1521) = 4.98, \ p = .01$, partial $\eta^2 = 0.01$. Employees at director level showed higher perception of ethnic identification ($M = 4.08, \ SD = 0.74$) than those on junior level ($M = 3.94, \ SD = 0.71$). Gender, $F(3,1521) = 2.57, \ p = .05$, partial $\eta^2 = 0.01$. Males showed higher perception of ethnic identification ($M = 3.92, \ SD = 0.75$) than females ($M = 3.83, \ SD = 0.70$). Highest qualification, $F(4,1520) = 24.78, \ p = .01$, partial $\eta^2 = 0.06$. Employees with master’s degree
and higher showed higher perception of ethnic identification ($M = 4.05, SD = 0.69$) than those high school certificate ($M = 3.55, SD = 0.72$). State of origin, $F (4,1520) = 25.98, p = .01$, partial $\eta^2 = 0.06$. Rivers employees showed higher perception of ethnic identification ($M = 3.99, SD = 0.69$) than non-Rivers employees ($M = 3.58, SD = 0.75$). Findings show the partial Eta squared values for each control variable except sector was less than 0.14. A partial Eta squared value ≤ 0.14 suggest that the variances in the main variables attributable to control variables’ effect is large enough to account difference (Richardson, 2011). As a result of the actual differences in the mean and the effect size it was useful to discuss possible reasons for the differences in the control variable in chapter eight.

6.9.1.2 ANOVA- Interpersonal fairness scale

ANOVA test results for interpersonal fairness scale was significant for interpersonal fairness in relation to each category of the control variables. The results were significant for each control variable as follows; sector, $F (1,1523) = 100.46, p = .01$, partial $\eta^2 = 0.06$. Public sector employees showed higher perception of ethnic identification ($M = 3.90, SD = 0.61$) than private sector employees ($M = 3.59, SD = 0.58$). Tenure in employment, $F (4,1520) = 20.85, p = .01$, partial $\eta^2 = 0.05$. Employees who have spent over 10 years in their organisation showed higher perception of interpersonal fairness ($M = 4.01, SD = 0.57$) than those who have spent less than 2 years ($M = 3.57, SD = 0.59$). Position in the organisation, $F (3,1521) = 3.25, p = .02$, partial $\eta^2 = 0.01$. Employees at director level showed higher perception of higher perception of interpersonal ($M = 3.89, SD = 0.64$) than those on junior level ($M = 3.84, SD = 0.67$). Gender, $F (3,1521) = 10.59, p = .01$, partial $\eta^2 = 0.02$. Males showed higher perception of interpersonal fairness ($M = 3.86, SD = 0.62$) than females ($M = 3.68, SD = 0.61$). Highest qualification, $F (4,1520) = 9.73, p = .01$, partial $\eta^2 = 0.03$. Employees with master’s degree and higher showed higher perception of interpersonal fairness ($M = 3.85, SD = 0.58$) than those high school certificate ($M = 3.56, SD = 0.64$). State of origin, $F (4,1520) = 14.25, p = .01$, partial $\eta^2 = 0.04$. Rivers employees showed higher perception of interpersonal fairness ($M = 3.85, SD = 0.64$) than non-Rivers employees.
Findings show the partial Eta squared values for each control variable was less than 0.14 and suggest that the proportion of the variance attributable to the categories of the control variable was not large enough to account for the differences.

6.9.1.3 ANOVA - Co-worker social support

ANOVA test results for co-worker social support scale was significant for interpersonal fairness in relation to each category of the control variables. The results were significant for each control variable as follows; sector, $F(1,1523) = 297.58$, $p = .01$, partial $\eta^2 = 0.16$. Public sector employees showed higher perception of co-worker social support ($M = 4.06$, $SD = 0.66$) than private sector employees ($M = 3.44$, $SD = 0.71$). Tenure in employment, $F(4,1520) = 21.83$, $p = .01$, partial $\eta^2 = 0.05$. Employees who have spent over 10 years in their organisation showed higher perception of co-worker social support ($M = 4.14$, $SD = 0.65$) than those who have spent less than 2 years ($M = 3.68$, $SD = 0.72$). Position in the organisation, $F(3,1521) = 2.55$, $p = .05$, partial $\eta^2 = 0.01$. Employees at director level showed higher perception of higher co-worker social support ($M = 3.92$, $SD = 0.84$) than those on junior level ($M = 3.86$, $SD = 0.71$). Gender, $F(3,1521) = 4.09$, $p = .01$, partial $\eta^2 = 0.01$. Males showed higher perception of co-worker social support ($M = 3.86$, $SD = 0.76$) than females ($M = 3.74$, $SD = 0.72$). Highest qualification, $F(4,1520) = 18.92$, $p = .01$, partial $\eta^2 = 0.05$. Employees with master’s degree and higher showed higher perception of co-worker social support ($M = 3.95$, $SD = 0.71$) than those high school certificate ($M = 3.50$, $SD = 0.75$). State of origin, $F(4,1520) = 19.40$, $p = .01$, partial $\eta^2 = 0.05$. Rivers employees showed higher perception of co-worker social support ($M = 3.91$, $SD = 0.71$) than non-Rivers employees ($M = 3.55$, $SD = 0.77$). Findings show the partial Eta squared values for each control variable except sector was less than 0.14 and suggest that the proportion of the variance attributable to the categories of the control variable is small. Given the effect size of sector ($\eta^2 = 0.16$), it is useful to provide explanation for differences between public and private sector participants’ view of co-worker social support in chapter eight.
6.9.1.4 ANOVA- Employee self-efficacy

ANOVA test results for employee self-efficacy scale was significant for interpersonal fairness in relation to each category of the control variables. The results were significant for each control variable as follows; sector, $F(1,1523) = 683.21, p = .01$, partial $\eta^2 = 0.31$. Public sector employees showed higher perception of self-efficacy ($M = 3.73, SD = 0.75$) than private sector employees ($M = 2.64, SD = 0.86$). Tenure in employment, $F(4,1520) = 31.55, p = .01$, partial $\eta^2 = 0.08$. Employees who have spent over 10 years in their organisation showed higher perception of self-efficacy ($M = 3.84, SD = 0.87$) than those who have spent less than 2 years ($M = 3.20, SD = 0.95$). Position in the organisation, $F(3,1521) = 10.48, p = .01$, partial $\eta^2 = 0.02$. Employees at director level showed higher perception of higher self-efficacy ($M = 3.51, SD = 0.95$) than those on junior level ($M = 3.46, SD = 0.84$). Gender, $F(3,1521) = 3.02, p = .03$, partial $\eta^2 = 0.01$. Males showed higher perception of self-efficacy ($M = 3.35, SD = 0.98$) than females ($M = 3.21, SD = 0.94$). Highest qualification, $F(4,1520) = 45.82, p = .01$, partial $\eta^2 = 0.11$. Employees with master’s degree and higher showed higher perception of self-efficacy ($M = 3.57, SD = 0.89$) than those high school certificate ($M = 2.75, SD = 0.90$). State of origin, $F(4,1520) = 23.97, p = .01$, partial $\eta^2 = 0.06$. Rivers employees showed higher perception of self-efficacy ($M = 3.43, SD = 0.94$) than non-Rivers employees ($M = 2.91, SD = 0.93$). Findings show the partial Eta squared values for each control variable except sector was less than 0.14 and suggest that the proportion of the variance attributable to the categories of the control variable was not large enough to account for the differences. Given the effect size of sector ($\eta^2 = 0.31$), it is useful to provide explanation for differences between public and private sector participants’ view of co-worker social support in chapter eight.

6.9.1.5 ANOVA- Organisational self-identity

ANOVA test results for organisational self-efficacy scale was significant for interpersonal fairness in relation to each category of the control variables. The results were significant for each control variable as follows; sector, $F(1,1522) = 108.23, p = .01$, partial $\eta^2 = 0.07$. 

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Public sector employees showed higher perception of organisational self-identification ($M = 4.10, SD = 0.71$) than private sector employees ($M = 3.70, SD = 0.76$). Tenure in employment, $F(4,1519) = 18.80, p = .01$, partial $\eta^2 = 0.05$. Employees who have spent over 10 years in their organisation showed higher perception of organisational self-identification ($M = 4.22, SD = 0.63$) than those who have spent less than 2 years ($M = 3.90, SD = 0.79$). Position in the organisation, $F(3,1520) = 5.07, p = .01$, partial $\eta^2 = 0.01$. Employees at director level showed higher perception of higher organisational self-identification ($M = 4.07, SD = 0.67$) than those on junior level ($M = 4.01, SD = 0.76$). Gender, $F(3,1520) = 1.34, p = .26$, partial $\eta^2 = 0.00$. Males showed higher perception organisational self-identification ($M = 3.95, SD = 0.74$) than females ($M = 3.92, SD = 0.74$). Highest qualification, $F(4,1519) = 14.46, p = .01$, partial $\eta^2 = 0.04$. Employees with master’s degree and higher showed higher perception of organisational self-identification ($M = 4.06, SD = 0.69$) than those high school certificate ($M = 3.63, SD = 0.85$). State of origin, $F(4,1519) = 8.59, p = .01$, partial $\eta^2 = 0.02$. Rivers employees showed higher perception of organisational self-identification ($M = 4.0, SD = 0.74$) than non-Rivers employees ($M = 3.76, SD = 0.77$). Findings show the partial Eta squared values for each control variable was less than 0.14 and suggest that the proportion of the variance attributable to the categories of the control variables on the organisational self-identity scale was not large enough to account for the differences.

6.9.1.6 ANOVA- Employee voice

ANOVA test results for employee voice scale was significant for interpersonal fairness in relation to each category of the control variables. The results were significant for each control variable as follows; sector, $F(1,1522) = 142.01, p = .01$, partial $\eta^2 = 0.09$. Public sector employees showed higher perception of voice behaviour ($M = 4.25, SD = 0.75$) than private sector employees ($M = 3.75, SD = 0.89$). Tenure in employment, $F(4,1519) = 10.42, p = .01$, partial $\eta^2 = 0.03$. Employees who have spent over 10 years in their organisation showed higher perception of voice behaviour ($M = 4.32, SD = 0.69$) than those who have spent less than 2 years ($M = 3.93, SD = 0.87$). Position in the organisation, $F(3,1520)$
Employees at director level showed higher perception of higher voice behaviour ($M = 4.14, SD = 0.78$) than those on junior level ($M = 4.12, SD = 0.79$). Gender, $F(3,1520) = 0.56, p = .64$, partial $\eta^2 = 0.00$. Males showed higher perception voice behaviour ($M = 4.07, SD = 0.85$) than females ($M = 4.02, SD = 0.83$). Highest qualification, $F(4,1519) = 20.87, p = .01$, partial $\eta^2 = 0.05$. Employees with master’s degree and higher showed higher perception of voice behaviour ($M = 4.22, SD = 0.74$) than those high school certificate ($M = 3.67, SD = 0.98$). State of origin, $F(4,1519) = 10.87, p = .01$, partial $\eta^2 = 0.03$. Rivers employees showed higher perception of voice behaviour ($M = 4.13, SD = 0.81$) than non-Rivers employees ($M = 3.83, SD = 0.89$). Findings show the partial Eta squared values for each control variable was less than 0.14 and suggest that the proportion of the variance attributable to the categories of the control variables on employee voice scale was not large enough to account for the differences.

