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**THE DETERMINANTS OF RETIREMENT PLANNING BEHAVIOR: A
COMPARATIVE STUDY OF PUBLIC AND PRIVATE SECTOR
WORKERS IN NIGERIA**

DAUDA SANI



**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
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**THE DETERMINANTS OF RETIREMENT PLANNING BEHAVIOR: A
COMPARATIVE STUDY OF PUBLIC AND PRIVATE SECTOR WORKERS
IN NIGERIA**



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Kolej Perniagaan
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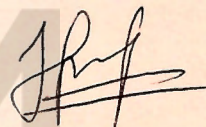
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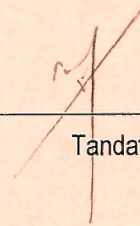
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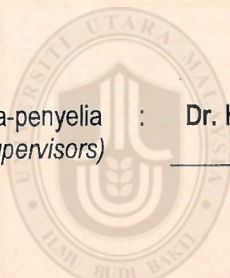
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ABSTRACT

Recent development in behavioral studies coupled with an increase in life expectancy, ageing population and a shift of retirement responsibilities onto the workers by many governments necessitate the urgent need for this study. In accordance with the theory of planned behavior (TPB), the study investigates the determinants of retirement planning behavior (RPB) between the private and public sectors workers in Nigeria. A structured questionnaire was used to enable data collection from a sample of 307 Nigerian workers selected across the six geopolitical zones. PLS-SEM and Wilcoxon signed-rank test were employed to examine the determinants and differences of RPB among the workers. Empirical evidences support six of the tested hypotheses that suggested that attitude and norms have a significant positive impact on RPB of the workers. Personality has a significant positive impact on attitude and control while knowledge impacted positively on attitude and norms. In contrast, three of the tested hypotheses are not supported. They are control to RPB, personality to norms and knowledge to control. The results of the Wilcoxon signed-rank test support six hypotheses suggesting significant differences between the workers in the two sectors. These are attitude and control to RPB, personality to attitude and control, and knowledge to attitude and norms. However, three hypotheses are not supported signifying no differences between the workers in the different sectors. They are norms to RPB, personality to norms, and knowledge to control. Theoretically, the study shows the usefulness of extended TPB by providing a more robust correlation between the variables leading to the prediction of RPB. Practically, the study highlights the use of TPB variables in influencing individual decision and could serve as a guide to pension managers in understanding the programs needed to motivate RPB. Finally, the study recommends for the design of intervention plans that are capable of encouraging RPB among the workers.

Keywords: retirement planning behavior, personality trait, subjective norm, perceived control, Nigerian workers

ABSTRAK

Perkembangan terkini dalam kajian tingkah laku manusia beserta dengan peningkatan jangka hayat, penuaan penduduk dan peralihan tanggungjawab persaraan ke atas diri pekerja oleh sebilangan besar kerajaan, mendorong keperluan mendesak kepada kajian ini. Selaras dengan teori tingkah laku yang dirancang (TPB), kajian ini menyelidik penentu tingkah laku perancangan persaraan (RPB) di antara pekerja sektor swasta dan awam di Nigeria. Soal selidik berstruktur telah digunakan dan membolehkan data dikumpul daripada 307 pekerja Nigeria yang terpilih di seluruh enam zon geopolitik. Ujian PLS-SEM dan ujian Wilcoxon signed-rank telah digunakan untuk mengkaji penentu dan perbezaan RPB di kalangan pekerja. Bukti empirikal telah menyokong enam hipotesis yang menunjukkan bahawa sikap dan norma mempunyai kesan positif yang signifikan terhadap RPB pekerja. Personaliti pula mempunyai kesan positif yang signifikan terhadap sikap dan kawalan manakala pengetahuan memberi kesan positif terhadap sikap dan norma. Sebaliknya, tiga hipotesis tidak disokong, iaitu kawalan kepada RPB, keperibadian kepada norma dan pengetahuan kepada kawalan. Hasil ujian Wilcoxon signed-rank turut menyokong enam hipotesis yang menunjukkan perbezaan yang signifikan antara pekerja di kedua-dua sektor. Ini adalah sikap dan kawalan kepada RPB, personaliti terhadap sikap dan kawalan, dan pengetahuan terhadap sikap dan norma. Sebaliknya, tiga hipotesis tidak disokong menunjukkan tiada perbezaan di antara pekerja di sektor yang berlainan. Ini adalah norma kepada RPB, keperibadian kepada norma, dan pengetahuan kepada kawalan. Secara teori, kajian menunjukkan kegunaan TPB lanjutan dengan menyediakan korelasi yang lebih mantap di antara pembolehubah untuk meramalkan RPB. Secara praktik, kajian ini menumpukan kepada penggunaan pembolehubah TPB dalam mempengaruhi keputusan seseorang individu dan boleh dijadikan panduan kepada pengurus pencen dalam memahami program yang diperlukan untuk memotivasi RPB. Akhir sekali, kajian ini mencadangkan reka bentuk rancangan intervensi yang mampu menggalakkan RPB di kalangan pekerja.

Kata kunci: gelagat perancangan persaraan, ciri keperibadian, norma subjektif, kawalan tanggapan, pekerja Nigeria

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Dauda Sani

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LIST OF ABBREVIATIONS

ATRP	Attitude Towards Retirement Planning
CBN	Central Bank of Nigeria
CPS	Contributory Pension Scheme
DB	Defined Benefits
DC	Defined Contribution
FGN	Federal Government of Nigeria
GMP	Guarantee Minimum Pension
GMP	Guaranteed Minimum Pension
ILO	International Labor Organizations
KFPR	Knowledge of Financial planning for Retirement
NPF	National Provident Funds
PAYG	Pay-As-You-Go
PBC	Perceived Behavioral Control
PCR	Perceived Control over Retirement Planning
PENCOM	National Pension Commission
PFAs	Pension Funds Administrators
PFCs	Pension Fund Custodians
PRA 2014	Pension Reform Act of 2014
PT	Personality Traits
RPB	Retirement Planning Behavior
RSA	Retirement Savings Account
SN	Subjective Norms
TPB	Theory of Planned Behavior
TRA	Theory of Reasoning Action
UAC	United African Company

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Retirement is a complex issue which involves a process that is related to planning behavior (Topa et al., 2009). The idea of retirement planning behavior has made considerable impacts within organizational psychology. Gutierrez & Hershey (2015) have defined retirement planning behavior as a series of stages in retirement planning which encompasses situation assessment, formulation of goals and how to achieve them in the future as well as monitoring the progress towards achieving the desired goal. It is also a process of planning for retirement where awareness is created, and goals of post-employment period are pursued through strategic behavior. Retirement planning touches different aspects of life such as finance, health, social and interpersonal relations, leisure and recreation, real estate, retirement age, post-retirement works and community development programs. Retirement planning focuses on multiple stages of post-retirement livelihood across the public-sector (Taylor & Doverspike, 2003) and private-sector (Reitzes, Mutran & Fernandez, 1996). It is clear that not all workers participate in planning for retirement before retiring from work. However, participating in planning before quitting the job will assist in smoothing the transition process and provide a realistic picture of retirement livelihood (Gutierrez & Hershey, 2015). This study, therefore, investigates the factors influencing retirement planning behavior among public and private sector workers in Nigeria. The study is designed within the reams of 18 objectives that generate new empirical and theoretical knowledge on retirement planning behavior in Nigeria.

1.2 Background to the Study

Global population ageing is a major problem in our societies. Virtually, all countries in the world are experiencing increase in the number of older people in their population. Population ageing touches all sectors of society including labor, financial markets, demand for housing, transportation, social protection and family structures (UN, 2017). According to UN (2017) report, the number of aged people (60 years and above) across the globe is anticipated to double by 2050 and even triple by 2100, growing from 962 million in 2017 to 2.1 billion by 2050 and 3.1 billion by 2100.

Globally, the population of aged people (60 and above) is growing faster compared to the younger age groups. In features to come, many countries may likely face fiscal and political pressures concerning healthcare, pensions and social protections for the growing older population (UN, 2017). Population ageing is projected to have a severe effect on support ratio of the workers. The support ratio is the number of workers per retiree. Though it is difficult to know the actual number of workers per retiree, a proxy was used as the ratio of number of persons who are likely to be either workers or retirees by their age. Thus, support ratio is the number of individuals aged 20 to 64 divided by the number of aged, 65 or above. In 2017, Africa has a support ratio of 12.9 persons aged 20 to 64 for each person aged 65 or above. Asia has a ratio of 7.4, Latin America and the Caribbean have a ratio of 7.3, Oceania has 4.6, North America has 3.8 and Europe has 3.3. The low support ratio underscores the fiscal and political pressures that many countries in the continents are likely to face with regards to healthcare systems, pensions and social protections for the growing older population (UN, 2017).

On the other hand, the increase in life expectancy across the world has been achieved in the past years (UN, 2017). Between 2010-2015, the life expectancy at birth increased by 3.6 years, that is from 67.2 to 70.8 years.

Table 1.1
Life Expectancy at Birth

<i>Life expectancy at Birth (years)</i>							
<i>Region</i>	<i>1990-1995</i>	<i>2005-2010</i>	<i>2010-2015</i>	<i>2015-2020</i>	<i>2025-2030</i>	<i>2045-2050</i>	<i>2095-2100</i>
World	64.6	69.1	70.8	71.9	73.8	66.9	82.6
Africa	51.7	57.0	60.2	62.4	65.7	70.9	78.4
Asia	65.2	70.3	71.8	72.9	74.6	77.5	83.3
Europe	72.7	75.3	77.2	78.1	79.8	82.8	89.3
Latin America and Caribbean	68.4	73.4	74.6	75.7	77.7	81.3	87.9
Northern America	75.9	78.4	79.2	79.9	81.4	84.4	89.9
Oceania	73.0	77.0	77.9	78.8	80.2	82.3	87.4

Sources: UN World Population Prospect 2017.

Different regions of the world have experienced the rise in life expectancy over this period, but the most significant increase was observed in Africa where life expectancy grew by 6.6 years in 2015. Life expectancy in Africa region stood at 60.2 compared to Asia with 71.8 years. Latin America and the Caribbean have a life expectancy of 74.6, Europe 77.2 years, Oceania 77.9 and Northern America have a life expectancy of 79.2 years. However, the life expectancy gap between the countries in the region are expected to diminish significantly by 2050 (UN, 2017). Figure 1.1 presents the life expectancy at birth across the world. The life expectancy gap between the least developed countries and other developing countries has narrowed from 11 years in 2000-2005 to 8 years in 2010-2015. The differences in life expectancy across the regions and income groups are expected to diminish significantly by 2045-2050.

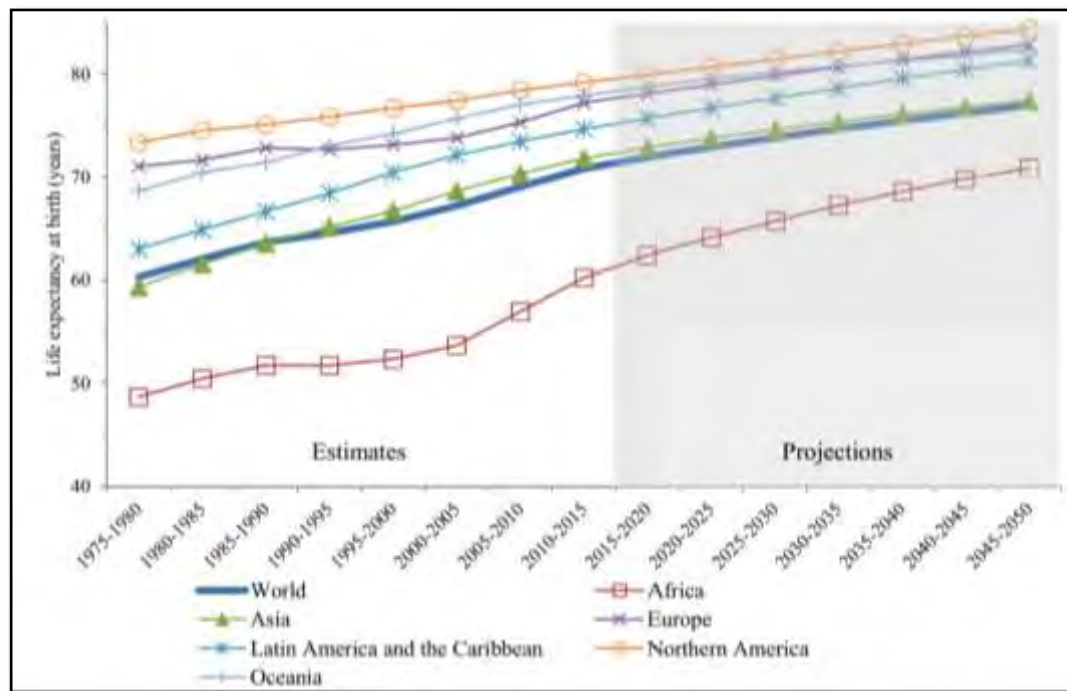


Figure 1.1
Life Expectancy at Birth (years) by Regions
 Source: UN World Population Prospect 2017.

The ageing population increases and the substantial rise in life expectancy in most developing countries has caused serious problems to the policymakers, especially on how to provide retirement needs of the elderly population. Natixis Global Retirement Index (GRI) is a consulting firm which compares the retirement index of different countries. The firm provides a standard retirement index for prospective retirees and retirees in about 150 countries. The firm has reported that Northern European countries have the highest retirement index, with Switzerland as number one with GRI of 82%, Norway as the second with GRI of 81% and Africa as the lowest in the GRI index ranking, with Nigeria as number 107 (GRI of 44%) and Togo as number 150 with GRI of 19% (Natixis Global Retirement Index, 2015).

The recent development in welfare cuts implemented by many governments in countries of the world implies a shift of retirement responsibilities onto individuals through private pension plan and personal retirement saving (Adami, Carosi & Sharma, 2018; World Economic Forum, 2017). In order to reduce corporate and governmental responsibilities for pension planning coupled with increased life expectancy requires an in-depth study of individuals' retirement planning behavior. Thus, the objective of this study is to examine the factors influencing the retirement planning behavior of the public and private sector workers in Nigeria and identify the differences between them.

Research on retirement planning usually shows that there is serious cause for concern. Many workers in developed and developing countries lack easy access to retirement savings and pension plans. Lack of opportunities to start retirement savings and encouragements to set aside certain amount of money for retirement is narrowing many people's ability to accumulate savings. To support a reasonable level of income in retirement, the workers are expected to save 10% to 15% of their average annual income. Today, individual's retirement savings rates in most countries are far below expectation (World Economic Forum, 2017). The shortfall in retirement savings for the eight largest pension markets in the world was estimated at \$70 trillion while the increase in longevity should be celebrated, longer lifetimes are presently increasing the cost of retirement. Hence, the retirement savings gap is projected to increase significantly. If measures are not taken to increase the levels of retirement savings, the gap may likely grow to \$400 trillion by 2050 as presented in figure 1.2 (World Economic Forum, 2018) below.

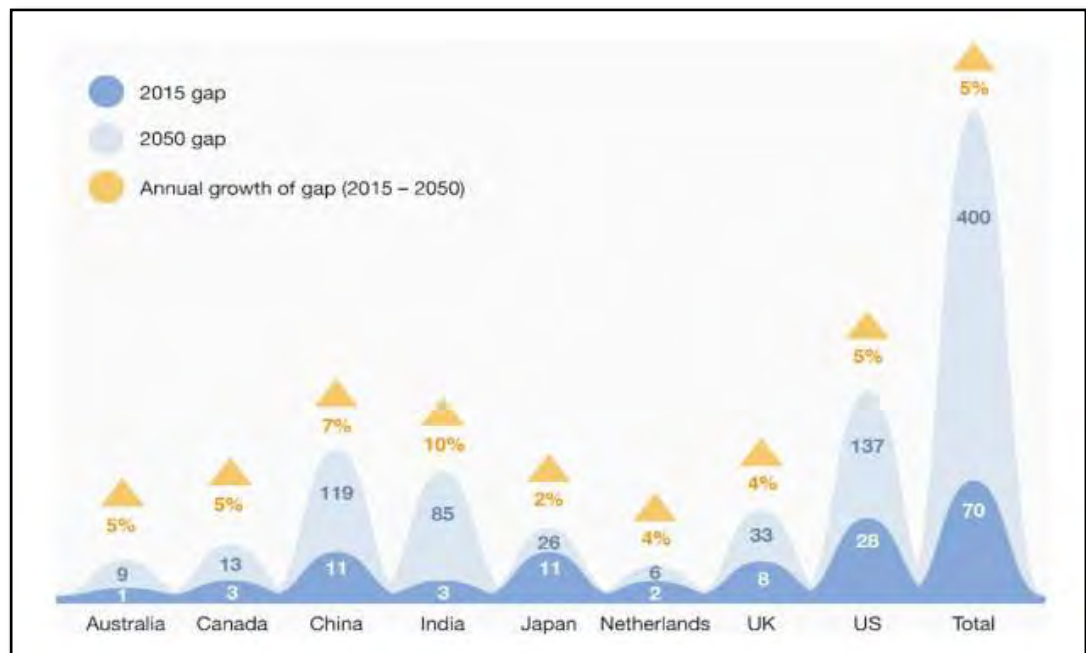


Figure 1.2:
Size of Retirement Savings Gap, 2015-2050 (trillion \$)
 Source: World Economic Forum 2018.

In the last decades, issues on retirement planning was handled by economists, accountants, and financial advisors. More recently, economists have found psychological concepts to be good enough in explaining economic and financial behavior (Topa, Lunceford & Boyatzis, 2018; Topa et al., 2011). Since then, researchers have progressively incorporated variables from other disciplines such as psychology in their empirical studies and accumulated evidence for integrated models of retirement planning (Shultz & Wang, 2011; Wang & Shultz, 2010; Wong & Earl, 2009). Theoretical revisions have emphasized the important contributions of psychological variables to retirement planning research.

Thus, retirement planning behavior (RPB) is at the core of the current concerns of governments and citizens due to its significant impacts on the well-being of workers

at retirement and its economic implications. Research on RPB between the public and private workers is still scanty and its determinants deserve further attention. An important contribution of this study is the use of extended TPB models which includes psychological predictors like attitude towards retirement planning, subjective norms and perceived behavioral control. Others are personality traits and knowledge of financial planning for retirement. Empirical evidence from the literature has suggested that there are psychological differences to retirement planning decisions of the workers (Choi & Jang, 2016; Ekici & Koydemir, 2016; Topa et al., 2018). Shultz and Wang (2011) have suggested that psychological variables can be used to explore both inter and intra-individual differences in retirement planning behavior.

Many studies have demonstrated the link between the psychological variables and retirement planning behavior. But a lesser number of studies established the differences between public and private sectors workers. Most of the private sector workers today face a do-it-yourself retirement income characterized by private saving and risk of financial insecurity at retirement. These conditions originate from interaction differences and retirement income (Quinn, Cahill & Giandrea, 2018). In contrast, the public-sector workers are covered by contributory pension plans which offer financial security at old ages. These categories of workers are less likely to face retirement challenges compared to their private sector counterparts.

Review of literature has shown the importance of attitude toward retirement planning. Most of the public-sector workers living in developed countries believe that their governments will bear their retirement costs and that retirement supports would come

directly from the government (Khan, 2017). In contrast, the private sector workers in developing countries (e.g. Nigeria) have a different believed on retirement planning compared to their public-sector counterparts because their attitude towards retirement planning is relatively low. This might have been caused by differences in wages, job insecurity, and poor working conditions. leading to negative attitude towards retirement planning (Imaga, 2003; Jawando & Adenugba, 2015; Garba, 2014 CBN 2015; Olatomide & Fashiku,2015).

On the other hand, the TPB suggested that people modeled their behavior in line with the values and behaviors of the groups to which they belong or aspire to belong. Many individuals find it helpful to discuss with other people about retirement planning (Hershey, Henkens & Van Dalen, 2010; Kimiyaghalam et al., 2017). Discussions with peers, spouse or parents regarding retirement planning behavior or the adequacy of retirement savings can facilitate or limit planning efforts. However, involvement of family members (Subjective norm) in retirement planning decision is about 42.5% among the public and private sector workers in Nigeria. This issue may cause poor financial decisions, negative attitude towards retirement planning, poor control on financial matters, and lack of planning for the future which may eventually lead to poor retirement planning behavior (Olatomide, 2010; Olatomide, & Fashiku, 2015; CBN 2015; UNDP, 2015).

Perceived control is considered as the major determinant of behavior (Ajzen, 1991). Estimating how much resources, level of opportunities or the extent to which workers see themselves as being in control of the forces that affect their decisions positively

influenced their retirement planning (Moen, Sweet & Swisher, 2005). Preliminary evidence shows that higher levels of personal control have a significant positive impact on retirement planning of public and private sector workers (Donaldson, Earl & Muratore, 2010; Griffin et al., 2012; Heenkenda, 2016). However, Hira, Rock and Liobl (2012) have reported significant differences between perceived personal control and retirement planning behavior between the male and female workers. The inconclusive nature of these findings paved way further study. On the other hand, Most of the public and private sector workers in Nigeria lack control over these resources (Akpan, 2017; Abdullahi, 2002; Amune, et al., 2015; Baba, et al., 2015; Olatomide & Fashiku, 2015; CBN, 2015).

Financial knowledge is one of the important determinants of financial decision (Hershey et al., 2000). Pre-retirees who had not acquired financial training were made to commit errors when handling issues related to financial planning (Hershey et al., 1998; Hershey & Walsh, 2000). Review of literature has shown that individual's low-level of information to make sound financial decisions affect their retirement savings (Poterba, 1996). Most of the comparative studies, with regards to financial knowledge and retirement planning focused on age (Hira et al., 2009) and gender differences (Griffin, 2012; Prast & van Soest, 2016), thus creating an urgent need to compare the financial knowledge of the public and private sector workers. A substantial number of workers (36.3%) in the public and private sectors in Nigeria have not heard of the pension plans and how it works. This problem may likely affect the attitude of the workers towards retirement planning and the ability of the workers

to have control over retirement planning which may eventually lead to poor retirement planning behavior (Amaike, 2016; Faboyede et al., 2015; CBN, 2015).