**6.10 Summary**

This chapter has presented the results of a cross-sectional survey of Nigerian employees. This study used the confirmatory factor analysis to determine the adequacy and validity of the scale used to test the positions. Results from the confirmatory factor analysis show that the model is adequate and valid to make deductions on the theoretical propositions. Results from ANOVA showed that the proportion of the variance attributable to the categories of the control variables (except sector) on each of scales uses were not large. In view of the variations in average scores and effect sizes, it is useful to provide explanation for differences in participants’ responses (especially in relation to sector) in discussions chapter.
Chapter 7
Inferential data analysis

7.1 Introduction.

This chapter presents analysis aimed at examining the hypothesis presented in chapter three using structural equation modelling (SEM). Analysis from regression weights in SEM explains the impact of the independent variables on the dependent variables. The structural equation model is derived from the measurement model. In line with the objectives of the study, EPOP is represented by its component constructs; employee self-efficacy, organisational self-identity and employee voice. Thus, the model examines how the predictors influence each of these variables in the formation of employee psychological ownership perception.

Structural equation model is appropriate for this type of analysis where the dependent variable has multiple component constructs. From the theoretical perspectives underpinning this study, literature suggests that there is a direct and indirect relationship between ethnic identification and EPOP components. In the light of this suggestion, analyses are presented to cover the hypothesis derived from literature in chapter 3. To begin, the chapter the theoretical framework is presented.
**Figure 10—Theoretical framework**

7.2 Components of employee psychological ownership perception

*Hypothesis 1.1:* Employee self-efficacy has a direct positive relationship with organisational self-identity.

The regression between employee self-efficacy and organisational self-identity is significant, $\beta = 0.22$, $t (1) = 11.58$, $p < .01$. This implies that employee self-efficacy is a significant predictor of organisational self-identity. Hypothesis 1.1 is therefore supported.

*Hypothesis 1.2:* Organisational self-identity has a direct positive relationship with organisational employee voice.

The regression between organisational self-identity and employee voice is significant, $\beta = 0.69$, $t (1) = 30.44$, $p < .01$. This implies that organisational self-identity is a significant predictor of employee voice. Hypothesis 1.2 is therefore supported.

*Hypothesis 1.3:* Employee voice has a direct positive relationship with organisational employee self-efficacy.
The regression between employee voice and employee self-efficacy is significant, $\beta = 0.31$, $t(1) = 10.83$, $p < .01$. This implies that employee voice is a significant predictor of employee self-efficacy. Hypothesis 1.3 is therefore supported. See Table 16.

**Table 16-Relationship between components of employee psychological ownership perception**

<table>
<thead>
<tr>
<th>Relationship between components of EPOP</th>
<th>$\beta$</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational self-identity &lt;-- Employee self-efficacy</td>
<td>0.22</td>
<td>0.19</td>
<td>11.58</td>
<td>0.01</td>
</tr>
<tr>
<td>Employee voice &lt;-- Organisational self-identity</td>
<td>0.69</td>
<td>0.23</td>
<td>30.44</td>
<td>0.01</td>
</tr>
<tr>
<td>Employee self-efficacy &lt;-- Employee voice</td>
<td>0.31</td>
<td>0.19</td>
<td>10.83</td>
<td>0.01</td>
</tr>
</tbody>
</table>

### 7.2 Direct effect relationship between employee ethnic identity (EI) and employee psychological ownership perception (EPOP)

This section establishes the direct relationship between employee ethnic identity and employee psychological ownership perception. In the direct effect analysis, the results show that ethnic identification significantly predicted employee self-efficacy, organisational self-identity and employee voice as follows, $\beta = 0.41$, $t(1) = 12.73$, $p < .01$, $\beta = 0.45$, $t(1) = 18.82$, $p < .01$ and $\beta = 0.45$, $t(1) = 19.86$, $p < .01$ respectively. See Figure 9.
Figure 11-Direct relationship between EI and EPOP components

Table 17-Summary of findings for direct effect

<table>
<thead>
<tr>
<th>Relationship between variables</th>
<th>β</th>
<th>S.E.</th>
<th>C.R</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Self-efficacy &lt;--- Employee ethnic identity</td>
<td>0.41</td>
<td>0.03</td>
<td>12.73</td>
<td>0.01</td>
</tr>
<tr>
<td>Organisational self-identity &lt;--- Employee ethnic identity</td>
<td>0.45</td>
<td>0.02</td>
<td>18.82</td>
<td>0.01</td>
</tr>
<tr>
<td>Employee voice &lt;--- Employee ethnic identity</td>
<td>0.53</td>
<td>0.02</td>
<td>19.86</td>
<td>0.01</td>
</tr>
</tbody>
</table>
7.3 Indirect relationship between EI and EPOP

In this section, the study tests the mediating effects of co-worker social support and interpersonal fairness on the relationship between EI and EPOP. Each of the mediators are discussed separately to ascertain their impact on the dependent and independent variables.

7.3.1 The mediating role of co-worker social support

Hypothesis 2: Employee ethnic identity has a direct positive relationship with co-worker social support.

The results show that ethnic identification significantly predicts co-worker social support, $\beta = 0.55$, $t(1) = 24.97$, $p < .01$. Therefore hypothesis 2 is supported.

Hypothesis 4.1 Co-worker social support has direct positive relationship with employee self-efficacy relationship.

Hypothesis 4.2 Co-worker social support has direct positive relationship with organisational self-identity relationship.

Hypothesis 4.3 Co-worker social support has direct positive relationship with employee voice.

Co-worker social support significantly predicts the components of EPOP as follows, for employee self-efficacy, $\beta = 0.33$, $t(1) = 9.09$, $p < .01$, for organisational self-identity, $\beta = 0.25$, $t(1) = 9.26$, $p < .01$ and employee voice, $\beta = 0.24$, $t(1) = 8.08$, $p < .01$). Hypotheses 4.1, 4.2, and 4.3 is therefore supported.

Hypothesis 5: Co-worker social support mediates the positive relationship between employee ethnic identity and employee psychological ownership perception (EPOP) components (employee self-efficacy, organisational self-identity, and employee voice).

The regression between ethnic identification and the component of EPOP is significant without co-worker social support with regression coefficients ($\beta = 0.41, 0.45$ and $0.53$) for employee self-efficacy, organisational self-identity and employee voice respectively. Upon the introduction of co-worker social support, the regression between ethnic identification and the components of EPOP changed, for employee self-efficacy ($\beta = 0.23$, $t(2) = 6.11$, $p < .01$),
organisational self-identity ($\beta = 0.31, t(1) = 11.32, p < .01$) and employee voice ($\beta = 0.39, t(2) = 12.74, p < .01$). See Table 17. With significant p-value, this indicates a partial mediation effect because the mediators reduce the direct effect of EI on EPOP. Hypothesis 5 is therefore supported. See Figure 10 and Tables 17 and 18.

### Table 18: Summary of findings for mediation effect

<table>
<thead>
<tr>
<th>Relationship between variables</th>
<th>$\beta$</th>
<th>S.E.</th>
<th>C.R.</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-worker social support &lt;--- Employee ethnic identity</td>
<td>0.55</td>
<td>0.02</td>
<td>24.97</td>
<td>0.01</td>
</tr>
<tr>
<td>Employee Self-efficacy &lt;--- Employee ethnic identity</td>
<td>0.23</td>
<td>0.04</td>
<td>6.11</td>
<td>0.01</td>
</tr>
<tr>
<td>Employee voice &lt;--- Employee ethnic identity</td>
<td>0.39</td>
<td>0.03</td>
<td>12.74</td>
<td>0.01</td>
</tr>
<tr>
<td>Organisational self-identity &lt;--- Employee ethnic identity</td>
<td>0.31</td>
<td>0.03</td>
<td>11.32</td>
<td>0.01</td>
</tr>
<tr>
<td>Employee Self-efficacy &lt;--- Co-worker social support</td>
<td>0.33</td>
<td>0.04</td>
<td>9.09</td>
<td>0.01</td>
</tr>
<tr>
<td>Organisational self-identity &lt;--- Co-worker social support</td>
<td>0.25</td>
<td>0.03</td>
<td>9.26</td>
<td>0.01</td>
</tr>
<tr>
<td>Employee voice &lt;--- Co-worker social support</td>
<td>0.24</td>
<td>0.03</td>
<td>8.08</td>
<td>0.01</td>
</tr>
</tbody>
</table>

The mediation model is a good fit for the data with (Normed Fit Index) NFI, (Incremental Fit Index) IFI and (Comparative Fit Index) CFI values of 0.77, 0.77 and 0.77 respectively. See Table 22.
7.3.2 Significance of co-worker social support mediation effect

To determine the significance of mediation, two methods are used. First, results from the indirect effect of co-worker social support on the relationship between the dependent variable and independent variables generated from AMOS is presented. Next, the thesis presents the Sobel test output from the Hayes mediation SPSS process macro to confirm the previous results AMOS results.

7.3.3 AMOS output

Results from AMOS analysis shows that the indirect effects of co-worker social support on the relationship between employee ethnic identity and employee self-efficacy, organisational self-
identity, and employee voice are 13%, 14% and 18% for employee voice, organisational self-identify and employee efficacy respectively. See Table 19.

Table 19: Summary of indirect effect of co-worker social support

<table>
<thead>
<tr>
<th>Variables</th>
<th>Ethnic identity</th>
<th>Co-worker social support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-worker social support</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Employee voice</td>
<td>0.13</td>
<td>.00</td>
</tr>
<tr>
<td>Organisational self-identity</td>
<td>0.14</td>
<td>.00</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>0.18</td>
<td>.00</td>
</tr>
</tbody>
</table>

7.4.4 Sobel output

To confirm the values of the effect reported in the AMOS analysis, a Sobel test was conducted. Findings from the Sobel test confirmed a significant partial mediation mechanism in the mediation model. The results were similar to the AMOS test on indirect effect in Table 19. For self-efficacy, the indirect effect was 0.16, \( z = 8.5, p < .01 \). For organisational self-identity, the indirect effect was 0.14, \( z = 8.62, p < .01 \). For employee voice, the indirect effect was 0.13, \( z = 7.59, p < .01 \).

Employee ethnic identity - Self-efficacy

Normal theory tests for indirect effect

<table>
<thead>
<tr>
<th>Effect</th>
<th>se</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.16</td>
<td>.02</td>
<td>8.50</td>
<td>.00</td>
</tr>
</tbody>
</table>

Employee ethnic identity - Organisational self-identity

Normal theory tests for indirect effect

<table>
<thead>
<tr>
<th>Effect</th>
<th>se</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>.14</td>
<td>.02</td>
<td>8.62</td>
<td>.00</td>
</tr>
</tbody>
</table>

Employee ethnic identity- employee voice

Normal theory tests for indirect effect

<table>
<thead>
<tr>
<th>Effect</th>
<th>se</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>.13</td>
<td>.02</td>
<td>7.59</td>
<td>.00</td>
</tr>
</tbody>
</table>
7.5 Mediated mediation effect- interpersonal fairness on employee ethnic identity and co-worker social support.

This section presents findings on the mediation effect of interpersonal fairness on the relationship between the independent variable (employee ethnic identity) and the valid mediator variable (co-worker social support) in Figure 10. The theoretical framework proposes that employees’ perception of interpersonal fairness is the process through which ethnic identity links to co-worker social support. Figure 11 illustrates this relationship, while Table 19 summarises the outcome of the relationship.

Hypothesis 3: Interpersonal fairness mediates the relationship between employee ethnic identification and co-worker social support

Findings show that the regression between ethnic identification and co-worker social support was significant, $\beta = 0.55$, $t (1) = 24.97$, $p < .01$. See Table 17. Also, the regression of interpersonal fairness to co-worker social support was significant, $\beta = 0.45$, $t (1) = 15.74$, $p < .01$. Upon the introduction of interpersonal fairness to the model, the regression of ethnic identification to co-worker social support was significant but lower, $\beta = 0.34$, $t (2) = 14.02$, $p < .01$. See Table 20. Thus, suggesting that employees’ perception of interpersonal fairness partially mediates the relationship between employee ethnic identity and co-worker support. Hypothesis 3 is therefore supported.