Likewise, personality trait is considered as a consistent and enduring disposition involving individual differences in thought or behavior (Costa & McCrae, 1986). Individuals' behavior reflects the persons' personality. People with positive belief always have positive attitude which, in turn, influences positive retirement planning behavior among the workers (Onyishi et al., 2012; Salami, 2010; Taylor & Shore, 1995). On the other side, positive belief depends on the influence of family, friends, or peers and ability to have control over resources (Ajzen, 1991). Consequently, most of the instability in personality observed among the Nigerian pre-retirees was due to lack of social support and poor retirement planning. The condition of this category of workers worsens at retirement due to poor retirement planning and non-availability of a viable social scheme (Adejumo, 2010).

Despite the differences and circumstances in retirement planning of the public and private sector workers, this distinction has received relatively less attention from the academia. Very little is known about attitude toward retirement planning of the people, perceived control over retirement planning and the influence of important referent group (family, friends and peers) in retirement planning decisions. There are shortages of comparative studies across geographical regions that may explain the complex retirement planning behavior of individuals. To fully understand the retirement planning behavior of Nigerian workers, the study compares the retirement planning behavior of public and private sector workers and anticipate that such a comparative

study can help us to know the ways each worker plans or do not plan for his/her retirement.

1.3 Problem Statement

The responsibility of any government is to make adequate provisions for the well-being of its workers during active service and after retirement. It is a well-known fact that productivity and growth rate are positively linked to workers' motivations. However, the importance of pension scheme is to provide regular and stable income to workers after retirement. Most of the workers in Nigeria were not enrolled in any retirement scheme. Barely 7.1% of the workers were registered for contributory pension scheme in both the private and public sectors (Pencom 2017). On the other hand, workers who retired without any personal savings identified lack of steady income as a significant factor that prevents them from enjoying their retirement life. Coupled with the belief that retirement often leads to a reduction in income, Nigerian retirees protested bitterly about inadequate financial resources with reported cases of ill-health and untimely deaths.

Despite all of these challenges, the Nigerian policymakers are self-satisfied about the traditional old age support method built on the erroneous cultural assumption that grown-up children and members of the extended family ought to provide adequate care and support for their old ones. It is important to note that good retirement income and efficient management of economic life are found to be key predictors of good retirement well-being (Amaiike & Bammeké, 2014; Dagauda & Adeyinka, 2013;

Garba, 2014; Oluwatoyin & Ezugwu, 2009; Obashoro, 2010; Togonu-Bickersteth, 2014).

The attitude of workers towards retirement planning is not encouraging because organizational factors have contributed immensely to promoting poor attitude towards retirement planning of the workers. For instance, the concept of full-time workers working within an organization is gradually being challenged by the nonstandard working arrangements called casual or temporary workers, especially in the Nigerian private sectors (Jawando & Adenugba, 2015). This nefarious act has encouraged negative attitude towards retirement planning because the workers lacked good pension plan, no medical allowances, no job security, no gratuity, and other compensation benefits. The negative effect readily transcends from the worker down to his families and the society at large. These compounded issues may lead to differences in the retirement planning of the workers in the public and private sectors (Tinuke, 2012). Most of the workers depend on their children, relatives or the community after retirement. It is a common incidence in Nigeria to see retirees parading their former organizations requesting for financial assistance. This obnoxious culture might have been instigated by lack of adequate planning for retirement. Some of these retirees exhibit some unwanted behaviors as a mechanism to cover up their poor lifestyles (Ali, 2014; Garba, 2014; CBN, 2015; Fapohunda, 2013; Olatomide & Fashiku, 2015).

The involvement of family members in retirement planning decision is achieved through frequent talks on future retirement with significant others like spouse,

relatives, friends and co-workers (Evans et al., 1985; Mutran et al., 1997). These discussions have resulted in focusing their attention on key retirement issues. Seeking for the consent of the family members become necessary because the dependency ratio (1-14 years) in Nigeria is approximately 83.9%. The Nigeria pre-retirees are always scared of financial insecurity after retirement due to large family size, polygamy, and responsibilities of members of the extended families (Olatomide, 2010; Olatomide & Fashiku, 2015; UNDP, 2015). Therefore, it has become necessary for Nigerian workers to discuss retirement planning issues with their referent groups (spouse, relatives, friends, co-workers). However, the Nigerian workers lacked the requisite knowledge which, in turn, leads to low perception of retirement plans (Manuel & Asuquo, 2010). The CBN has revealed that about 41.8 million or 42.5% of the population in Nigeria took financial decisions in partnership with someone within the family members or friends. 16.8 million or 36.6% of the men personally took financial decisions indicating that there is no difference between the workers in the public and private. These issues if not handled with positive conscience, may likely cause poor financial decisions, poor deliberation on financial matters, and lack of planning for the future. It may even distort the income, residential provisions, the family structure, welfare as well as the economic capabilities of the workers. All of these important determinants of life satisfaction at retirement will reduce due to the negative influence of friends and family members (Baba, Garba & Zakariya, 2015; CBN 2015; Ode, 2004; Olatomide & Fashiku, 2015).

The conducive atmosphere for retirement planning depends on a well-managed, social, working, and environmental setup. The attainment of the desired retirement goal, to

some extent, is enhanced through well-organized and controlled retirement planning, continuous and sustained financial knowledge and acquisition of post-retirement skills (Akpan, 2017). The critical stakeholders that will enhance this process have failed to do the needful to the workers because most of Nigerian workers lack absolute control over their resources. A substantial number of workers in both the private and public workers have refused to save after satisfying their monthly needs. At the end of their work circle, they get to understand that they have neither savings nor private businesses to replace their income. Many workers have faced lots of psychological problems while some exhibit emotional trauma (Abdullahi, 2002; Amune, Aidenojie & Obinyan, 2015; Baba et al., 2015; Olatomide & Fashiku, 2015).

The Nigerian workers do not give early retirement planning and management of post-retirement situations the substantial priority it merits due to lack of self-control over resources. A study conducted by the CBN (2015) indicates that only 19.1% of the workers engaged in financial planning for old age and 8.4% invest in financial securities for their dependants. The findings of this report (CBN) signify that the workers have not planned or even thought much about retirement despite the laws enacted by the government encouraging them to contribute for their pension plans (Pencom, 2014).

On the other hand, financial knowledge is the acquiring of financial skills which improve worker's understanding of financial products, keeps track of finances, and enhance planning. Financial knowledge promotes economic choice, awareness of business risks and opportunities (Faboyede et al., 2015). However, the central bank of

Nigeria (CBN) has discovered that the level of financial literacy and knowledge of financial products and services are enormously low in Nigeria because about 35.8 million or 36.3% have not heard of pension schemes. Most of the pre-retirees in Nigeria approaches retirement age without adequate planning. This issue is common among the public and private sector workers. Thus, the situation of Nigerian workers become worse off after retirement due to inadequate proper social provisions required to address their health challenges, improve their quality of life and reduce retirement anxiety (CBN, 2015; Amaike, 2016).

Review of literature has shown that individuals' behavior reflects the persons' personality (Onyishi et al., 2012). Evidence has pointed to the robustness of pre-retirement planning through individual personality which invariably predicts his/her psychological well-being at retirement (Salami, 2010). Therefore, individual's behavior reflects his/her personality and people with positive belief always have positive attitude leading to positive retirement planning behavior among the workers (Onyishi et al., 2012; Salami, 2010; Taylor & Shore, 1995).

1.4 Research Questions

The study attempts to answer the following research questions:

- 1a. What is the relationship between attitude towards retirement planning and retirement planning behavior?
- b. Is there a difference between attitude towards retirement planning and retirement planning behavior of public and private sector workers in Nigeria?

- 2a. What is the relationship between subjective norms and retirement planning behavior?
- b. Is there a difference between subjective norms and retirement planning behavior of public and private sector workers in Nigeria?
- 3a. What is the relationship between perceived control over retirement planning and retirement planning behavior?
- b. Is there a difference between perceived control over retirement planning and retirement planning behavior of public and private sector workers in Nigeria?
- 4a. What is the relationship between personality trait and attitude towards retirement planning?
- b. Is there a difference between personality trait and attitude towards retirement planning of public and private sector workers in Nigeria?
- 5a. What is the relationship between personality trait and subjective norms?
- b. Is there a difference between personality trait and subjective norms of public and private sector workers in Nigeria?
- 6a. What is the relationship between personality trait and perceived control over retirement planning?
- b. Is there a difference between personality trait and perceived control over retirement planning of public and private sector workers in Nigeria?
- 7a. What is the relationship between knowledge of financial planning for retirement and attitude towards retirement planning?
- b. Is there a difference between knowledge of financial planning for retirement and attitude towards retirement planning of public and private sector workers in Nigeria?

- 8a. What is the relationship between knowledge of financial planning for retirement and subjective norms?
- b. Is there a difference between knowledge of financial planning for retirement and subjective norms of public and private sector workers in Nigeria?
- 9a. What is the relationship between knowledge of financial planning for retirement and perceived control over retirement planning?
- 9b. Is there a difference between knowledge of financial planning for retirement and perceived control over retirement planning of public and private sector workers in Nigeria?

1.5 Objectives of The Study

The objectives of this study are:

- 1a. To assess the impact of attitude towards retirement planning and retirement planning behavior.
- b. To assess the difference between attitude towards retirement planning and retirement planning behavior of public and private sector workers in Nigeria.
- 2a. To assess the impact of subjective norms on retirement planning behavior.
- b. To assess the difference between subjective norms and retirement planning behavior of public and private sector workers in Nigeria.
- 3a. To assess the impact of perceived control over retirement planning and retirement planning behavior.
- b. To assess the difference between perceived control over retirement planning and retirement planning of public and private sector workers in Nigeria.

- 4a. To assess the impact of personality traits and attitude towards retirement planning.
- b. To assess the difference between personality trait and attitude towards retirement planning of public and private sector workers in Nigeria.
- 5a. To assess the impact of personality trait on subjective norms.
- b. To assess the difference between personality trait and subjective norms of public and private sector workers in Nigeria.
- 6a. To assess the impact of personality trait on perceived control over retirement planning.
- b. To assess the difference between personality traits and perceived control over retirement planning of public and private sector workers in Nigeria.
- 7a. To assess the impact of knowledge of financial planning for retirement on attitude towards retirement planning.
- b. To assess the difference between knowledge of financial planning for retirement and attitude towards retirement planning of public and private sector workers in Nigeria.
- 8a. To assess the impact of knowledge of financial planning for retirement on subjective norms.
- b. To assess the difference between knowledge of financial planning for retirement and subjective norms of public and private sector workers in Nigeria.
- 9a. To assess the impact of knowledge of financial planning for retirement on perceived control over retirement planning.

- b. To assess the difference between knowledge of financial planning for retirement and the perceived control over retirement planning of public and private sector workers in Nigeria.

1.6 Significance of the Study

Conducting a study on retirement planning behavior is becoming an interesting field of research in the past few years. Information and education on this important aspect of retirement planning behavior will be useful to the workers and that will encourage them to make better retirement planning decisions. Studying non-financial features like attitude, subjective norms and perceived control, building good personality and acquiring financial knowledge will assist individuals or families to be more conscious of their retirement planning behavior. The study provides sufficient explanation that can encourage positive retirement planning among workers and offer advice on what can be done to promote retirement planning behavior. Not only is the present study the first to adopt TPB to the area of retirement planning; the study also validates the extension of the TPB by incorporating essential variables such as personality traits and knowledge of financial planning for retirement to serve as predictors of retirement planning behavior.

The present study is important to the academicians because there are limited studies on the determinants of retirement planning behavior especially in Nigeria and Africa at large. This study, therefore, adds to the existing scanty literature and bridges the knowledge gap. The study exhibit uniqueness in revealing the determinants of retirement planning and extend it to cover the behavior of workers in the public and

private sectors. The work generates values for future studies, especially in the areas of planning and behavioral issues. Finally, the study combines the newly explored factors, finds their effects on retirement planning behavior and gives a valid conclusion on how the factors affect workers' retirement planning behavior.

The finding of the present study will be important to the pension managers because it will provide them with explanatory power when it comes to explaining why some workers fail to plan for retirement. The study could serve as a valuable tool for pension managers because they will be more enlightened on the sets of psychological factors that inspire the propensity to plan for the future. It will assist the pension managers to undertake direct marketing approaches capable of increasing trust which will, in turn, change the attitude of the workers towards retirement planning. Correspondingly, the workers will be better informed and be able to undertake a more rational retirement planning decision.

On the other hand, the policymakers will also benefit from the findings of this study. Especially those units charged with the responsibility of designing retirement education programs to both the young and middle-aged groups. The results of this study may provide room for individual differences in retirement planning behavior of the workers. Therefore, the policymakers will be in a better position to develop retirement planning programs capable of accommodating those difference among the workers. The results of this study will serve as a useful materials to the policymakers and provide professional advise using psychological factors to achieve retirement planning behavior goal among the workers.

1.7 The Scope of the Study

This research is designed to compare the retirement planning behavior of the public and private sector workers in Nigeria. The study has developed and tested a retirement planning model using the Theory of Planned Behavior (TPB) (Ajzen, 1985, 1991). Many studies from health, dieting, and exercise have supported the use of TPB model (Hagger & Chatzisarantis, 2005; Ravis & Sheeran, 2003). More importantly, the present study has extended the TPB model by including external factors such as personality trait and knowledge of financial planning for retirement to mediate the behavioral variables as discussed by previous TPB studies. Therefore, personality trait and knowledge of financial planning for retirement were used to test the impact of the TPB variables (attitude towards retirement planning, subjective norms, and perceived control over retirement planning) on retirement planning behavior.

1.8 Organization of the Thesis

The research is organized in six chapters. Chapter one covers the introduction, background to the studies, research objectives, research questions, and scope of the study. In chapter two, previous studies on retirement planning behavior were reviewed just as the knowledge gap was identified. Chapter three discusses the methodology of the research which comprises of theoretical framework, hypothesis development, estimation technique, and variable measurement. Others are study areas, sample size, and method of data collection. Chapter four explains the method of data analyses and explicitly presents the findings of the study. Chapter five consists of discussions of the results. Lastly, the theoretical, methodological, practical implications of the study, recommendations, and proposal for future research are presented in chapter six.

1.9 Conclusion

This chapter provides an overview of the research topic. It introduces the subject matter of retirement planning behavior and shows the urgent need for the study in Nigeria. The chapter discusses the research problems and issues affecting the retirement planning behavior of the public and private sector workers in Nigeria. Eighteen research questions and objectives were outlined to address the problems. It is expected that once these issues are addressed, the study will make a lot of contributions to the retirement planning behavior of the public and private workers in Nigeria.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter is designed to give an overview of the retirement system followed by the history of Nigerian pension plan. The chapter also discusses the public and private sectors pension plans, differences in the plans, weaknesses, operators of the plan and the study area. The chapter reviews the concept, theories, and factors influencing retirement planning behavior, attitude towards retirement planning, subjective norms and perceived control over retirement planning. The background factors used in this study consist of personality trait and knowledge of financial planning for retirement. Lastly, the chapter compares each of the variables mentioned thereof and identifies the knowledge gap.

2.2 The Retirement System or Plan

Retirement systems is a comprehensive social security scheme which caters for the welfare of a worker from his period of commencement of career down to his retirement (Tolos et al., 2014; Wang et al., 2014). Retirement system is equally called income maintenance, social insurance/scheme (Rejda, 2011), pensions plan /scheme, or retirees social assistance scheme (Dorfman, 2015). Scott (2003) has viewed social security system as a welfare program that provides stable purchasing power to the workers and their wards in the form of retirement income, disability income, and other retirement incentives. The primary aim of social security is to protect the workers against loss of income, and other basic needs arising from accident, birth or loss of life

(Lee, 2002). Also, the system provides a safety net for the retirees by giving an income replacement rate, that is the percentage of pre-retirement income which a worker expects to acquire after retirement. Income replacement rate indicates the amount of the last drawn salary or any other similar benchmark. Therefore, for an average worker, a replacement rate of 75% is regarded as sufficient for financial security at retirement (Asher, 1998).

There are two major types of retirement schemes. The Defined Benefit (DB) and Defined Contribution (DC) (Baranoff, 2004; Bodie et al., 1988; Davis, 1995; Rejda, 2011). The DB plan is a retirement scheme which provides financial benefits to the worker during retirement. The contributions rate of the scheme differs depending on the amount of money needed to fund the program which is determined by the policymakers. The payment of the retirement benefits in the DB plan is the responsibility of the employer. Therefore, the benefits are typically in the form of retirement annuity which begins after the retirement of the worker and extends throughout his /her lifespan (date of death). A DB plan can serve as a final salary paid on monthly basis to the recipient. For instance, after retirement the worker will enjoy a regular pension steepens of 50% of his last earned salary or may be allowed to possess a retirement income for a projected period of 60 months of full salary (Rejda, 2011, Wang et al., 2014).

The DC pension plan is a scheme sponsored by both the employer and the employees which stipulates fixed contributory savings through periodic contributions into the employees' account and managed by pension managers. The contribution is made up

of the portion of the workers' salary and a percentage from the employers which is normally decided by the policymakers. However, the amount of the money to be contributed to the plan by the two parties is determined by the policymakers. Though the two parties know the rate of the contribution, the retirement benefit differs depending on the worker's age, earnings, retirement contributions, investment return and average retirement age (Trieschmann et al. 2005; Rejda, 2011).

2.3 Historical Development of Pension/ Retirement Plan in Nigeria

The British intrusion into West African countries has influenced the political, social and economic composition of her former territories (Stride & Ifeka, 1971). As a member of the Commonwealth Nations, the colonial office handed over to Nigeria a Model Retirement and Pension Legislation stated in Circular No.19 issued on 24th March 1945 (Uzoma, 1993). The legal approval that swing the scheme into operation was the Pensions Ordinance of 1951 with commencement date from 1946 (Abdulazeez, 2015). During the pension ordinance 1946, retirement benefits was therefore not a privilege for Nigerian workers (Abdulazeez, 2015), despite the fact that the Pension Ordinance 1946 provides operational modalities, types of retirement benefits and the requirement needed to enjoy the benefits. The ordinance further explains the minimum annual salaries that a worker may need to earned pension and gratuity or gratuity alone. It also states the condition of living service and how to handle workers misconduct. All of these can lead to decrease in or unconditional forfeiture of the retirement privileges of the affected retirees.

The first private sector pension arrangement to be established in Nigeria was for workers in the Nigerian Breweries (1954), followed by the United African Company (UAC) in 1957. In 1961 the National Provident Fund (NPF) was established for the non-pensionable private sector workers. The primary function of NPF was to reduce income loss during retirement and provide financial security for workers as mandated by the International Labor Organization (ILO) enshrined in its Social Security (Minimum Standards) convention, 1952 (No.102). The scheme protected only workers in the private sector with a monthly contribution of 6% of their basic salary to be paid on equal proportion by the employer and the worker (Abdulazeez, 2015; Meknassi, 2005).

The first Pension Reform in Nigeria was the Act No. 102 of 1979 ratified by the Federal Government in 1979 with an operative date of 1st April 1974. It is purposely designed for government workers by the Udoji Public Service Review Commission of 1974. The Act was Pay As You Go (PAYG) and defined benefit (DB) in nature funded from the government's annual budget. However, the Act combined all other Pensions laws and served as essential Act which breeds other pension laws in Nigeria (Barrow, 2008). Despite tremendous efforts made by the government to establish a good retirement scheme, management of the scheme has faced many problems because it was not adequately funded and completely mismanaged. The system could not record any remarkable success. The situation has brought untold hardships and poverty to millions of retired workers who could neither earn much income nor save adequately during their working life (National Pension Commission, 2006; Orifowomo, 2006).

Having observed the failure of the old pension system (DB), the Nigerian government decided to overhaul the legal framework for pension administration. This led to a total change from the PAYG system to a defined contributory scheme (DC). The new Act was passed into Law on 23rd June 2004 by the Nigerian Senate and assented to the President on 25th June 2004. The new DC scheme came into force for all public sector workers on 1st July 2004 and 1st January 2005 for the private sector workers respectively. Thus, the scheme applies to all personnel in the public and the private sectors (Orifowomo, 2006).

The new system made it compulsory for organizations and workers in the public and private sectors to open a Retirement Savings Account (RSA). The pension fund administrators (PFA) manage the account on the condition that the employer and employees will contribute 7.5% each of every monthly salary payment in the RSA. In the case of the armed forces, the rate of contribution is in the proportion of 2.5% by the employee and 12.5% by employers (Olurankinse, 2010). However, the inherent weaknesses of the DC scheme, coupled with systemic problems, have exposed the Nigerian retirees to untold hardships and sufferings. In the struggle to solve the inadequacy as mentioned above, the Federal Government of Nigeria (FGN) promulgated the Pension Reform Act 2014 (PRA'14). The Nigerian President Dr. Goodluck Ebele Jonathan approved the new Pension Reform Act 2014 on 1st July 2014. The Act (PRA'14) annulled the existing Pension Reform Act No.2 of 2004. Like the invalidated Act, the new Act (PRA'14) directs and controls the management of the pension scheme in the country.

2.4 The Public and Private Sectors, Pension Plans in Nigeria

The Pension Reform Act (PRA'14) provides all the rules governing the operations of Nigerian pension plan in Nigeria. The Act (PRA'14) provides a Defined Contributory (DC) plan for both the public and private sectors operated through a Contributory Pension Scheme (CPS). Details of the scheme will be discussed in this section.

2.5 Enrolment into the Pension Plan (Public and Private Sector)

The Act (PRA'14) established a set of rules, regulations and standards for the management and payments of retirement entitlements of the public and private sectors workers. Therefore, it is designed to enhance mandatory participation in the Contributory Pension Scheme (CPS). The plan applies to all workers in both the public and the private sectors with five or more employees. In the case of private companies with less than three workers, the act provides operational guidelines governed by the National Pension Commission (PenCom). However, the Act is still silent on those private organizations with more than 3 but less than 15 workers.

2.5.1 The Retirement Savings Account (RSA) of the Workers

The scheme provides that every worker (public and private) must open and maintain a retirement savings account with any chosen Pension Fund Administrator (PFA). The Act (PRA'14) provides an upward review of the rate of the retirement savings contribution from 15% to 18%. The workers and companies jointly fund the Retirement Savings account (RSA) from their monthly emoluments to a minimum of 8% (workers) and 10%, (companies) each. Any company that wishes to bear the full RSA cost of their workers will be expected to provide a minimum of 20% to the Plan

(Aibieyi & Christopher 2016). In an event where the worker refuses to open a retirement savings account within six months after resuming work, his organization should request the PFAs of their choice to open the RSA on his behalf for onward deposit of his contributions. Again, in a situation where the organization fails to comply with the stipulated law, the Pension Commission is authorized to take disciplinary actions against that organization (Pension Act, 2014).