Hypothesis 7: Employee ethnic identification has a direct positive relationship with interpersonal fairness.

Findings show that regression of ethnic identification to interpersonal fairness was significant, $\beta = 0.46$, $t (1) = 23.53$, $p < .01$. Hypothesis 7 is therefore supported.
Hypothesis 8: Interpersonal fairness has a direct positive relationship with co-worker social support.

Findings show that interpersonal fairness is a significant predictor of co-worker social support,\[ \beta = 0.45, t(1) = 15.74, p < .01. \] Hypothesis 8 is therefore supported.

### Table 20: Summary of findings for mediated mediation effect

<table>
<thead>
<tr>
<th>Relationship between variables</th>
<th>( \beta )</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal fairness &lt;--- Employee ethnic identity</td>
<td>0.46</td>
<td>0.02</td>
<td>25.33</td>
<td>0.001</td>
</tr>
<tr>
<td>Co-worker social support &lt;--- Employee ethnic identity</td>
<td>0.34</td>
<td>0.02</td>
<td>14.02</td>
<td>0.001</td>
</tr>
<tr>
<td>Co-worker social support &lt;--- Interpersonal fairness</td>
<td>0.45</td>
<td>0.03</td>
<td>15.74</td>
<td>0.001</td>
</tr>
<tr>
<td>Employee self-efficacy &lt;--- Employee ethnic identity</td>
<td>0.27</td>
<td>0.04</td>
<td>6.81</td>
<td>0.001</td>
</tr>
<tr>
<td>Employee voice &lt;--- Employee ethnic identity</td>
<td>0.34</td>
<td>0.03</td>
<td>10.29</td>
<td>0.001</td>
</tr>
<tr>
<td>Organisational self-identity &lt;--- Employee ethnic identity</td>
<td>0.25</td>
<td>0.03</td>
<td>8.41</td>
<td>0.001</td>
</tr>
<tr>
<td>Employee self-efficacy &lt;--- Co-worker social support</td>
<td>0.38</td>
<td>0.04</td>
<td>9.60</td>
<td>0.001</td>
</tr>
<tr>
<td>Organisational self-identity &lt;--- Co-worker social support</td>
<td>0.18</td>
<td>0.03</td>
<td>6.23</td>
<td>0.001</td>
</tr>
<tr>
<td>Employee voice &lt;--- Co-worker social support</td>
<td>0.18</td>
<td>0.03</td>
<td>5.67</td>
<td>0.001</td>
</tr>
<tr>
<td>Employee voice &lt;--- Interpersonal fairness</td>
<td>0.20</td>
<td>0.04</td>
<td>5.04</td>
<td>0.001</td>
</tr>
<tr>
<td>Employee self-efficacy &lt;--- Interpersonal fairness</td>
<td>-0.14</td>
<td>0.05</td>
<td>-3.05</td>
<td>0.002</td>
</tr>
<tr>
<td>Organisational self-identity &lt;--- Interpersonal fairness</td>
<td>0.23</td>
<td>0.04</td>
<td>6.64</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The mediated mediation model is a good fit for the data with (Normed Fit Index) NFI, (Incremental Fit Index) IFI and (Comparative Fit Index) CFI values of 0.84, 0.84 and 0.84 respectively. In comparison with the mediation model in section 7.3, the mediated mediation
model is better for explaining the mediation mechanism because it has better model fitness indices. See Table 22.

7.6 Mediated mediation effect- interpersonal fairness on employee ethnic identity and EPOP components.

Hypothesis 6: Interpersonal fairness further mediates the relationship between employee ethnic identity and employee perception of psychological ownership components (employee self-efficacy, organisational self-identity, and employee voice).

The mediation effect of interpersonal fairness on the relationship between employee ethnic identity and employee self-efficacy, organisational self-identity, and employee voice are illustrated on Table 19. Prior to the mediated mediation analysis, the regression between ethnic identification and EPOP components were as follows; for employee self-efficacy, $\beta = 0.23$, $t (2) = 6.11$, $p < .01$, organisational self-identity, $\beta = 0.31$, $t (1) = 11.32$, $p < .01$ and employee voice, $\beta = 0.39$, $t (2) = 12.74$, $p < .01$. See Table 17. The introduction of interpersonal fairness into the model change the regression relationships as follows; for employee self-efficacy, $\beta = 0.27$, $t (3) = 6.81$, $p < .01$, organisational self-identity, $\beta = 0.25$, $t (3) = 8.41$, $p < .01$, and employee voice, $\beta = 0.34$, $t (3) = 20.19$, $p < .01$. See Table 19. The significant p value is suggestive of a partial mediated mediation relationship between ethnic identification and EPOP components. However, the changes in the EPOP components were not all lowered in the mediated mediation. For self-efficacy’s coefficient was increased because of the introduction of interpersonal fairness mediation. Hypothesis 6 is partially supported.

7.7 Significance of mediated mediation effect

To test for the significance of interpersonal fairness as a mediated mediator, score from the summary of indirect effect of the SEM analysis on AMOS is presented. Results show employee
ethnic identification indirectly influences the outcomes of employee voice, organisational self-identity and employee self-efficacy by 0.19%, 0.21% and 0.14% respectively. This indirect relationship is due to the two mediation effects of interpersonal fairness and support from colleague in Figure 11. The indirect effect table show that mediated mediation approach to investigating the variables in the model supports the theoretical framework. Kline (1998, p. 52). See Table 21.

**Table 21: Summary of indirect effect (mediated mediation)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Employee ethnic identity</th>
<th>Interpersonal fairness</th>
<th>Co-worker social support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal fairness</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Co-worker social support</td>
<td>0.21</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Employee voice</td>
<td>0.19</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td>Organisational self-identity</td>
<td>0.21</td>
<td>0.08</td>
<td>0.00</td>
</tr>
<tr>
<td>Employee self-efficacy</td>
<td>0.14</td>
<td>0.17</td>
<td>0.00</td>
</tr>
</tbody>
</table>
7.8 Determination of model fitness

This section highlights the findings from the different measures used to determine model fitness. Three widely used measures are adopted in this study (Kenny, 2016). They include: computation of Incremental fit index (IFI) (Bollen, 1989; Fan, Thompson, & Wang, 1999), Normed Fit index (NFI) and Comparative fit index (CFI) (Bentler, 1990). Table 22 summarises the results alongside outputs that are generally considered as good fit for the different measures and shows that the mediated mediation model is a better fit.
### Table 22: Determination of Model Fit

<table>
<thead>
<tr>
<th>Model</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mediation</td>
<td>0.77</td>
<td>0.77</td>
<td>0.77</td>
</tr>
<tr>
<td>Mediated mediation</td>
<td>0.84</td>
<td>0.84</td>
<td>0.84</td>
</tr>
<tr>
<td>Rule</td>
<td>Closest to 1</td>
<td>Closest to 1</td>
<td>Closest to 1</td>
</tr>
</tbody>
</table>

#### 7.9 Summary

Findings show that the hypotheses derived from literature are supported. The relationship between ethnic identification and co-workers social support is explained by employees’ perception of interpersonal fairness. The outcome of the structural equation model analysis showed that the mediated mediation model was better for explaining the link between ethnic identification and the components of EPOP. The model showed that interpersonal fairness and co-workers social support are mediating variables. The next chapter presents discussions of these findings.
Chapter 8
Discussions of findings

8.1 Introduction

For employee psychological ownership perception, the findings offer a significant contribution to its three components. It supported the conceptualisation of EPOP as presented in this study. It shows that EPOP is a formative construct that is comprises of three distinct variables; employee self-efficacy, organisational self-identification, and employee voice. Findings also supported the theorisation linking ethnic identification to EPOP. Ethnic identification also had a significant positive effect on co-worker social support and interpersonal fairness. The discussion also explains the possible reasons for the findings in relation to employees’ demographic components.

The chapter is divided into two. The first section discusses overall findings as presented in chapter seven. The relationship between ethnic identification and co-worker social support is explained by existing literature as follows; employees who identify highly with their ethnicity are perceived by their colleagues as having high perception of discrimination. This makes their colleagues cautious in their dealings to avoid being prejudicial (Campbell, 1996). This increases the high ethnicity-identifying employee’s feeling of fair treatment. Thus, making the employee feel accepted and welcome in their organisation, and supporting identification with it (Cropanzano & Mitchell, 2005). The second section focusses on explaining analysis based on demographic attributes. Explanations show that societal values and norms, levels of formalisation in both public and private sectors, the role of time in perception formation and skills obtained from education were the underlining factors for explaining the differences in the impact of the relationship between ethnic identification and employee psychological ownership. At the end, the chapter narrows the discussions to the empirical context.
8.2 General discussion of findings

This section considers the findings irrespective of the demographic attributes of the participants. The discussions are presented thematically in line with the objectives of the study.

8.2.1 Explaining the relationship between the components of employee psychological ownership perception.

One of the objectives of this study is to breakdown the components of employee psychological ownership perception and to explain how the components relate with each other in the formation of employee psychological ownership perception. Existing studies suggest that employees’ self-efficacy results in organisational identification, and organisational identification positively influence employee voice (Hsieh & Wang, 2016; Wagner et al., 2003). This study provided findings to support this process. The strength of the relationship was however weaker for self-efficacy.

A possible explanation for this outcome is that as employees get better at doing their jobs, the social context within the organisation may not matter to them (Mitchell, Holtom, & Lee, 2001). This suggests that high performing employees may be more interested in career development and growth (Boyd & Vozikis, 1994), and increased pay. The age of the employee may also be a determining factor, such that the older the employees, the more likely efficacy results in organisational identification and voice (Govaerts, Kyndt, Dochy, & Baert, 2011). Younger employees may be more likely to be forward looking for better prospects outside their organisation that matches their proficiency (Govaerts et al., 2011).

8.2.2 Explaining the linkage between employee ethnic identity and employee psychological ownership perception

The relational framework developed from literature in chapter 3 was the premise upon which analysis was carried out. The framework suggested that the process through which employee ethnic identity influences the components of employee ownership perception is through co-
worker social support (Chughtai, 2016). For example, results show that employee ethnic identity positively had a significant positive influence on co-worker social support.

While the findings of this study support the theoretical proposition on co-worker social support, care must be taken to ensure that employees do not take the support they get for granted. For example, employees may hide under the guise of ethnic identification to become lazy at work, while other employees may help to do their jobs for fear of being prejudiced (Campbell, 1996).

8.2.3 Explaining the relationship between co-worker social support, employee self-efficacy, organisational self-identity and employee voice

Findings suggest that there is a relational framework for linking ethnic identification and employee psychological ownership perception and fully agree with existing theory. As expected, co-worker social support positively influences all three components of employee ownership perception (Consiglio et al., 2016; Rice, 2006). However, the strength of the relationship was weaker for employee self-efficacy.

A possible reason for this is that employee self-efficacy is linked with employees’ ability to do their job (Gist & Mitchell, 1992) suggesting that the support they get from their colleagues may not really matter (Gist & Mitchell, 1992). Relating this finding to the reconceptualization of employee psychological ownership perception, employee self-efficacy falls within job based psychological ownership perception (Yang et al., 2013). Thus, suggesting that employee self-efficacy may be positively influenced by job related antecedents, such as training (Tai, 2006) and experience (Gist & Mitchell, 1992).

For the other 2 components of EPOP, findings show that the relationship between co-worker social support, organisational self-identity and employee voice was stronger. Employees that perceive strong support systems among co-workers may in-turn provide support to others (Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001) and collectively
work together to achieve their organisation’s goals. Within such a supportive environment, employees feel a sense belonging to their organisation and may develop an emotional attachment to their work (Cropanzano & Mitchell, 2005). Thus, support from colleagues may result in reciprocal positive behaviour (voice) and sentimental attachment to their organisation (organisational self-identification).