2.5.2 The Retirement Benefits and Planned withdrawals (Public Vs Private)

The Act (PRA'14) has stipulated that any holder of retirement saving account shall, upon attainment of 50 years of age, withdraw from his RSA account. The withdrawal can be in a lump sum depending on the available credits in his RSA, provided the amount left in the account can fund an annuity by the set down rules of the commission (Pen Act 2014). The Act also provides that the worker shall not make any withdrawal from his retirement savings account before the attainment of 50 years of age. However, any worker who is disengaged from his/her work or retires, on health ground before 50 years he/she cannot withdraw from his RSA. The law further states that any worker who lost his job before the age of 50 years and could not find another work within four months of his disengagement may be authorized by the Pension Commission to withdraw a minimum of 25% from his RSA as stipulated in section 7, 2, and 3 of the act (PRA'14). The law provides that if a holder of RSA dies, his beneficiaries can claim his entitlements under his life insurance policy.

2.5.3 Differences in the Pension Plans (Public Vs Private)

Despite the uniformity in the Pension plan, there are some differences between the two sectors. For instance, apart from the monthly contributions made by the public sector worker, the Federal Government contributes a redemption fund of 5% to the RSA account of the public sector workers payable from the consolidated revenue account of the federation. In contrast, the private sector workers and the company bear the burden of the contributions alone. The act mandated that the accrued pension rights and retirement benefits of the public sector workers shall be reviewed from time to time, provided there are no changes in the salary and wages of the workers and credited to his RSA. However, this provision does not include the private sectors workers (Pen Act 2014).

The Act (PRA'14) provides that any public university professor or political office holder, under the amendment act by their condition and terms of service, will enjoy full retirement benefits. The pension commission has issued modalities on how to manage their RSA. And if there is any shortfall, the Commission will augment such from the statutory budget of their employers. In contrast, the act did not make any provision for Principal officers (e.g., senior managers, directors or managing directors) in the private sectors. Apart from these differences, all other entitlements and benefits provided in the act cut across the two sectors on an equal proportion.

2.5.4 The Strength of the Pension Reform Act 2014

The new Contributory Pension Scheme (CPS) caters for the welfare of both the public and private sectors workers. The Act (PRA'14) provides that any interests or dividends

generated from investments or any income accruable to RSA funds or its asset are not taxable. However, the act has further explained that if such returns include interest on government securities, then tax should be deducted from the accrued income. The Act (PRA'14) shows the type of investments units in which the contributed funds can be invested. The investments units comprise of specialized investment funds and financial portfolios which may be approved by PenCom. The instruments consist of federal, state and local government bonds, securities and bills. Others are the investment in ordinary shares from the private limited liability companies issued by the Nigerian Security and Exchange Commission (NSEC).

The act provides severe penalties to pension fund administrators (PFAs) who tend to misuse the contributed funds or assets. However, the managers are required by law to secure and safeguard the funds by providing a contingency Reserve with the Pencom to the tune of 12.5% of their annual net profits after tax. Also, each PFA is expected to set and manage a Pension Protection Fund capable of securing the benefits of their clients. Interestingly, all RSAs holders who maintain steady deposits for some number of years shall be qualified to enjoy some minimum pension benefits to be prescribed by the pension commission. The act further provides that any person or group of people disguised as pension managers or collected pension deposits from any company without a License shall be convicted in the court of law and charge a penalty of not less than USD29,000:00 (N10Million). Despite all of these advantages, the scheme still has some weaknesses and will be presented in the next section.

2.5.5 The Weaknesses of the Nigerian Pension Plan

The Nigerian workers have high expectations of the new pension scheme which arise from the urgent need to have sustainable retirement well-being and payment of their benefits as at when due. However, the Contributory Pension Scheme (CPS) has caused different problems which affect the efficiency of the PFAs in meeting the retirees' expectations. Most of the workers in Nigeria were not enlightened on the mode of operations of the new scheme. On the other hand, the process of establishing the guaranteed minimum pension (GMP) by Pension Commission (Pencom) to protect all RSA holders who might not have accumulated enough money to enjoy a modest retirement lifestyle (Section 84 (1) of PRA 2014) is yet to be completed. The GMP is a form of financial assistance from the government which acts as a safety-net for the retirees. For more than a decade, the procedure for executing the GMP is yet to be concluded by the commission due to administrative and computational problems (Amazu, 2015; CBN, 2015).

Thirteen (13) years after the pension reform (2004-2017), the level of compliance within the working population is not encouraging. Despite the provision of the act which stipulates that all private sectors with at least five employees be required to enroll in the scheme, only 26 out of 36 states, including governmental organizations, have fully registered in the scheme amounting to a total of 3,308,661 contributors. The compliance rate in the private sectors has remained a serious issue of concern because only about 200,000 employers of labor have enrolled in the plan with a total number of 3,698,073 contributors. Summarily, the figure mentioned above represents 7.1% of the Nigerian working population and 3.8% of the entire country's population.

The enrollment figure is not encouraging given the fact that the number of private enterprises operating in Nigeria is more than one million. (Gunu & Tsado, 2012; Amazu, 2015; PENCOM, 2016).

2.6 The Operators of the Nigerian Pension Plan

The operators of the pension plan in Nigeria include the National Pension Commission (PENCOM), Pension Funds Administrators (PFAs), and Pension Funds Custodians (PFCs). Details of their activities will be presented below.

2.6.1 The National Pension Commission (Pencom)

The Act (PRA'14) established the Nigerian Pension Commission (Pencom) to serve as a regulatory agency in Nigeria. It supervises the entire pension activities in the country. The Pencom is mandated by law to monitor and guarantee prompt payments of retirement benefits to the pensioners at the right time. The commission is expected to follow and safeguard the funds by giving rules, provide operation permits, approve, regulate and keep records of the investment performance of the PFAs. They serve as the watchdog of the plan by acting in the interest of all stakeholders (Pen Act. 2014).

2.6.2 The Pension Funds Administrators (PFAs)

The pension funds administrators (PFAs) are mandated by the new Act 2014 to open retirement savings account for all Nigerian workers. They invest and maintain the funds in a fixed income securities and other portfolio assets as may be defined by the Pension Commission. The PFAs keep records and maintain the books of accounts of all pension management and transactions. They also provide periodic reports on

investment policy, market gains and other performance indices to the Pencom. The PFAs are to issue service assistance to the workers, issue RSA account balance statements on request, calculate and pay retirement benefits to the beneficiaries following the laid down rules (Pen Act. 2014). To safe guide the investor's assets, the Act provides penalties to serve as a warning on any case of diversion of the retirement funds under any pretext by the pension funds administrators (PFAs). According to the new scheme, any PFA operator who abuses the retirement fund will be liable to ten years in jail or to a fine equivalent to three times the amount stolen or misused (Eme, Uche & Uche, 2014).

2.6.3 The Pension Funds Custodian (PFCs)

The pension funds custodians are mandated by the Act (PRA'14) to keep custody of all pension funds and assets in trust for the employees or RSAs beneficiaries. Upon the receipt of the funds, the PFCs notify the PFAs within 24 hours. The PFCs then credit all the funds remitted by the employers to the beneficiaries RSA and maintain balance with PFAs account. The PFCs report to the commission all matters regarding the assets at their custody on a periodic basis. It also undertakes statistical record of all investment and returns to the PFAs and the PenCom (Pen Act 2014).

2.7 The Study Area

Nigeria is the most populated country in the African sub-region with a population of over 180 million people (NBS, 2016). It is located within 4000, 16111 and 13000, 53111 north of the equator and 2000, 40111 and 14000, 41111 east of the Greenwich Meridian. The country shares her border with the Republic of Niger in the north, Chad

in the northeast, Cameroon in the east, and the Republic of Benin in the West. To the south, Nigeria share a boundary with the Gulf of Guinea and part of the Atlantic Ocean with a total area of approximately over 923,000 sq. Km (356,000 sq. meters). Nigeria is two times larger than California in the United States (Central Intelligence agency, 2009; NPC, 2000). The country's landscape consists of coastal marshlands, lowlands, gently sloping plains and special highland. The third longest river in Africa, called the River Niger, crosses the northwest and flows towards the southern coast linking the Gulf of Guinea through the delta province. The Nigerian weather condition starts blowing from the equatorial to the semi-arid region moving from the beach to the south down to the savannahs in the north (World InfoZone, 2009).

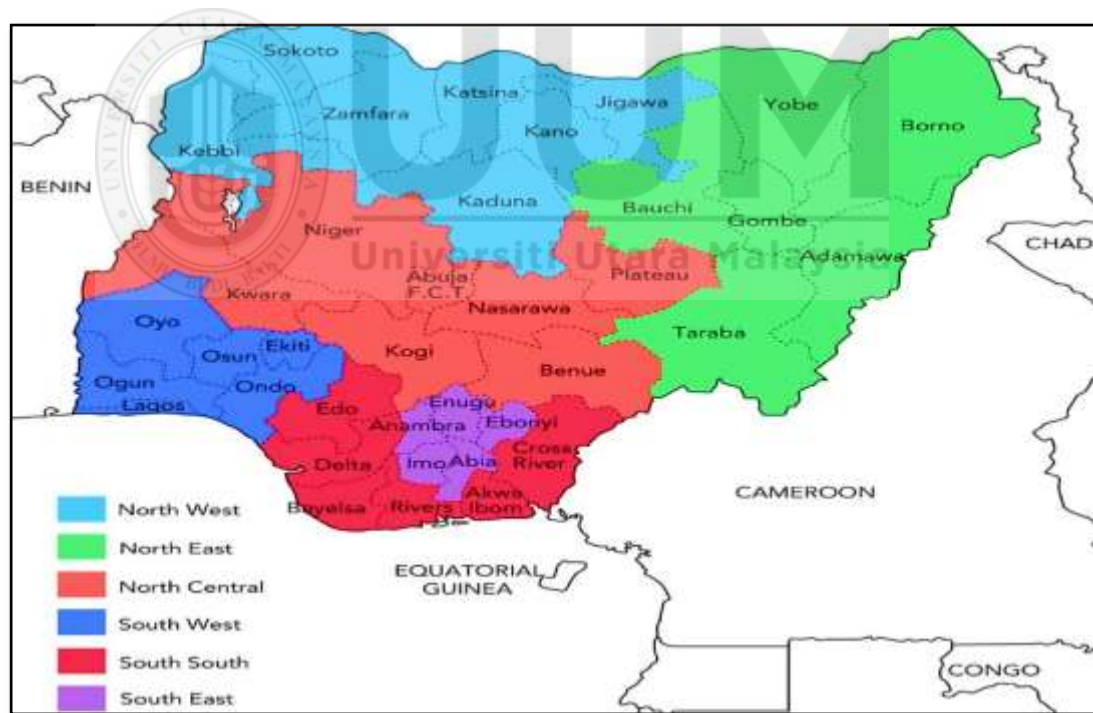


Figure 2.1

Map of Nigeria Indicating the Six Geo-Political Regions

Source: Alexander Thurston (2015) Background to Nigeria's 2015 Elections. CSIS

Nigeria consists of 36 states spread across six geopolitical zones, namely: Northeast (6 states), North West (7 states), North Central (5 states), South East (5 states), South West (5 states) and South-South (6 states) as presented in Figure 2.1 and Table 2.1 (Aigbe & Zannu, 2012; NBS 2010). Employers of labor in Nigeria are the public and private sectors. The public sectors include governments and publicly- controlled, or funded agencies (parastatals, government corporations or enterprises). Others are the federal, state and local governments organizations, ministries, extra/non-ministerial departments (NBS, 2010). The private sectors are regarded as independent business entities which operate in the informal parts of the economy. The private sectors comprise of small and medium scale enterprises (SMEs) and multinational corporations (NBS, 2010; Osemeke, 2011).

Table 2.1
Number of states in each of the geo political Zones in Nigeria

S/N	North East	North West	North Central	South East	South West	South South
1	Adamawa	Jigawa	Benue	Abia	Lagos	A/Ibom
2	Bauchi	Kaduna	FCT	Anambra	Ogun	Bayelsa
3	Borno	Kano	Kogi	Ebonyi	Osun	C/Rivers
4	Gombe	Katsina	Kwara	Enugu	Ondo	Delta
5	Taraba	Kebbi	Nassarawa	Imo	Oyo	Edo
6	Yobe	Sokoto	-	-	-	Rivers
7	-	Zamfara	-	-	-	-
Total:	6	7	5	5	5	6

Sources: NBS Annual Statistical Abstract (2010)

2.8 An overview of the Public and Private Sectors in Nigeria

The history of the public sector in Nigerian could be traced to the colonial period down to the independence era. The Colonial rule, spear headed the amalgamation of the Southern and Northern protectorates of Nigeria in 1914. Under the leadership of Governor Lord Fredrick Lugard, the colonial government established. for the first

time, what seemed to be a unified civil service. The hierarchical arrangement recognized the upper level of the colonial service to be dominated by the Europeans and they were regarded as controlling executive, judicial and legislative powers, while the traditional rulers were appointed at the lower cadre of the colonial power structure (Ayeni, 2002). With the development of regionalism in 1954, three Regional Civil Services were centrally designed in each of the regions. More so, the Federal and Regional Services later developed the professional civil service within their respective areas. After Nigeria's independence in 1960, the role of the civil service was transferred from the colonial style of maintaining law and order to that of smoothing the process of national development (Ayeni, 2002).

The Nigerian public sector consists of three different levels of management whose position, authorities and influences are well explained in the Constitution. They are the federal, state and local governments. The federal and state governments perform their functions through Ministries and Public Enterprises. The government recruits its personnel based on their skills/qualification and expertise. However, public enterprises consist of all establishments, authorities, boards, councils and Limited companies in which government acquires full or specific share holdings (Imaga, 2003; Osemeke, 2011). It is imperative to note that a greater part of governmental activities was organized by the public enterprises, at times called parastatals. The common features of public enterprises are separate legal entity of public ownership and control. Others are statutorily defined objectives, partially autonomous board appointed periodically for a limited term, privileges, responsibilities, and areas of coverage (Osemeke, 2011).

Nigerian public enterprises may be in the form of limited liability companies wholly or partially maintained by the government or public companies set up by the authorities. The objective of establishing public companies is to render services to the members of public at an affordable cost. The Nigerian public sector, therefore, represents the domain where the government operates for the benefits of the people. This is different from the private sector where individuals operate. Thus, presently, there are 338 federal ministries and extra- ministerial departments spread across the six geo-political zones (NBS, 2016).

During the colonial era (1900-1960), the Nigerian economy was predominantly private-sector based aimed at exploring the scarce resources, promote investment, and industrial development. It was designed to produce goods and services for economic improvement, as well as the promotion of the welfare of the citizens. The sector refers to all economic establishments, business organizations, and cooperatives entities, etc. that do not belong to the government. The private sector companies are frequently called the market system, free enterprise, or the profit system (Jerome, 1999; Adem, 2006).

In Nigeria today, the private sector comprises of any entrepreneurial person or any proprietor that employs labor or company and is not owned by any public authority (Hussain & Nadol, 1997). However, any person who is an employee or a proprietor and doesn't belong to any public company is assumed to be working in the private sector (Sanda, Dogon-Daji & Abdullah, 2006). Thus, the private sector operates in large sections of the informal parts of the economy. It comprises of small and medium

scale enterprises (SMEs) or the multinational companies. It is characterized by over dependence on public authorities for sponsorship and periodic contracts (Osemeke, 2011). Nigeria has a total 37,067, 416 private enterprises spread across all states of the nation (SMEDAN, 2013).

2.9 The Retirement Planning Behavior (RPB)

Discussing the issues of human behavior from the physiological processes down to social institutions is entirely a complex phenomenon. For many years, understanding and predicting human behavior have been of interest to psychologists and researchers at large. In general, the prediction of human behavior can be achieved if there is a clear understanding of cognitive variables. Therefore, the focus of this behavioral study is the relationship between retirement planning behavior and attitude towards retirement planning, subjective norm, perceived control over retirement planning, personality traits, and knowledge of financial planning for retirement.

The concept of behavior, therefore, is defined as an individual's observable response with regards to a given circumstance and target. Behavior cuts across time and condition to produce a more broadly measures of behavioral performance (Ajzen, 1991; 2006). Retirement planning behavior has acquired an increasing significance both as a concept and as a process as can be observed in most developed countries around the world where retirement is seen as an institution and segment of life. Retirement planning behavior is coined out from Ajzen's concept of behavior. Scholars have offered a wide range of definitions in that regard. For instance, Lee & Law (2004) have defined RPB as an idea that centers on a set of events, financial and

health planning. Hearn, Borstorff & Thomas (2005) regard it as a process which changes one's awareness and behavior as they move through their profession and consider retirement as imperative. Petkoska & Earl (2009) have defined RPB as the rate at which workers participate in issues of finance, health, interpersonal /leisure, and planning for retirement to achieve a targeted goal. However, Gutierrez & Hershey (2015) suggested that RPB is a stage in retirement planning which includes situation assessment, formulation of goals and how to achieve them in the future.

In this study, therefore, RPB is used as a dependent variable and it is defined as a complex set of behaviors, determined by the individual's attitude towards retirement planning, subjective pressures from others and the ability to have control over retirement planning all of which are influenced by the knowledge of financial planning for retirement and the personality of the workers. Review of literature indicated that RPB has a close inter-relationship with financial planning for retirement and savings decision of the workers (Lusardi, 2003; Lee & Law, 2004; Borstorff & Thomas, 2005; Hira, 2009; Petkoska & Earl, 2009; Moorthy et al., 2012; Muhidin et al., 2013; Clark et al., 2015; Hassan et al., 2016; Kajauchire, 2015; Talib & Manaf, 2017). Some scholars have suggested that psychological factors also relate with RPB and even play a significant role in determining the retirement plans of a worker. These factors include future time perspective, retirement goal clarity, self-rated financial knowledge, Income savings behavior, demographic indicators, personality construct and positive attitude towards retirement (Hershey & Mowen, 2000; Hershey, 2004; Hershey et al., 2007; Petkoska & Earl, 2009; Topa et al., 2009).

Thus, retirement planning behavior is a model of preparation and saving throughout the individual's life. Planning and saving can assist in forming appropriate financial security, independence, and acquisition of economic freedom at retirement (Hershey, Kopusko, Kiso & Gerrans, 2015). Retirement planning behavior includes financial knowledge which shapes the attitude of the workers towards planning and setting aside certain amount of money purposely for retirement. These savings will enable the workers to cater for their retirement needs such as the ability to pay for excellent healthcare, standard balanced diet, and acquire an affordable residential apartment. Financial experts have recommended that the retirement transition should be treated with caution and good thought (Kahana et al., 2003).

2.9.1 Constructs Used in Measuring Retirement Planning Behavior

The concept of RPB has received less consideration within the existing works due to weak measurement constructs (Muratore et al., 2010). Review of literature in the field of economics, political and psychological field of study are mostly concerned with financial planning for retirement (e.g., Hershey & Mowen, 2000; Morgan & Eckert, 2004; Rossiter-Base, 2004; Denton et al., 2004; Caliendo & Aadland, 2007). Surveys into wider areas have recently been observed (Dorfman, 1989; Ferraro, 1990; Glass et al., 2000; Denton et al., 2004; Hershey et al., 2007).

Though most of the studies viewed RPB from the broader perspective. Yet, they only focused on one or more retirement planning variables such as demography, goal clarity etc (e.g., Clark, Lusardi & Mitchell, 2017; Hassan et al., 2016; Hira et. al., 2009; Kajauchire, 2015; Lee et al., 2004; Moorthy et al., 2012; Mohidin et al., 2013; Mutran

et al., 1997; Muratore & Earl, 2010; Reitzes & Mutran, 2004). Others have offered only qualitative information on retirement planning (e.g., Denton et al., 2004; Rossiter-Base, 2004; Kemp, Rosenthal & Denton, 2005). It is very important to come up with an appropriate measures of retirement planning behavior that will focus on a broad number of behavioral domains.

In line with the above statement, this study has suggested suitable constructs for measuring retirement planning behavior adapted from Stawski & Hershey (2007). The researchers viewed RPB as an activity which includes a comprehensive range of behaviors that enable the worker to search for retirement information, attend a meeting with financial or retirement managers, and reading investment articles. It also includes listening to retirement planning programs on radios or TV and browsing retirement planning sites followed by participating in retirement planning lectures and workshops or taking part in retirement training (Bernheim & Garrett, 1996; Joo & Grable, 2001; Lusardi, 2003; Richardson, 1993; Madrian & Shea, 2001; Stawski & Hershey, 2007).

All these mentioned activities seem to be very important in the sense that they help to enhance the knowledge of the pre-retirees (Bernheim, 1998). They also stimulate savings among them (Gustman & Steinmeier, 2001). On the other hand, educational programs organized by either a group or organizations, such as seminars apparently serve as a motivating factor which enhanced positive attitude toward investment (Abel & Hayslip, 1987; Lynch, Ogg & Christensen, 1975) and, concurrently, increased satisfaction during retirement. (Taylor-Carter, Cook & Weinberg, 1997).

The critical aspect of retirement planning activities which happen to be an instrument of measuring individual behavior has not been given due consideration. Examples of such actions comprise of a general assessment of investment and financial records. It also entails calculating the actual amount required to achieve an anticipated befitting lifestyle. It determines individuals' retirement contributions. Others include intensive assessment of investment units and forming a long-term financial plan. Equally, the period devoted to thinking about retirement issues is also considered as part of retirement planning activities (Jacobs-Lawson, Hershey & Neukam, 2004; Stawski, Hershey & Jacobs-Lawson, 2007).

2.9.2 The Theory of Retirement Planning Behavior

Analyzing human behavior is one of the most complex stages of research because of the process range from physical processes to attention on societal institutions. Social and personality psychologists point to the transitional phase of human behavior which ultimately affects the working individuals. However, the perceptions of behavioral characters, like social behavior have played a significant role in predicting individual actions (see Ajzen, 1988; Campbell, 1963; Sherman & Fazio, 1983). Several theoretical contexts were proposed to tackle the emotional processes of human behavior. Therefore, the present study has reviewed and adopts the theory of reasoning action (TRA) and theory of planned behavior (TPB) as underpinning theories of this study.