8.3 General discussion of findings comparing employee demographic attributes

This section attempts to explain how demographic attributes of employees investigated in this research influenced the relationship among variables in the theoretical framework. The discussion proceeds as follows: first, explanations are provided for the differences in response of employees in relation to their sector of employment. Secondly, explanations on differences as a result of employees’ state of origin, gender, position in organisation, tenure in employment and employee qualification are discussed. Overall, findings from the demographic attributes analysis show that there was no difference in the relationship between ethnic identity and EPOP. This is because the results are constant across the various demographics. Average scores from the ANOVA conducted in chapter six is used for this discussion.

8.3.1 Comparison of employee responses based on their sector of employment

A current proposition for successfully influencing employee psychological ownership perception in organisations is the need for the organisation to focus on employees’ wellbeing (Brooke, Russell, & Price, 1988). An investment in employee wellbeing may result in their emotional attachment to the organisation such that the employee becomes favourably disposed to the organisation’s goals (Zeffane, 1994).

Introduction of policies that influence EPOP and investment in EPOP-related programmes may be dependent on the organisation’s management structure and sector of operation (Goulet & Frank, 2002). Thus, the type of sector that an organisation operates in may
influence EPOP due to the structure of management in place (Wetzel & Gallagher, 1990). In view of the potential effect of organisational sector, this section explains the findings on the differences in response of employees investigated from selected public and private sector.

**Employee ethnic identification**

Average scores from the ANOVA showed that for ethnic identification, sector significantly explained the variations in the responses. However, ethnic identification was stronger for employees in the public sector. A reason for this result may be due largely to the organisational culture that is dominant in both sectors (Zeffane, 1994). Ethnic identification policies are more formalised in the public sector than the private sector (Deshpande & Farley, 1999). This may explain why the impact is lesser in the private sector.

**Organisational self-identity**

For the organisational self-identity component of EPOP, the average scores showed that public sector employees had higher perception of organisation self-identity than private sector employees. This may be because public sector employees feel more sense of fulfilment in their roles as people making positive changes in the lives of the citizens. Also, the formalisation of ethnic identification policies within the public sector may account for the higher perception.

**Employee voice**

Average scores for the employee voice variable show that public sector employees had a higher perception of employee voice. This is likely due to the implementation of ethnic identification polices in public sector organisations sampled. Also, the activities of workers union are more effective in the public-sector organisations. This may explain why employees’ voice are higher within the public sector than the private sector.
Co-worker social support

The ANOVA results showed that the average score for public sector employees were higher than private sector employees for the co-worker social support variable. A possible reason for this is that public-sector organisations are making efforts to ensure that employees are recruited from the various ethnic groups in the society (Andrews & Ashworth, 2015). Employees that perceive that their organisations have a fair representation may want to work hard to present their ethnic group in a good way (Pepple, Davies, & Davies, 2017). Such employees may also consider themselves as ethnic ambassadors and may do their best to further the organisations efforts so as to benefit the society, including their areas of their origin.

Employee self-efficacy.

Findings show public sector employees perception of self-efficacy was higher than private sector employees. Private sector organisations have narrower and more identifiable goals (Bullock et al., 2015). This may be because public sector employees consider their jobs as a service to humanity and develop deep feeling to it. Such employees take pride in their jobs and care about the well-being of their colleagues. It is an all hands-on deck approach as everyone is poised to contributing towards the success of their organisation (Eisenberger et al., 2001). Also, the bureaucratic nature of public sector organisations may also require people to work together at different levels. Due to the increasing collaboration among employees in the public sector, it is therefore not surprising that self-efficacy perception is higher in the public sector.

Interpersonal fairness

Findings from both sectors indicate that interpersonal fairness perception is higher for public sector employees than private sector employees. Employees who perceived that they were treated fairly and irrespective of their ethnic identification are motivated to return the favours by going out of their way to support each other. The reason for this may be linked to the fact
that public sector organisations have higher levels of formalisation than those in private sector (Goulet & Frank, 2002). Part of the formalisation is the implementation of the federal character principle. A consequence of formalisation is the availability of rules and procedures that govern relationships at work. In most cases, the procedures and rules serve as a guide to how work is done and how people relate with each (Cornelis et al., 2006).

8.3.2 Comparison of employee responses based on their state of origin (Rivers and Non-Rivers)

This section attempts to provide explanation for differences in response among variables based on employees’ origin. Explanations are provided as to why employees’ origin may influence respondents’ perceptions.

Employee ethnic identification

Average scores from ANOVA results show that Rivers employees experienced higher ethnic identification than non-Rivers employees. A reason for this result may be due largely to the fact that employees of origin where the organisations are located tend to feel a sense of entitlement (Roberson & Stevens, 2006). This entitlement feeling may result to a shift in the attention from self-development and job related to training ethnic agitating for control in the organisation (Eposi & Orock, 2012).

Organisational self-identity

Findings show that for the organisational self-identity component of EPOP, Rivers employees had higher perception of organisational self-identity than non-Rivers employees. As Rivers employees are working in the home state, they may put in more efforts to do their jobs well so as to benefit their community. Rivers employees may also feel a sense of belonging to their organisation as they are able to overtly identify with their ethnic heritage. They also have more colleagues from their home state at work who understand their way of life. This may explain why Rivers employees have higher perception of organisational self-identity.
**Employee voice**

The average score from ANOVA conducted in chapter 6 shows that Rivers employees have more voice perception than non-Rivers employees. This may be because Rivers employees are more in number in the organisation and may have relatives within organisational hierarchy. Also, as the organisations are located in the state, work culture may sometimes be influenced by the national culture. For example, organisations’ participation in traditional events organised by the community. Thus, Rivers employees may feel more sense of belonging and display voice behaviour.

**Co-worker social support**

Findings show that public sector employees display more co-worker social support behaviour than private sector employees. Co-worker social support involves extra role behaviour that is not described in job descriptions. Co-worker social support is discretionary and within the power of the employee to support or not (Ang et al., 2003). Employees that are local enjoy a degree of freedom and affirmation among co-workers (Bonache, 2005) and they feel more at ease to display their ethnic heritage at work. Also, in some instances, local employees represent the dominant group at work as have been highlighted in the organisations sampled in this study. In view of these advantages it is not surprising that Rivers employees display more co-workers social support.

**Employee self-efficacy**

For employee self-efficacy, average scores showed that Rivers employees had higher perception of self-efficacy than non-Rivers employees. Rivers employees are more in number in the organisations’ sampled and they promote shared values and sense of community among themselves. The cumulative prosocial behaviour extended to themselves may explain their willingness to make productive contribution to the success of the organisation.

**Interpersonal fairness.**
Analysis of responses show that employees with Rivers had higher perception of interpersonal fairness than non-Rivers employees. This may be linked to the greater support they receive from the organisation as well as from colleagues form similar ethnic origin (Ang et al., 2003). Overtly identifying with their ethnic heritage is easier among local host community employees, as they usually have a higher number of employees in the organisation (Leigh & Blakely, 2016, p. 240; Toh & Denis, 2005). Ang et al., (2003) however notes that making efforts to accommodate non-Rivers employees may make non-Rivers employees feel a higher sense of interpersonal fairness.

8.3.3 Comparison of employee responses based on gender

The clamour for gender equality has been given scholarly attention in the past decade (Joshi, Neely, Emrich, Griffiths, & George, 2015). This has resulted in the increase in the number of females in the employee composition of organisations (Lyngsie & Foss, 2017). In order to explain the experiences of both male and female employees as it related to their ethnicity and psychological ownership perception, this study follows Smith, DiTomaso, Farris, and Cordero (2001).

According to Smith et al. (2001), there is need to investigate the effect of each minority group in an organisation, rather than clustering them together. This is because the effects may not yield similar outcome. Although this study has a fairly balanced representation of female employees in the organisations sampled, the effects are discussed distinctly from minority ethnic groups in the organisations. This section provides reasons for differences participants’ response based on average scores of the categories of gender.

Employee ethnic identification

Average score from the ANOVA results show that men had a higher perception of ethnic identification than women. A reason this is an institutional and cultural expectation for men in the context of the study (Herring, 2009). Men are expected to be custodian of their culture
and they sometimes derive their identification from their ethnicity. Men attach more importance to their ethnicity (Barak et al., 1998). These may explain why men have higher perception of ethnic identification.

Organisational self-identity.

For the organisational self-identity component of EPOP, the average scores show that men have higher perception of organisational identification than women. Men occupy more leadership positions and for that reason, be more likely to identify with their organisations. Men also have a strong attachment to one’s ethnic group, makes them sensitive to the way they are treated in relation to others (Operario & Fiske, 2001). Thus, a feeling of acceptance of one’s ethnic identification may result in a higher perception of organisational self-identity.

Employee voice.

For employee voice, although there were differences in average scores between men and women, the ANOVA results showed a zero effect and an insignificant p value. This suggests that there were no differences in the perception of voice behaviour among men and women in the sample.

Co-worker social support.

Average scores for both men and women were similar, but, the effect was higher for men than women. Men occupy higher position and hence, have more stake in the organisation. This may explain why male employees are more likely to support their colleagues. It is therefore not surprising that male employees experience a higher perception of co-worker social support.

Employee self-efficacy

For employee self-efficacy, although there were differences in average scores between men and women, the ANOVA results showed a small effect and an insignificant p value. This
suggests that there were no differences in the perception of self-efficacy among men and women in the sample.

Interpersonal fairness.
Findings indicate that irrespective of employees’ gender, men and women’s perception of interpersonal fairness was similar. However, men had higher average scores. Reflecting on previous discussions above, male employees are being given more opportunities in their organisation and face less obstacles such as differentiation in pay and position (Evers & Sieverding, 2014). Men receive extra support from their female colleagues, especially because of their position (Abad-Merino, Dovidio, Tabernero, & González, 2018). It is therefore not surprising for their perception of interpersonal fairness to be higher than women’.

8.3.4 Comparison of employee responses based on their position in organisation
This sub-section explains why there were differences in average score of the variables because categorisations of participants’ position in their organisation.

Employee ethnic identification
In relation to position, the results show that employees at director level experience higher ethnic identification compared to other employees on other positions. Also, noticeable in the result of the average scores were stronger for employees on the senior levels than for those at the junior level. A possible explanation for this is that the higher the level of seniority, the more training and skills are received to get the job done (Brunello & Medio, 2001).

Organisational self-identity.
The organisational self-identity component of EPOP had a significant ANOVA result. The average scores were however highest for employees at the director level. This group of
employees are less likely to face challenges ranging from low wages to over loaded job descriptions (Antoniou, Davidson, & Cooper, 2003). They have more stake in the organisation and are involved in decision making. This may explain why the average score were higher for the director level employees.

Employee voice.

Average score for employee voice scale showed that senior level employees had higher perception of voice behaviour. Following from the discussion on organisational self-identity, senior level employee occupies higher positions and may feel more inclined to contribute to their organisation.

Co-worker social support.

Findings from ANOVA conducted show that the average scores of employees at the director levels were higher than those on other levels. The extra role behaviour associated with co-worker social support manifests more in management employees because of the role they play in the organisation (Piccolo & Colquitt, 2006). The higher position and stake in the organisation may also explain why they are willing to engage more in co-worker social support. It is therefore not surprising that managers experience a higher perception of co-worker social support and engage more in supporting their colleagues.

Employee self-efficacy

The self-efficacy ANOVA results showed that perception of self-efficacy was higher for employees at the director levels. This may be explained by their levels of education and trainings and experiences gained to enable them occupy such position.

Interpersonal fairness.

Irrespective of employees’ position in their organisation, they influence by interpersonal fairness. However, the effects are higher for employees at the director levels. Following from
discussions above, employees at management levels experience less discrimination (Reskin, 2000). They have fewer interactions with the day to day general employees’ activities. Management level employees also receive greater support from other level of employees in the organisation (Reskin, 2000). They have higher education and training that enables them to understand and manage diversity related issues. These reasons may explain why interpersonal fairness is higher among management staff employees.