2.9.2.1 The Theory of Reasoning Action (TRA)

The Theory of Reasoning Action (TRA) is one of the most influential theory of human behavior introduced by Martin Fishbein and Icek Ajzen and its descendants such as Ajzen's theory of planned behavior (Ajzen & Fishbein, 1980; Fishbein, 1963, 1967, 1980; Fishbein & Ajzen, 1975). The theory of reasoned action (TRA) states that behavioral intentions (what one intends to do or not to do) is determined by the attitude towards behavior (one's evaluation of the behavior) and subjective norm (one's evaluation of what important others think one should do) which, in turn, causes the behavior in question. Usually, the relationship between intention, attitude, and behavior is explained by simple multiple regression analyses, where the behavioral intention is regressed on to attitude and subjective norm. Thus, attitude towards the behavior is determined by behavioral beliefs (beliefs about the consequences of the behavior) and evaluations of how good or bad it would be if those behavioral consequences occurred. Subjective norm is determined by normative beliefs about what important others (family, friends, peers) think one should do and how one is inspired to comply with those important others. Both attitude towards the behavior ($\text{attitude} = \sum b_i e_i$), and subjective norm ($\text{subjective norm} = \sum n_i m_i$) are assumed to be determined by summative processes.

2.9.2.2 The Theory of Planned Behavior (TPB)

The theory of planned behavior (TPB) is an extended form of the theory of reasoning action (TRA) (Fishbein, 1967; Fishbein & Ajzen, 1975). The theory proposes that human behavior is controlled by the behavioral beliefs about the consequence of behavioral performance, the normative assumptions about the action of the referent

groups (family, friends, peers) and the control beliefs about the factors governing the behavioral performance (Ajzen, 1988, 1991;2001). In line with the aggregation principle, the behavioral beliefs resulted in a positive or negative attitude toward the behavior, and the normative beliefs lead to the subjective norm or pressure from important referent groups (family, friends, peers). Control beliefs give rise to perceived control (resources, skills and information), which serve as the ability to have control over factors that may or may not facilitate the behavioral performance (Ajzen, 1991; 2002). Therefore, the aggregates of attitude, subjective norm, and perceived control encourage the establishment of intention and behavior. Considering the level of control over resources, skills and availability of information, individuals are required to willingly carry out their intention and behavior. Therefore, the intention is the predictor of behavioral performance (Ajzen, 1991, 2002).

2.10 The Determinants of Retirement Planning Behavior

Review of existing studies has shown that different factors are responsible for retirement planning behavior. Most of the studies suggested that demographic factors, educational qualification, and level of monetary earnings are the significant determinants of RPB (Hira et al., 2009; Moorthy et al., 2012; Kajauchire, 2012; Mohidin et al., 2013; Clark et al., 2015; Hassan et al., 2016; Talib & Manafi 2017). Other determinants of retirement planning behavior include financial literacy/information, knowledge, risk tolerance, self-awareness, and retirement goal clarity. Self-rated financial planning, retirement savings, perceived personal control and potential conflicts to retirement are also believed to influence retirement planning behavior. Ability to recover from loss, attitude towards personal financial planning,

money management, investment and estate planning are also assumed to influence retirement planning behavior (Hira et al., 2009; Kajauchire, 2015; Mohidin, et al., 2013; Clark et al., 2015; Hassan et al., 2016).

In this study, therefore, attitude towards retirement planning, subject norm, perceived control over retirement planning, personality and knowledge of financial planning for retirement would be used as independent variables (IVs). Thus, an elaborate explanation of these factors and how they relate with each other to influence RPB would be discussed.

2.10.1 Attitude Toward Retirement Planning

Attitude towards behavior is the most useful concept in modern psychology. It is considered as the rate at which the behavior is positively or negatively measured (Ajzen 1991; 2006; Ajzen et al., 2013). Allport (1935) has viewed attitude towards behavior as the psychological state of willingness acquired through experience and influenced by the individual's response to interrelated issues. In a different approach, Pickens (2005) regards attitude toward behavior as sets of personality, beliefs, values, behaviors and motivations to act in line with the individual's experience and character. In this study, the attitude towards retirement planning is regarded as the positive or negative perception of individual worker's towards retirement planning. Attitude towards planning is nurtured through learning or direct experiences acquired through people and situations. Attitude influence individual decisions, guide behavior, and impact on individual's selective actions (Pickens, 2005). In general, attitude toward

behavior constitutes the most significant source of all social decision making (Begum et al., 2009).

The expectancy-value model, has suggested that attitude toward behavior is determined by individual beliefs about the object of the attitude which is associated with certain attributes, linking each belief with the behavioral outcomes. In some instances, the belief linking the attribute has resulted in behavioral performance (Fishbein & Ajzen, 1975). Therefore, attitude towards behavior is a factor determined by available belief about the “object” and "attribute" that guides individual's behavioral performance (Fishbein & Ajzen, 1975; Ajzen, 1991; Krosnick et al., 2005; Ajzen et al., 2013). However, the features leading to the behavioral performance are positively or negatively measured which automatically influence one's attitude. In the same fashion, favorable attitude favors behavioral performance while unfavorable attitude toward behaviors lead to poor behavioral performance, individual's (Ajzen 1991; 2006). Therefore, the consequences of this subjective assessment have a proportionate impact on the behavioral belief about the behavior in question (Ajzen, 1991). Thus, behavioral belief is the primary determinant of attitude toward behavior.

Review of literature have shown that within the growing body of retirement studies, less attention has been given to the planning stage because the existing literature mainly focus on attitude toward retirement (Goudy, et al., 1980; Glamser, 1981; Solomon, 1981; Atchley, & Robinson, 1982; Kilty, & Behling, 1985; Hanisch, & Hulin, 1990; Richardson & Kilty, 1991; Taylor & Shore, 1995; Lim, 2003; Henkens, 2005; Desmette & Gaillard, 2008). Though Turner et al. (2009) have proposed that

demographic factors influence attitude toward retirement planning. In a different view, Talib and Manaf (2017) have proposed demographic features and self-awareness as the factors influencing attitude towards retirement planning. In this study, therefore, attitude toward retirement planning is determined by behavioral belief, subjective pressure from the important referent group, and control over retirement planning while knowledge, and personality of the individual motivates his/her attitude toward retirement planning. (Perkins 2005; Ajzen, 1990).

2.10.2 Subjective Norms

Subjective norm is regarded as an individual's thought about the social influence from the important referent groups (e.g. family, friends and others) to or not to execute the behavior (Ajzen, 1991; Fishbein & Ajzen, 1975; Francis et al., 2004). In other words, the subjective norm relates to the perception of individual's social influence from very important personalities (e.g. family, friends and others) to either act or not to act in a positive manner and the motivation to comply with the behavior of those people's opinions (Ajzen 1991; 2006; Ham, Jeger & Frajman Ivković, 2015). Although most of the studies that explicitly used the TPB acknowledged social influence as a substitute of subjective norm (Vries et al., 1995; Vitória et al., 2009; Balbo & Mills, 2011; Griffin et al., 2012; Akar et al., 2015), others regard it as a peer influence (Bauman & Ennett, 1996; Mounts & Steinberg, 1995; Lee, 2010; Marshal & Chassin, 2000; Mangleburg et al., 2004; Gillani, 2012). All of these variables, including attitude towards the behavior, and perceived control over the behavior are regarded as proximal predictors of behavioral intention, and behavior (Ajzen, 1988; 1991; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

Given the above, therefore, this study has adopted subjective norm to serve as a factor that influences retirement planning behavior (Ajzen 1991). Hence, subjective norm is the willingness and motivation to comply with perceived social pressure from members of the family, friends, co-workers or organizational authorities of the worker to either engage or not to participate in retirement planning behavior. Though there is shortage of studies showing direct relationship between subjective norm and behavior, Manning (2009) has proposed the possibility of subject norm having an immediate effect on behavior. He suggested two ways in which subjective norms can affect behavior. Firstly, the mediating influence of subjective norm on behavior through intentions (Ajzen, 1991), and the direct influence of subjective norms on the behavior (Manning, 2009).

However, retirement planning literature are of the opinion that one of the features of the subjective norm is the perception of spousal influence towards retirement planning (Noone et al., 2010). The influence of spouse was found to encourage the individual's retirement planning. Previous studies have suggested that discussing retirement issues with a spouse is an act of retirement planning because such kinds of discussions may inspire individuals to engage in retirement planning behavior (e.g., Noone, Stephens & Alpass, 2010; Smith & Moen, 1998). Hershey et al. (2010) are of the view that when individuals perceived their spouse to recognize the importance of retirement savings, the individual may likely engage in financial planning for retirement. Likewise, Noone et al. (2009) have suggested that those persons who have discussed retirement issues with their spouse were more satisfied with their retirement life in the long run.

Although positive spousal support prevails in the existing literature, a comprehensive evaluation of negative relationship is equally important (e.g., Walen & Lachman, 2000; Uchino et al., 2004). Thus, spousal negativity is the unpleasant interaction which is contrary to the spousal support (Brooks & Schetter, 2011; Okun & Lockwood, 2003). Spousal negativity could cause tension, stress, and reduced the individual's well-being (Cranford, 2004; Rook, 1984; Walen & Lachman, 2000). Such negative associations may likely discourage retirement planning.

In line with the simple analogy of the expectancy-value model of attitude toward behavior, subjective norm is assumed to be determined by normative belief about the rate at which the significant others such as family members, friends, etc. want the individual to comply with their behaviors. The urge to comply with the behavior of essential others has a direct influence on the subjective norm of the individual to the extent that the referent groups (family members, friends) think that he/she believe it is necessary to engage in the behavior (Ajzen, 1991; Ajzen 2006; Ajzen, 2016). In this study, therefore, the subjective norm is determined by the perceived social pressure from family members, friends, co-workers and organizational authorities like the worker's supervisors and superior officers. The motivation to comply with their behavior consists of a positive attitude toward retirement planning, perceived control over retirement planning, knowledge of financial planning for retirement and the influence of personality (see Ajzen, 1991).

2.10.3 Perceived Behavioral Control over Retirement Planning

The TPB is an updated version of the TRA which has proposed that a sizable number of human behaviors falls within the domain of free control and can only be predicted from behavioral intentions (Fishbein & Ajzen, 1975), thus leading to the formation of perceived behavioral control (Ajzen 1991; 2002). Perceived behavioral control is the individuals' thoughts about their skills or ability to engage in behavioral performance (Ajzen, 1991; 2006). Therefore, perceived control over retirement planning is adopted from PBC. Perceived control over retirement planning is the perception, skills or ability of the worker to engage in retirement planning. A high level of perceived behavioral control ought to inspire the person's intention to participate in the behavior while the low level of PBC decreases the motivation to engage in the behavior (Ajzen, 1991).

The PBC is very useful in measuring individual's actual control. In general, perceived behavioral control has proved very useful in understanding the decision-making process underlying the retirement planning behavior. Thus, the ability of individuals to have control over their behavior depends on the perceptions, nature, and adequacy of resources, skills and information as highlighted in different studies (Ajzen & Madden, 1986; Beale & Manstead, 1991; McCaul et al., 1993; Wankel & Mummery, 1993). Hence, perceived behavioral control is believed to both indirectly (through intentions) and directly influence behavior (Ajzen, 1988, 1991).

Theoretically, there are shortage of studies related to perceived behavioral controls and retirement planning behavior. It is worthwhile to bridge the gap by testing the link

in the present study. Review of existing studies on retirement literature has suggested that persons with moral self-control were more likely to engage in retirement savings (Brandstätter, 2005; Laibson, Repetto & Tobacman, 1998). Those with weak moral self-control may not be determined to manage, accumulate wealth and probably engage in retirement savings which serve as an act of retirement planning behavior (Lunt & Livingstone, 1991). Also, the outcome of retirement planning behavior can be observed in the study of Moen et al., (2006) which has argued that higher levels of personal ability and control significantly influence financial planning and management of life after retirement.