8.3.5 Comparison of employee responses based on their tenure in employment

Time is an important factor in the formation of opinion or perception (Searle, 2015, p. 13). The duration spent in the organisation is categorised into five: those who have spent below 2 years, 2 to 5 years, 5 to 7 years, 7 to 10 years and 10 years and above in the organisation and those who have spent five years and above.

Employee ethnic identification

Analysis from the ANOVA showed that perception of ethnic identification was higher for employees who have spent over 5 years in the organisation than for those who have spent less than five years. The reason for this may be because employees who have spent longer time in their employment become more experience with their jobs and may do it better (Sandstrom, 2014).

Organisational self-identity.

For the organisational self-identity component of EPOP, average score from ANOVA conducted show than employees with over 10 years employment in their organisation had higher perception of organisational self-identity. These group of employees have created networks in the organisation over time. They have also become familiar with their jobs, such that it may no longer be burdensome to them. This may explain why employees who have spent longer time in the organisation may have higher perception of organisational self-identity.
Employee voice.

For employee voice, findings showed that those who have worked in their organisation for over 10 years had higher perception of voice behaviour. The reasons given from the discussion on organisational self-identity suffices to explain the differences.

Co-worker social support.

Findings show that co-worker social support was higher for employees that have spent have longer tenure (Wayne, Shore, & Liden, 1997). This may be connected to the networks that they have formed at work and their understanding of the behaviour of their colleagues. It is therefore not surprising that as a result of longer tenure, they have higher perception of co-worker social support.

Employee self-efficacy

Employee self-efficacy was higher for those who have spent longer time at work. Employees with longer tenure create mutual bonds of friendship with colleagues; they have a better understanding of organisational policies and have a better understanding of the behaviour of their colleagues. Also, the longer they perform their tasks, the better they may become. As a result, those who have spent longer time in employment may experience higher self-efficacy.

Interpersonal fairness.

Irrespective of tenure, employee experience perception of interpersonal fairness. The results show that perception of interpersonal fairness was higher for employees who have spent longer time in employment. Reflecting on discussions above, employees with longer tenure may experience lower discrimination (Wayne et al., 1997). What newer colleagues may perceive as discrimination may not matter to them following the rapport they have with each other at work. They have the buffer of the networks that have been created over time and this explains why perception of interpersonal fairness is higher among employees with longer tenure.
8.3.6 Comparison of employee responses based on their level of education

This section provides explanations for the difference in average score of the variables in relation to the categorisation of participants' level of education.

Employee ethnic identification

In relation to position in organisation, findings from average scores show that employees with master's degree and above had higher perception of ethnic identification compared to others. This result is contrary to expectation as employees with master's degree and above are sometimes in higher positions at work, high higher self-efficacy (Arslan & Uzaslan, 2017) and should less likely derive their identification from their ethnicity.

Organisational self-identity.

For the organisational self-identity component of EPOP, the average scores showed that employees with master's degree and above had higher perception. In the population sampled in this study, employees with higher level education were often at a senior level in their organisation. These employees may not face the challenges ranging from low wages to heavy workloads (Cooke, 2006). Also, in some instances, their levels of training and educational qualification are much higher than their colleagues (Arslan & Uzaslan, 2017). For such groups of workers, identifying with their organisation is because they have more stake in it (McKay et al., 2008). This may explain why organisational self-identification is highest for employees with master's degree.

Employee voice.

As expected, perception of voice behaviour was higher for employees with university education. The reason given from the organisational self-identification above may suffice to explain the differences.
Co-worker social support.

Findings showed that employees with a university education experience higher perception of co-worker social support. This may be because this group of employees may sometimes occupy higher positions at work which may allow them to get the support of colleagues and subordinates. Also, because of their position and stake in their organisation, they may be more likely to engage in extra role support to their colleagues.

Employee self-efficacy

Self-efficacy perception was higher for employees with university degree than for those without. This is because education is important for the acquisition of relevant skills and competences required to work. It is not surprising that employees with university education experienced higher perception of self-efficacy.

Interpersonal fairness.

Irrespective of employees’ level of education, they may experience perception of interpersonal fairness. Findings show that the experience is higher among employees with master’s degree and above. This may be because education has given this group of employees the advantage of being in senior position in the organisation. Education also provides skills and competences that may help employees navigate through the politics.

8.4 Employee demographic attributes specific to of Rivers State, Nigeria.

Being a mono-race country with a population made up of predominantly blacks, the conceptualisation of ethnic categorisation in Nigeria is mainly between language and residency (Musa, 2015). Residency is used to explain the geographical location of one’s heritage (Umezurike, 2008). Ethnic identities have in some instances become a barrier to access of quality manpower (Umezurike, 2008). This is mainly due to the clamour of various groups seeking representation in employment in both public and private sector organisations (Osaghae, 1988).
Ethnicity in Nigeria is therefore premised on three key foundations, namely; the need for groups to gain advantage in times of competition, in times of conflict and their ability to cooperate towards goals that are mutually beneficial (Ukiwo, 2005). Within the Nigerian context, shared heritage or traits which has been used to categorise ethnicity, is not as important as the deeply rooted geographical and regional self-identification traits (Brubaker, Loveman, & Stamatov, 2004). The perception of ethnic identification in Nigeria in line with the afore mentioned foundations are thus described within social constructions as constructionism and institutionalism (Fearon & Laitin, 2000). Constructionism highlights the fact that ethnicity is a product of peoples’ ideology, while institutionalism is used to explain the tendency for people to utilise ethnicity as a vehicle to drive resources to their regions (Osaghae, 1995; Ukiwo, 2005).

With this conceptualisation of ethnicity in mind, many organisations have continued to make frantic efforts to promote the employment of people from different backgrounds in terms of residency and language (Otobo, 2016). This has been driven largely due to the institutionalisation of the federal character principle (Kendhammer, 2014). Data was collected from organisations both public and private sectors in Rivers State, Nigeria. Rivers State has 23 local government areas and is the third largest cosmopolitan state in Nigeria (Watts, 2016). Due to the abundance of natural gas resources in the region, it has become a hub for employees from all over the country (Watts, 2016). Whereas organisations are confronted with the challenge of ensuring that they promote a fairness by employing people from the various local government areas, they still have to employ people from states other than Rivers to meet their specific manpower requirements.

The quota system mentality enshrined in the federal character principle has also increased the cautiousness of residents, increasing the demand from communities to have persons from the local government areas employed in organisations operating within the state (Musa, 2015). This situation therefore makes it important for this research to be carried out
to investigate the consequences of ethnic identification for organisations in the state and by extension, the country.

Employees come to organisations with preconceived ideologies of solidarities to their local government areas. Within organisations where employees attach importance to their ethnic identification, the perception of discrimination whether explicit or implied may be high (Alderfer & Thomas, 1988). This research refocuses the attention of managers from looking at the hard benefits of ethnic diversity. It highlights the benefits of ethnic identification for organisations, by considering how ethnic identification may influence employees feeling of psychological attachment to their organisation.

When employees in Rivers State perceive that they are not discriminated upon as a result of their language and residency (local government or state of origin), they feel welcomed in the organisation. This welcome feeling results in an emotional attachment to their organisations. Findings also suggest that in Rivers State, organisations where ethnic identification is welcomed, employee stereotyping is low as employees form bonds with people irrespective of their language or origin. There is high co-worker social support among employees that perceive that they are welcome in their organisations. This is because they are treated fairly in terms if interactions and procedures in the organisations sampled.

Reflecting on the differences in responses that exist for various demographic attributes in the organisations sampled, this thesis draws the following inferences with regards to ethnic diversity and employee psychological ownership in Rivers State, Nigeria. Firstly, with regards to sector of employment, findings suggest that in Rivers state, public sector organisation employees experience a higher sense of interpersonal fairness, co-workers social support, employee self-efficacy, organisational self-identity and employee voice climates at work that support ethnic identification.
Secondly, some demographic attributes display common results with regards to the interaction between ethnic identification and employee psychological ownership perception. For example, position in organisation, educational qualification and tenure in employment provided similar results. For senior staff, employees with university degrees and employees with longer tenure, their perception of ethnic identification, interpersonal fairness, co-workers social support, employee self-efficacy, organisational self-identity was higher.

Fourthly, when considering the response among Rivers and non-Rivers State employees, Rivers employees had higher perceptions of ethnic identification, organisational self-identity, employee voice, interpersonal fairness, self-efficacy and co-worker social support.

8.5 Summary

The objective of this study was to unpack the component of EPOP and to determine how it emerges when influenced by ethnic identification. Discussions here show that in unpacking the component of EPOP, findings support the theoretical framework developed in chapter three. Specifically, this study shows that employee self-efficacy had a positive effect on organisational self-identity and organisational self-identity has a positive on employee voice. In determining the effects of ethnic identification on EPOP, the study shows that there is a positive relationship between ethnic identification and the components of EPOP. Discussions show that this relationship is possible through a serial mediation effects of interpersonal fairness and co-worker support. Controlling for the effects of demographic variables, findings show the effect of ethnic identification on EPOP was consistent irrespective of the various categories of participants demography. The next chapter highlights contributions to theory, implications for practice and conclusions.
Chapter 9
Theoretical contributions, Practical implications and Conclusions

9.1 Introduction

From the objectives of this thesis and analysis of findings, this thesis posits that employee ethnic identity is a determinant for influencing employee psychological ownership perception. This thesis contributes to both psychological ownership theory and diversity management theories. For psychological ownership theory, the thesis explains how psychological ownership is formed, focusing on non-formal ownership antecedents. The thesis also charts a new course in the psychological ownership discourse by linking a collective identity antecedent (ethnic identity) to psychological ownership perception. Of significant value also, is the unbundling of psychological ownership perception. This provides a unique insight on how components of psychological ownership relate to collective identification in the formation of psychological ownership perception. This is significant because it shows that ethnic identification results in employee psychological ownership. The results show that ethnic identification positively and significantly influence all three components of psychological ownership. Researchers interested in investigating the antecedents of psychological ownership are encouraged to examine such stressors against each component of psychological ownership. This will identify whether such stressors are organisation-based or individual-based psychological ownership antecedents.

For ethnic diversity management literature, the thesis contributes to a micro level understanding of the effect of ethnic diversity on employee perception. The focus on employee perception rather than organisation or society takes the discussion of ethnicity from a normative point of view to a relational point of view. Reflecting upon the empirical context of Nigeria, the practical implications for human resource managers in the public sector are as
follows; that the quota system enshrined in the federal character principle may have positive effects on employee perception. Secondly, that systems should be put in place to reward cosmopolitan behaviours at work as this will increase employees’ perception of psychological ownership. Private sector managers need to introduce the federal character principle also, as this has positive benefits for employees. Both managers in the public and private sector should ensure that interpersonal fairness is core for interactions and procedures at work.

9.2 Contribution to psychological ownership literature

This section highlights contributions to psychological ownership literature. The contribution also highlights the importance of the objectives of this thesis. Within the theoretical framework, the objectives of this study are twofold. One, to unbundle the concept of psychological ownership perception. Two, to establish the process through which psychological ownership perception links with ethnic identification at work.

9.2.1 Unbundling employee psychological ownership perception construct.

A key contribution that this study makes to the psychological ownership literature was unbundling the construct. Principal Component Analysis results showed that psychological ownership is a formative construct that has three distinct components; employee self-efficacy, organisational self-identity and employee voice. This study argues that rather than treat these variables are routes to psychological ownership, they should be treated as formative components of EPOP. Unbundling EPOP and investigating how it is influence at the individual component level was novel as it enabled the determination of how the components individually relates with other variables.

9.2.2 Framework for explaining ethnic diversity and employee psychological ownership perception relationship

Upon unbundling the components of employee psychological ownership perception, findings suggest that although all three components of EPOP was influenced by employee ethnic
identification, the effect was lesser for job based psychological ownership construct (employee self-efficacy) in the relational perspective. The following suggestions are made from the findings; that employee ethnic identity is useful in influencing employees’ sense of belonging and emotional attachment to their organisation and that because of employees’ perception of interpersonal fairness, they reciprocate favourably to the support received from other employees.

**Figure 14-Relational Framework for Linking Ethnic Diversity and EPOP**

9.2.3 Psychological ownership antecedents

This study contributes to the employee psychological ownership perception literature at the collective identity level. Findings suggest that co-worker social support explains the relational process through which employee ethnic identification positively influences employee psychological ownership at the organisation-based level. At the collective identity level,
employees come to identify with their organisation as a result of their perception of interpersonal fairness and co-worker social support.

Furthermore, findings contribute to theory by reconceptualising employee psychological ownership perception as follows; employee self-efficacy represents job-based employee psychological ownership perception. Antecedents of self-efficacy are associated with job-based psychological ownership while organisational self-identity and employee voice are components of organisation-based psychological ownership perception.

Figure 15- Conceptualisation of EPOP Components

The above reconceptualization of psychological ownership in Figure 13 suggests that the emergence of psychological ownership requires both collective identity level antecedents and
individual level antecedents. Although findings show that collective identification antecedents have lower effects on employee self-efficacy and stronger effect on organisational self-identity and employee voice.

9.2.4 Psychological ownership at the collective identity level

Existing psychological ownership studies have been dominated by investigations explaining psychological ownership at the individual identity level. Individual identity level antecedents explain how psychological ownership emerges as a result of stressors unique to the individual. For example, the nature of job, incentives received from work, position in the organisation, and participating in decision making. Collective identity level antecedents are stressors related to various forms of group identification and categorisations in the organisation. This thesis charts new waters in the psychological ownership literature by explaining empirically how employee psychological ownership is linked to ethnic identification. It also provides a theoretical framework that will enable further studies into other forms of identities that manifest at work.

9.2.5 Psychological ownership as an end or desired outcome

Existing studies have concentrated on psychological ownership as an independent and as a mediating variable. As an independent variable, psychological ownership is associated with the cause of the effect, while as a mediator, psychological ownership has been used to explain intervention through which an independent variable influences a dependent variable. The lack of focus on how psychological ownership emerges has resulted in misconceptions in the investigation of psychological ownership. This thesis attempts to clarify the misconceptions by focussing on psychological ownership as an end.

9.2.6 Unifying common organisational behaviour terms with psychological ownership

Following the unbundling of the concept of psychological ownership in chapter three, the robustness of the psychological ownership as a composite construct can be seen. The thesis conceptualises the components as employees’ self-efficacy, organisational self-identity and
employee voice. Organisational behaviour literature has been dominated with similar concepts related to psychological ownership. These include; employee commitment, identification and internalisation. A conceptualisation of these terminologies suggested by leading organisational behaviour scholars Pierce et al. (2001) show that these concepts fit in to the overall conceptualisation of psychological ownership.

The proposition in extant studies supposes that these concepts are different from psychological ownership. However, this thesis argues that such view is only possible if psychological ownership is considered at face value. When considered in the light of its formative constructs, the concepts themselves link with formative constructs of psychological ownership. Thus, the conceptualisation of psychological ownership perception highlights how important the concept is for employees’ behaviour in the organisation.

9.2.7 Psychological ownership and person-organisation stereotyping

With organisations having various form for identification among employees such as ethnicity, sexual orientation, gender and age, studies show that organisations face challenges of groups within groups at work. The concept of group within group is premised on social identity theory which underpins individual needs to stick to persons of similar characteristics. Existing social identity literatures suggest that representation is associated with employee stereotyping. Employee stereotyping means a situation where employees with similar identities relate better with themselves and may be sometimes regarded as a closed group within a group. The premise of ethnic diversity in this study suggests that ethnic representation may result in a reduction of such stereotypes. This is because ethnic identification and interpersonal fairness may improve employees’ perception of organisational ownership; a situation where the employees define themselves by their organisation’s identity. This study refers to this situation as person organisation stereotyping. Using self-identity theory, this thesis holds that within the framework of this study, person-person stereotypes will be non-existent as employees will feel a sense of obligation to their organisation.
9.2.8 Psychological ownership in the Nigerian context

Extant psychological ownership study literature has been dominated by investigations in Western countries. This study contributes to psychological ownership discourse by examining the concept from an African perspective. The Nigerian context is unique because the practice of employee ownership is non-existent. The study is positioned as a pioneer investigation of the concept in Nigeria. While formal ownership practices are non-existent, informal ownership practices have been implemented in both public and private sectors. The study provides a framework for organisations to follow to influence employees’ psychological ownership.

9.3 Contribution to diversity management literature

This section highlights the contribution of this thesis to the diversity management literature. The contributions are three-fold. One is expansion of the concept of active representation. Whereas existing studies call from representation of the various ethnic groups, the aim has always been linked to improving the lot of minority groups. In this thesis, active representation focusses on how ethnicity is manipulated to benefit the organisation as a whole. This explains why self-identity theory is used to explain the relational processes underpinning ethnic identification and psychological ownership perception.

The second contribution to ethnic diversity literature is the shift in focus on the determination of employee identity and values. Previous studies have linked employee identity and values to their ethnic heritage. This thesis, however, supposes that through the processes stipulated in the relational framework, employees’ identification and values may be linked to their organisation.

Thirdly, this thesis contributes to ethnic diversity discourse by highlighting ethnic identification on the premise of employees’ region or location. Ethnicity is discussed in terms of employees’ state of origin and local government areas. In the analyses, employees from
Rivers origin are categorised as one ethnic group, while those who are not from Rivers state as categorised as a separate ethnic group.

9.3.1 Federal character principle impact on employee perception

Since the enactment of the federal character principle in Nigeria, its implementation has focussed on meeting the representation needs of the various ethnic group (state or local government areas) in the employment quota of public sector organisations. For organisations owned by the federal government, the federal character principle quota system has been put in place to ensure that every federating state in the country is given employment access. Within the states, public sector organisations also model their recruitment policy in line with the federal character principle. Only that the focus at the state levels is to ensure that local government areas that make up the state are given their employment quota based on the agreed formula.

While the focus of the federal character principle has been at macro or societal levels, this thesis contributes to the debate by shifting the focus from the society and organisation to the individual employee. Findings suggest the federal character principle implemented within the environment context highlighted in the theoretical framework may have the potential to positively influence the employee, and by extension, their organisations.

9.4 Implications of employees’ ethnic identity for organisation based psychological ownership.

This section considers the implication of the relationship between ethnic identification and employee psychological ownership for organisations.

9.4.1 Extension of self-identity to organisational identity

Employees play a vital role in the success or otherwise of any organisation. Identities are key constructs in the way employees define themselves. In this era of growing identification such as sexual orientation, ethnicity, religion, political and profession, there are competing identities all seeking to define the employee. The theoretical framework presented in this
thesis provides a valuable framework upon which organisations can influence and maintain employee psychological ownership perception.

9.4.2 Extension of ethnic loyalty to organisational loyalty
Within the context of Nigeria, ethnicity is a big deal for employees as employees identify with their ethnic groups. This may result in a clash of interest between ethnic goals and organisational goals. Challenges like this may be seen in employment processes, promotion procession, and interactions among employees. These challenges are more severe for employees in the public sector. One of challenges facing organisations especially public sector within multi-ethnic settings is how to influence employees to extend ethnic identification to organisational identification. From the structural equation model, ethnic identification positively influences employee needs to positively identify with their organisation and also exhibit voice behaviour. Following the findings from this study, organisations are encouraged to incorporate ethnic tolerance, ensure interpersonal fairness and reward positive behaviour towards employees of different ethnicities.

9.4.3 Co-worker social support in organisations
Findings also suggest that in an environment with multiple ethnic identities, interpersonal fairness results to co-worker social support. As a result of the high presence of employees from different ethnicities in organisations, managers are advised to emphasise organisational justice policies. These includes procedural justice (for example, equal treatment of employee relations issues irrespective of ethnic identification) and interactional justice (for example, highlight the need for mutual respect). Ensuring that fairness is perceived by employees may foster a climate that encourage employees to support each other.

9.4.4 Ethnic diversity training and job description
In view of the significant positive relationship between ethnic diversity and employee organisation-based employee psychological ownership perception, human resource practitioners are encouraged to organise training on managing and working with people from
different ethnicities. Inclusion of cosmopolitan behaviour in the job description and appraisal process may further entrench the relationship between ethnic diversity and organisational self-identity and employee voice.

9.5 Limitations of the thesis

The limitations of this thesis are as follows; first, location of empirical study. Empirical investigations were carried out in Rivers state, Nigeria. Thus, findings may be different if study is carried in another location. This limitation however, does not affect the validity and reliability of the outcomes of the study. This is because of the rigorous methodological process used. Also, the scales used to collect data are validated scales that have been widely used by organisational behaviour researchers in different contexts. In addition, while contextual issues affect results if an investigation is carried out in a different location, the structure of the thesis is such that it forms pedagogical material that may be used to carry out the investigation elsewhere. Furthermore, the choice of location as a dimension of ethnicity is apt because within the empirical context of Nigeria, the country is a mono racial country with a predominantly black population. Also, individuals in the country places deep significance on their ethnicity on the basis of their region or location of parental origin.

Secondly, this thesis is limited by the cross-sectional methodological approach. Thus, findings do not provide in-depth explanation to determine the causal relationship between employee ethnic identity and employee psychological ownership perception. The goal is to ensure that findings are generalisable within the context of the study and that the investigation may be implementable elsewhere with similar characteristics. The goal of generalisability is achieved following the robust sets of data collected. Discussion of findings drawing on existing literature shows that the findings make meaningful contributions with potential implications for practitioners. Also, as employee perceptions are constructs that may be influenced by time, the cross-sectional data may not fully explore the changes of EPOP over time. However, when controlled for tenure of service, ANOVA findings show that
irrespective of the tenure of service, participants responses to the variables remained unchanged.

Thirdly, the thesis is limited to the scope of mirror organisation (Pepple, Davies, & Davies, 2017). Mirror organisation entails the need for organisations to mirror the demographic component of the society in which they operate. These demographic components include, age, ethnicity, race, religion, political views, marital status, gender and sexual orientation. Whereas this thesis focusses on the component of ethnicity and does not cover the others, the thesis provides a foundation for the investigation into other components of mirror organisation.

9.6 Suggestions for future research

In order to get more understanding of the remaining dimensions of mirror organisation, this thesis suggests that future studies could investigate the impact of other dimension such as sexual orientation, religious identification, race, and marital status on employees’ perception of psychological ownership. This thesis also suggests qualitative studies that will allow for an in-depth explanation of the reasons behind the findings. Although findings support most hypothesis, and are consistent with existing literature, findings from a qualitative approach will further provide contextualised reasons for the outcome of the research. Furthermore, using the framework provided in this thesis, future empirical studies are solicited from a different context, especially within the Western world with a predominantly white background to enable comparison of responses and results.

The average score of ethnic identification variable in relation to certain demographic variables (tenure in employment, position in organisation and qualification) provided results that were contrary to expectation. It was expected that employees who have spent longer in employment, had higher educational qualification and occupied senior position may experience lower ethnic identification. This was not the case, as the results showed a reverse.
It is suggested that future qualitative study within the empirical context should consider these findings means of interviewing respondents to get the rationale for the result.

9.7 Conclusions

A review of existing psychological ownership and ethnic diversity literature in this thesis shows that there is a gap in the conceptualisation of psychological ownership perception and in the operationalisation of ethnic diversity in organisations. From the onset of this thesis, its objective was to unbundle the concept of psychological ownership and to establish a relational framework for linking psychological ownership and employee ethnic identification. In unbundling the concept of psychological ownership, the thesis highlights three components as follows; employee self-efficacy, organisational self-identity and employee voice. By unbundling the concept of psychological ownership and measuring the emergence of each individual component, this thesis contributes to the concept of psychological ownership.

In this exploratory study, this thesis affirms that ethnicity matters in the formation of employee psychological ownership perception. This is evidenced by the sizeable percentage value of the adjusted incremental $r^2$. Adjusted incremental $r^2$ explains the variance in the dependent variables because of a stressor variable. In this study, ethnic identification explains to a significant extent the changes in the other independent variables. This ranges from 15% to 25% for employee voice, organisational self-identity, employee self-efficacy, interpersonal fairness and co-worker social support. In view of the significance of the adjusted incremental $r^2$, scholars and practitioners need to explore this concept more using the conceptualisation in this study to understand its effect on employees’ perception.

Findings show that ethnic identity has an overall positive effect on psychological ownership perception, when considered on an individual component basis, the effect is positive for employee self-efficacy, organisational self-identity and employee voice. Without breaking down the components of psychological ownership, this discovery may not have been possible.
Examining the link between psychological ownership perception as a whole, and as an antecedent factor, may lead to a misleading result. It is therefore important to follow the conceptualisation of this study to get a more informed result as to how other antecedents may influence psychological ownership perception.

On the establishment of a relational framework for linking ethnic identification and psychological ownership, this thesis suggests that employee ethnic identity is significant in predicting employee psychological ownership perception. This thesis provides a relational framework for linking ethnic identification to employee ownership perception. From the framework, it is deduced that employees’ ethnic identification is significantly related to their perception of interpersonal fairness within the organisation. Furthermore, a positive perception of interpersonal fairness results in co-worker social support and ultimately influences higher psychological ownership perception. In the light of this relational framework, organisations within multi ethnic settings are encouraged to be vocal with regards to interpersonal fairness at work. This is because within a multi ethnic setting organisation, interpersonal fairness may mediate the relationships of co-worker social support and employee psychological ownership.

Findings are consistent when investigated for differences in responses as a result of participants’ demographic attributes. The differences in demographic responses were however explained in chapter 7. These include, the level of formalisation and participation in the organisation, societal values, and the effect of time. Formalisation is used to explain why organisational identification is higher in the public sector. Within public sector organisation there are levels of rules and policies highlighted in the Federal Character Principle that may protect against discrimination. From the private sector, findings were not surprising. Although the practice of federal character is not institutionalised, findings suggest that the relationship between ethnic identification and employee voice is higher than those in public sector. The literature suggests that this may be due to private sector organisation value of employee
participation in decision making. Findings with regards to gender are not surprising as male employees recorded higher psychological ownership. Findings from literature suggests that extant societal values place more responsibility on men, and that men take up roles because they feel obligated to do so. Men also feel a higher impact of co-worker social support from the findings in this study.

An interesting result relates to explaining participant responses with regards to tenure in employment. Findings show that newer employees had stronger organisational self-identity and employee voice than those who have spent longer time in the organisation contrary to expectation. Literature suggests that newer employees have a preconceived notion about their organisations. Upon employment and they experience interpersonal fairness and support from colleagues, their perception of psychological ownership may be higher than those who have been in the organisation longer. This finding is also supported by literature that psychological ownership perception has a temporary effect on employees. These findings are speculative from this exploratory study. Thus, future qualitative studies are suggested to further corroborate these explanations.

Within the demographic variables, findings were consistent with propositions in extant studies. This thesis presented similar findings to others irrespective of the different in circumstance. For example, studies posit that females’ perception of interpersonal fairness was higher than men (Williams, 2017). Also, for sector of employment, consistent with existing studies, private sector employees had higher employee ownership perception (Goulet & Frank, 2002).

This study uses a carefully designed methodology. Recognising that behavioural research may be prone to methodological errors and biases, care was taken to minimise errors. Firstly, data were collected from employees from two different organisational contexts (public and private sector). Results obtained were consistent irrespective of the sector. Secondly, participants were assured of their anonymity and that their answers were not being evaluated.
This procedure reduced the possibility of bias and improved objective responses. Thirdly, questions were recoded, and only responses that were consistent were used for the data analysis. Lastly, as the volume of data analysed was large, the possibility of typographical errors was imminent. To check that this error did not affect the validity of the results, a test for outliers was conducted and responses outside the range eliminated from the analysis. In view of the above measures taken to mitigate the effects of response bias and analytical errors, propositions from the analysis are reliable.

Drawing on the contribution of this thesis, the following recommendations are put forward for future theorisation of psychological ownership; first future investigation into other possible antecedents of psychological ownership to explore its linkage to the individual components of psychological ownership. This is important to determine whether such antecedents fall within the collective level antecedents or the individual level antecedents. Secondly, because psychological ownership is a composite concept that embodies other organisational behaviour concepts such as commitment, identification and internalisation, significant effort should be put into research to explore the various ways that it effects employees and by extension the organisation.

The concept of psychological ownership perception is apt in investigating how to influence employees working in both public and private sector organisations within the empirical context of the study. In Nigeria, there is a sense of entitlement towards government organisations (Musa, 2015; Ukiwo, 2005). The notion is that government belongs to everyone; thus, the struggle by the federating states and LGAs to have employee quotas in government bureaucracies (Adeosun, 2011; Kendhammer, 2014). Employees unintentionally have psychological ownership personalities. However, their feelings and actions are in most instances geared towards improving their regions. This study suggests that employees with such strong ethnic identifications that are treated fairly and accepted may exhibit co-worker social support and display their psychological ownership personality traits to favour their
organisations. The empirical context of this study thus supports the exploration of the relationship between ethnic identification and employee psychological ownership perception.

For the ethnic diversity management literature, increased attention should be given to issues relating to ethnic diversity and employee perception. This is because, as indicated in this study, ethnic diversity affects the perception of employees. As already highlighted, ethnic identity is important and forms a core part of self-identity. Organisations should not place hard lines on ethnic identification work, but rather introduce policies that appreciate and welcome people of diverse ethnic backgrounds. Organisational policies that celebrate cosmopolitanism may serve as a buffer for discrimination and elicit a psychological attraction for the employees. Also, as the call for representation of various ethnic groups at work continues to grow, scholars and practitioners must continue to investigate various ways for mitigating discrimination associated with multi ethnic settings.
References


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Kenny, D. A. (2016). Power analsis app MedPower. Learn how you can do a mediation analysis and output a text description of your results: Go to mediational analysis using DataToText using SPSS or R. *Power.*


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Appendix One

A review of existing psychological ownership theory literature

With the aid of Google Scholar, the author conducted a search on existing literature from the period 1980 to 2012. The author imputed the phrase 'psychological ownership theory' in the search engine and reviewed the abstracts of the results provided. Results are shown in Table 1 below, highlighting the focus of organisations in their quest to foster perception of ownership in their employees. Summary of findings show that there is a paradigm shift in the focus from formal ownership schemes to informal or pro social actions that may foster ownership perception.

Table 1: Psychological ownership literature trend

<table>
<thead>
<tr>
<th>YEAR</th>
<th>S/N</th>
<th>FORMAL: FOCUS ON FINANCIAL EXCHANGE</th>
<th>INFORMAL: FOCUS ON ORGANISATIONAL CONTEXT ISSUES</th>
<th>AUTHOR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>Rewards, investments, alternatives and organisational commitment</td>
<td></td>
<td>Oliver, N. (1990)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Correlates of employee satisfaction with stock ownership</td>
<td></td>
<td>Klein, K. J., &amp; Hall, R. J. (1988)</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Meanfulness, safety, and availability as Psychological conditions of personal engagement and disengagement at work.</td>
<td></td>
<td>Kahn, W. A. (1990)</td>
</tr>
</tbody>
</table>


Work rewards, work values, and organisational commitment in an Oliver, N. (1990).
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>Exploring the linkages between formal ownership and psychological ownership for the organisation: The mediating role of organisational justice.</td>
<td>Chi, N. W., &amp; Han, T. S. (2008).</td>
<td></td>
</tr>
<tr>
<td>Page</td>
<td>Performance: A Social Exchange Perspective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------------------------------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 57   | Exploring perceptions of organisational ownership of information and expertise.  
| 59   | Work performance, affective commitment, and work motivation: the roles of pay administration and pay level.  
| 60   | Participation in co-operative firms: Theory, measures and impacts.  
Appendix Two

Survey Questionnaire

Note: Two scales (perception of fair treatment and LMX was not utilised for this study) They were included to enable future research.

Section 1-General information

Please complete the questions below by placing a cross X the appropriate box

1) How long have you worked in this organisation
   - Less than 2 years
   - 2 years but less than 5 years
   - 5 years but less than 7 years
   - 7 years but less than 10 years
   - 10 years and above

2) What position are you currently in
   - Director
   - Manager
   - Senior staff
   - Junior staff

3) How long have you been in your current position
   - Less than 2 years
   - 2 years but less than 5 years
   - 5 years but less than 7 years
   - 7 years but less than 10 years
   - 10 years and above

4) Gender
   - Male
   - Female

5) Highest qualification
   - High School Leaving Certificate
   - Ordinary National Diploma
   - Bachelor’s Degree
   - Masters Degree and higher

6) Please provide the name of your LGA

7) For Non Rivers, please provide your state of origin

Please complete the questions in section 2 by placing a Cross X on the appropriate answer.

Note: LGA=Local Government Area

Explanation of scale
Section 2 - LGA identity and Employee psychological ownership statements

**Ethnic Identification** - Multi Ethnic Identity Measure Scale (Phinney & Ong, 2007)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Uncertain/not applicable</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I consider my LGA affiliation important</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have spent time trying to find out more about my LGA, such as its history, traditions, and customs</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have a strong sense of belonging to my LGA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I understand pretty well what my LGA membership means to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have often done things that will help me understand my LGA background better</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I have often talked to other people in order to learn more about my LGA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel a strong attachment towards my LGA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

**Interpersonal fairness** - Diversity Perception Scale (Mor Barak et al., 1998)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Uncertain/not applicable</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>People are treated fairly irrespective of their LGA background in my organisation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>In my organisation employment and promotion is done objectively irrespective of LGA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>In my organisation, supervisors give feedback objectively irrespective of LGA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Decisions to lay off workers are made objectively irrespective of people’s LGA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Human resource policies (such as sick leave, study leave) are interpreted and applied fairly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Assignments are given based on skills and abilities irrespective of LGA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Management encourages employees to form networks and support groups</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>There is mentoring programme that prepares everyone for promotion</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>People still form cliques in my organisation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>My organisation organises diversity awareness and related training</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Knowing more about cultural norms of diverse LGAs would help me be more effective in my job</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I think that diverse viewpoints add value</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I believe diversity is a strategic business issue</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td></td>
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</tr>
<tr>
<td>28</td>
<td>I feel at ease with people from backgrounds other than my own</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29</td>
<td>I am not afraid to disagree with colleagues from other LGAs for fear of being prejudiced</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30</td>
<td>Diversity issues do not affect people’s performance and effectiveness</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Support from colleagues- Co-worker Social Support Scale (Caplan et al., 1975)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>I know I can rely on my colleagues when things get tough at work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32</td>
<td>I find it very easy to talk to my colleagues at work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33</td>
<td>My colleagues are willing to listen to my personal problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34</td>
<td>My colleagues go out of their way to do things to make my work life easy for me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35</td>
<td>Employees are praised for good work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Perception of Fair Interpersonal Treatment Scale (Donovan et al., 1998)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Supervisors shout at employees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37</td>
<td>Supervisors play favourites</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38</td>
<td>Employees are trusted</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39</td>
<td>Employees’ complaints are dealt with effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40</td>
<td>Employees are treated like children</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41</td>
<td>Employees are treated with respect</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42</td>
<td>Employees’ questions and problems are responded to quickly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>43</td>
<td>Employees are lied to</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>44</td>
<td>Employees’ suggestions are ignored</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>45</td>
<td>Employees’ hard work is appreciated</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>46</td>
<td>Supervisors threaten to fire or lay off employees</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>47</td>
<td>Employees are treated fairly</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>48</td>
<td>Co-workers help each other out</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>49</td>
<td>Co-workers argue with each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>50</td>
<td>Co-workers put each other down</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>51</td>
<td>Co-workers treat each other with respect</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Leader-Member Exchange- LMX 7 Scale (Graen & Uhl-Bien, 1995)
<table>
<thead>
<tr>
<th></th>
<th>I usually know how satisfied my supervisor is with what I do</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>My supervisor has good understanding of my job problems and need</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>53</td>
<td>My supervisor recognise my potential</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>54</td>
<td>My supervisors always help to solve my problems at work</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>55</td>
<td>My supervisors always help me solve my problems even at their own expense</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>56</td>
<td>I have enough confidence in my supervisors that I would defend and justify their decision if they were not present to do so</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>57</td>
<td>I have a very good working relationship with my supervisors</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**Employee Self-Efficacy- Self-Efficacy Scale (Sherer & Maddux, 1982)**

<table>
<thead>
<tr>
<th></th>
<th>When I make plans, I am certain I can make them work</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>One of my problems is that I cannot get down to work when I should</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>60</td>
<td>If I can't do a job the first time, I keep trying until I achieve it</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>61</td>
<td>When I set important goals for myself, I am unable to achieve them</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>62</td>
<td>I give up on things before completing them</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>63</td>
<td>I avoid facing difficulties</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>64</td>
<td>If something is too complicated, I will not even bother to try it</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>65</td>
<td>When I have something unpleasant to do I stick to it till I finish it</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>66</td>
<td>When I decide to do something, I go right to work on it</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>67</td>
<td>When trying to learn something new, I soon give up if I am not initially successful</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>68</td>
<td>When unexpected problem occur, I don’t handle them well</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>69</td>
<td>I avoid trying to learn new things when they look difficult to me</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>70</td>
<td>Failure just makes me try harder</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>71</td>
<td>I feel insecure about my ability to do things</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>72</td>
<td>I am a self-reliant person</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>73</td>
<td>I give up easily</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>74</td>
<td>I do not seem capable of dealing with most problems that come up in life</td>
<td>1 2 3 4 5</td>
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**Organisational Self-Identity – Organisational Identification Scale (Mael, 1988; Mael & Ashworth 1992)**
<p>| | |</p>
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<tr>
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<tr>
<td><strong>76</strong></td>
<td>When someone criticizes my organisation, it feels like a personal insult</td>
</tr>
<tr>
<td><strong>77</strong></td>
<td>I am very interested in what others think about my organisation</td>
</tr>
<tr>
<td><strong>78</strong></td>
<td>When I talk about my organisation, I usually say 'we', rather than 'they'</td>
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<tr>
<td><strong>79</strong></td>
<td>My organisation's success is my success</td>
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<tr>
<td><strong>80</strong></td>
<td>When someone praises my organisation, it feels like a personal compliment</td>
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<td><strong>Employee Voice- Voice Scale (Farh et al 2007)</strong></td>
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<tr>
<td><strong>81</strong></td>
<td>I am actively offering suggestions to improve my work procedures and processes</td>
</tr>
<tr>
<td><strong>82</strong></td>
<td>I am actively bringing suggestions to help organisation run more efficiently and effectively</td>
</tr>
<tr>
<td><strong>83</strong></td>
<td>I try to prohibit behaviour harmful to my organisation</td>
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### Distribution of Participants Local government area (LGA)

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<th>Cumulative Percent</th>
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<td>2.2</td>
<td>6.3</td>
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Participant Information Sheet

Research Project: Establishing a Link between Ethnic Diversity in Organisation and Employee psychological ownership perception in Rivers State, Nigeria.

You are being invited to take part in a research project. Before you decide it is important for you to understand why this research is being done and what it will involve. Please take time to read the following information and discuss it with others if you wish. Ask if there is anything that is not clear or if you would like more information. May I take this opportunity to thank you for taking time to read this information sheet.

What is the purpose of the project?

The research project is part of an on-going PhD programme that is intended to establish a link between employees’ perception of ethnic diversity in organisation and employee perception of psychological ownership.

Why have I been chosen?

The research is focussed on employees in Nigeria, particularly in Rivers State. You have been chosen because you are either a civil servant or a private sector employee, and your valuable contribution will assist in the research project.

Do I have to take part?

Participation on this study is entirely voluntary, so please do not feel obliged to take part. Refusal will involve no penalty whatsoever and you may withdraw from the study at any stage without giving an explanation to the researcher.

What do I have to do?

You will be invited to take part in a questionnaire

This should take no more than 20 minutes of your time.

Are there any disadvantages to taking part?

There should be no foreseeable disadvantages to your participation. If you are unhappy or have further questions at any stage in the process, please address your concerns initially to
the researcher if this is appropriate. Alternatively, please contact the research supervisors Prof. Jawad Syed- j.syed@hud.ac.uk, and Dr. Eleanor Davies- e.davies@hud.ac.uk, and Dr. Julie Davies-j.davies@hud.ac.uk at the Business School, University of Huddersfield.

Will all my details be kept confidential?

All information which is collected will be strictly confidential and anonymised before the data is presented in the assignment, in compliance with the Data Protection Act and ethical research guidelines and principles.

What will happen to the results of the research study?

The results of this research will be written up in a dissertation, and presented for assessment. It will also be written up inform of conference presentations and in academic journal articles. If you would like a copy please contact the researcher.

Who has reviewed and approved the study, and who can be contacted for further information?

The research supervisors are Prof Jawad Syed, Dr. Eleanor Davies and Dr. Julie Davies. They can be contacted at the University of Huddersfield.

Name & Contact Details of Researcher:

Pepple, Dennis Gabriel

Dennis.pepple@hud.ac.uk; +447704914579 or +2348134971537
**Participant Consent Form**

**Title of Research Project:** Establishing a Link between Ethnic Diversity in Organisation and Employee psychological ownership perception in Rivers State, Nigeria.

It is important that you read, understand and sign the consent form. Your contribution to this research is entirely voluntary and you are not obliged in any way to participate, if you require any further details please contact your researcher.

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<th>Statement</th>
<th>Yes</th>
<th>No</th>
</tr>
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<tr>
<td>I have been fully informed of the nature and aims of this study as outlined in the information sheet version X, dated 00:00:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I consent to taking part in this study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand that I have the right to withdraw from the research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Participation on this study is entirely voluntary, so please do not feel obliged to take part. Refusal will involve no penalty whatsoever and you may withdraw from the study at any stage without giving an explanation to the researcher. Once the questionnaire has been returned, it will not be possible to identify your response as we will not collect any identifying information and so withdrawal will not be possible from that stage)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand that the information collected will be in kept secure conditions for a period of ___ years at the University of Huddersfield</td>
<td></td>
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<tr>
<td>I understand that no person other than the researcher/s and facilitator/s will have access to the information provided</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand that my identity will be protected and that no written information that could lead to my being identified will be included in any report</td>
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</tr>
</tbody>
</table>
If you are satisfied that you understand the information and are happy to take part in this project please put a tick in the box aligned to each sentence and print and sign below.

<table>
<thead>
<tr>
<th>Signature of Participant:</th>
<th>Signature of Researcher:</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Date:</td>
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</table>

(one copy to be retained by Participant / one copy to be retained by Researcher)
Research Interest: Establishing a Link between Ethnic Diversity in Organisation and Employee psychological ownership perception in Nigeria.

Name of Researcher: Dennis Gabriel Pepple

The Head of Service
Rivers State Civil Service
9th Floor, Point Block
State Secretariat Complex
Port Harcourt, Rivers State

i) The purpose of the research study is to establish a link between representative bureaucracy and employees’ perception of organisational ownership

ii) The data collection methods to be used is structured questionnaires to be administered in paper format

iii) Employees from the different ethnic groups and at different levels (directors to junior staff) will be selected for this study.

I confirm that I give permission for this research to be carried out and that permission from all participants will be gained in line within my organisation’s policy.
Name and position of senior manager:

..........................................................................................................................

Signature of senior manager: ...........................................................................

Date: ...............................


Name of Researcher: ..........................................................................................

Signature of Researcher: ..................................................................................

Date: ...............................

Letter to organisations

To whom it may concern

Dear Sir,

ORGANISATION PARTICIPATION REQUEST AND INTRODUCTION OF RESEARCHER

Mr. Dennis Gabriel Pepple is a PhD researcher with our University. His research interest is in 'Establishing a Link between Ethnic Diversity in Organisation and Employee psychological ownership perception in Rivers State, Nigeria'. Details of the research are found in the organisation participation consent form attached.

Mr Dennis Gabriel Pepple hopes to administer questionnaire to employees from different ethnic groups and positions in your organisation. I trust that the research will be carried out to the highest standards and will abide by the University’s Code of research ethics.

The findings from this study will form part of his thesis and a report may be provided to your organisation at your request.

Kindly provide him the necessary access to carry out this very important study in your organisation by signing the attached organisation consent form.

Kind Regards
# Appendix Three

*Reliability and factor analysis scores*

## Reliability Scores

### Ethnic identification

<table>
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<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
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</tr>
</thead>
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<td>.845</td>
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<th>Corrected Item-Total Correlation</th>
<th>Squared Multiple Correlation</th>
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Interpersonal fairness (ITF)

Reliability Statistics

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Q23 and Q17 deleted to improve the alpha value to 0.819

Reliability Statistics

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Co-worker social support

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Employee self-efficacy

### Reliability Statistics

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6 items deleted step by step to improve Cronbach alpha to 0.912 (Q66, Q73, Q61, Q71, Q59, Q67)

### Reliability Statistics

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Organisational self-identity

### Reliability Statistics

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Employee voice

### Reliability Statistics

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## Factor analysis Scores

### Ethnic identification scale

**KMO and Bartlett's Test**

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .849 |
| Bartlett's Test of Sphericity Approx. Chi-Square | 3818.423 |
| df | 21 |
| Sig. | .000 |

**Total Variance Explained**

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Extraction Method: Principal Component Analysis.

### Interpersonal fairness

**KMO and Bartlett's Test**

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .835 |
| Bartlett's Test of Sphericity Approx. Chi-Square | 4513.728 |
| df | 78 |
| Sig. | .000 |

**Total Variance Explained**

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Extraction Method: Principal Component Analysis.

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Item Q19 poorly loaded and were taken off. This increased the total variance explained to 0.59.5

Extraction Method: Principal Component Analysis.

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### Co-worker social support

#### KMO and Bartlett's Test

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#### Total Variance Explained

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Extraction Method: Principal Component Analysis.

### Employee self-efficacy

#### KMO and Bartlett's Test

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#### Total Variance Explained

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Extraction Method: Principal Component Analysis.
Organisational self-identity

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .787 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 2336.407 |
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Total Variance Explained

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Extraction Method: Principal Component Analysis.

Employee voice

KMO and Bartlett's Test

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| Bartlett's Test of Sphericity | Approx. Chi-Square | 1155.972 |
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Total Variance Explained

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Extraction Method: Principal Component Analysis.
Employee psychological ownership perception

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AMOS scores for determination of measurement model fitness

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RMSEA

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Appendix six

ANOVA scores

Descriptive statistics-ethnic identification

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