Thus, perceived behavioral controls have reduced negative emotions and boosted positive feeling among retirees (Bye & Pushkar, 2009). Similarly, Van Schie et al., (2012) is of the believe that the sense of financial control motivates individuals to plan which, in turn, leads to a stronger intention to save for retirement, especially if the individuals are not specific on their retirement savings. Hence, it will be assumed that perceived control over retirement planning may lead to positive retirement planning behavior of the workers.

In line with the expectancy-value model of attitude towards behavior, PBC is determined by sets of available control beliefs about the existence of issues that may permit or prevent the behavior (Ajzen, 1991, 2006). All things being equal, a high PBC is expected to support the individual's intention to engage in the behavior through increased effort and determination. Therefore, perceived behavioral control can indirectly affect behavior through intention and when PBC is coincidental, it provides

valuable information on the actual control on how an individual can behave (Ajzen, 1991). In such situations, therefore, PBC can be used as a direct predictor of behavior (Ajzen, 2002).

2.10.4 The Background Factors

The theory of planned behavior, which is an extension of theory of reasoning action (TRA), assumes that the significant factors influencing intentions and behavior reasonably follow from attitude, subjective norm and perceived behavioral control (Ajzen 1991; Ajzen & Fishbein, 2005). These factors can be understood through behavioral, normative, and control beliefs. Though the TPB has failed to explain the origins of these beliefs, many factors may likely influence individuals' belief. For instance, age, sex, ethnicity, socioeconomic state, educational qualification, race, religious association, personality, mood, emotion, general attitude and values, knowledge, group membership, past experiences, exposure to information, social support, coping skills, and lots of others (Ajzen & Fishbein, 2005).

The TPB has explained the importance of these background factors because some of the factors affect behavioral, normative or control beliefs which ultimately influence attitude, subjective norms, or perceived behavioral control (PBC) and indirectly influence intention and behavior. Though researchers hardly report the direct effects of these factors (background factors), but their influence may not likely have a direct effect on intention or behavior. In spite of the proceeding notion, they have some significant impacts on the attitude, subjective norms and perceived behavioral control of the individual (Ajzen, & Fishbein, 2005). This study, therefore, examines two

background factors (personality trait and knowledge) to serve as determinants of retirement planning behavior.

2.10.4.1 Personality Traits

Personality is an emotional trait and enduring behavioral disposition which affects human behavior across different circumstances or situations. It describes the association of the individual's character, traits, attitude, and habits (Ajzen, 1991;1987). Personality trait is a constant and continuing characters which affects individual lifestyle or general believed. It is a form of thoughts, feeling and behavior that are relatively stable over time and circumstances (Costa & McCrae, 1986). Personality trait is the total amount of behaviors in which individual performs and relates with others (Ersche et al., 2010). It is an active part of human physical systems which enables individual to plan his social affairs and environment (Allport & Odbert, 1936; Ersche et al., 2010).

Personality trait is one of the features of the individual that exerts an influence on a broad range of similar characteristics, responses and behavioral manifestation (Ajzen, 2005). Information related to the personality of an individual can be observed from three primary sources: The individual himself, his family and peer groups. The personality trait response of an individual can be judged through observation (Overt) or indirectly through some scientific techniques (Ajzen 2005). In this study, the definition of personality traits by Allport & Odbert, 1936 and Ersche et al., 2010 will be adopted because of its peculiarities with the behavior of the individuals and adjustment within his environment.

One of the ways to learn about an individual's personality is to inquire directly about his/her trait. An overview of personality trait studies shows that individual personality falls within the scope of comprehensive five-factor model which include neuroticism, extroversion, openness, agreeableness, and conscientiousness (Costa & McCrae, 1988). The model captures the five significant personality factors that are consistent with these five constructs and they offered a steady basis for all explanations of personality traits. The characteristics of neuroticism and extroversion are areas of personality that have established better consideration. But conscientiousness relates well to retirement issues and were used in virtually all personality classifications (Cattell, Eber & Tatsuoka, 1970; Noller et al., 1987; Watson & Clark, 1984).

Review of literature has supported the relationship between personality trait and pre-to post-retirement (Reis & Gold, 1993; Hershey et al., 2007; Löckenhoff et al., 2009; Robinson et al., 2010; Feldman & Beehr, 2011). On the other hand, long-term research findings have supported the proposition that the personality of individuals remains constant over time, ages, development stages, and traits (Costa & McCrae, 1984, 1986, 1988). Ekerdt (1987) has suggested that steady personality traits are attributed to stable life satisfaction, work and retirement. Furthermore, van Solinge & Henkens (2007; 2008) has suggested that personality traits ought to be related to retirement preparation, satisfaction, and adjustment as it has previously been recognized by other researchers. In the same view, Löckenhoff, Terracciano & Costa (2009) has posited that personality traits should be connected to retirement planning and preparation while self-control can serve as anticipatory emotions.

Conscientiousness signifies the determination to accomplish a given task or goal. It has features that are necessary for attaining that quest. The features are organized, systematic, efficient, practical and stable (Fernández-Ballesteros, 2002). An individual with high level of conscientiousness, who are cautious and well-organized, should prepare adequately for retirement (Löckenhoff et al, 2009). Additionally, Hershey et al. (2000) suggested that high level of conscientiousness is associated with better financial preparedness for retirement. In another study, Duckworth & Weir (2010) discovered a significant effect of conscientiousness on retirement savings in couples while Cobb-Clark et al. (2016) suggest that conscientiousness significantly affects economic affluence and has no impact on retirement savings.

Extroversion is another personality traits measure which symbolized habitual openness and handle unknown issues with less care. Extraverted individuals are interested in people's affairs. McCrae (1987) relate personality traits with retirement. The study captured the extroversion features of personality trait to be warmth, friendliness, excitement-seeking, confidence and action. These features may lead to more pleasant and satisfying life after retirement. Extroverted retirees are likely to relate actively, efficiently and socially in society and organizations after retirement.

On the other hand, introverted individuals always develop a keen interest in one's psyche, and often prefer to be alone. Introverted retirees with underprivileged public relationship account for lesser general happiness (Hotard, McFatter, McWhirter & Stegall, 1989; Fernández-Ballesteros, 2002). Brown and Taylor (2014) has discovered the significant positive effect of extroversion on the debt liability and negative impact

on the accumulation of financial asset. In contrast, Cobb-Clark et al. (2016) and Duckworth & Weir (2010) could not find any effects of extroversion on retirement savings. Cobb-Clark et al. (2016) has suggested a negative effect of extroversion on financial wealth which signifies inconclusive results.

Neuroticism is a personality trait measure which signifies anxiety or emotional stability and how people manage general pressure. The essential features of neuroticism are unhappiness, annoyance and general weakness. Review of studies on neuroticism has reported that anxiety rises to some degree in some months earlier than retirement and lessens after that (Theriault, 1994; Howard et al., 1986). Cobb-Clark et al. (2016) have reversed the scale of neuroticism to measure the degree of individual psychological balance. The result obtained shows positive emotional stability on retirement savings. Besides that, neuroticism plays a significant role in domestic finances. Studies have shown that the more psychologically balanced an individual is, the higher his/her chances to be adequately prepared for retirement (Schäfer, 2016).

In a similar opinion, Löckenhoff et al. (2009) have argued that changes in retirement adjustment do not affect neuroticism. They added that those with emotional stability and have neuroticism will be affected by anxiety and impulsivity which may likely lead to poor retirement planning and nervousness in retirement. In contrast, Hershey et al. (2000) have proposed that low neuroticism is related to better financial preparedness for retirement. Mroczek & Spiro (2003) are of the view that retirement does not affect neuroticism and extroversion.

Openness to experience is a personality trait that characterizes an individual's intellectual inquisitiveness and ability to seek new skills and ideas. An individual with high openness is assumed to be creative, innovative, imaginative and reflective. In contrast, an individual that is low in openness is always conservative, narrow in interests and unanalytical in nature (Zhao & Seibert, 2006). An individual with openness to experience finds it difficult to save for retirement (Schäfer, 2016). However, Cobb-Clark et al. (2013) found a positive effect on openness to experience and pension savings.

Agreeableness shows an interpersonal orientation of the individual. Individuals who are high on agreeableness are expected to be trustworthy, forgiving, caring, generous, and straightforward. Those with low agreeableness are likely to be self-centered, suspicious, and ruthless (Costa & McCrae, 1992; Digman, 1990). Although agreeableness may lead one to be seen as trustworthy and may help one form a positive and cooperative working relationship. Duckworth and Weir (2010) suggested that the agreeableness of husband and wife tend to lower retirement savings. In contrast, Cobb-Clark et al. (2013) have argued that agreeableness has a positive influence on retirement savings.

Researchers today are faced with the choice of using brief measures of Big-Five personality dimensions. To meet the need for brief measures of personality trait, Gosling et al. (2003) have developed 5 and 10 items personality trait measures. The short-item measures are useful in eliminating item redundancy, reduce fatigue, frustration, and boredom connected with answering repeatedly similar questions

(Robins et al., 2001; Saucier, 1994). Burisch (1997) has noted that short-item scales are valid compared to the long and sophisticated scales. This study, therefore, uses the Gosling et al. (2003) 5 brief measures of personality trait because personality researchers have resorted to using short items personality measures due to the nature of the respondents as seen in the case of Robins et al., (2002) internet study, and Paulhus & Bruce's (1992) longitudinal study of interpersonal perceptions.

2.10.4.2 Knowledge of Financial Planning for Retirement

Knowledge is a precondition for effective behavioral action (Ajzen et al., 2012). Ajzen (1991) has suggested that general knowledge is neither enough nor necessary for behavioral performance. He tried to show how knowledge poorly predicts individual behavior. He argued that beliefs establish the bases for acquiring information (knowledge) which ultimately predict individual behavior. Consequently, the TPB neither deals with the availability of information (i.e, the level of people's beliefs) nor with the accurateness of that information (knowledge) because beliefs might not likely be accurate due to individual thoughts or biased mind and may not probably reflect actual behavior (Ajzen et al., 2012). That is why knowledge has appeared as a background factor in the TPB model.

Among the different psychological variables used in retirement planning studies, none has received considerable attention more other than financial knowledge. Thus, financial knowledge is regarded as an important determinant of financial decision (Hershey et al., 2000). Potential retirees who had not hitherto undergone financial training may likely commit errors when handling financial planning and investment

issues. (Hershey et al., 1998; Hershey & Walsh, 2000). Review of literature has shown that individual's low-level of information to make a sound financial decision affect their retirement savings and caused an erroneous estimate of one's longevity ((Poterba, 1996; Walsh, Walsh & Pennington, 1989). In a similar study, Hershey and Wilson (1997) have suggested the propensity of individuals to overrate the strength of their financial decisions led to poor retirement planning. Bernheim, Garrett & Maki (2001) have argued that lack of retirement preparation, caused by inadequate educational opportunities, affects positive attitude toward saving. These studies reviewed so far has postulated that individual's knowledge of financial planning has a significant impact on individual's retirement savings decisions.

Hayslip, Bezerlein & Nichols (1997) have posited that workers were of the habit of displaying high levels of retirement anxiety due to a shortage of information about retirement. In a similar opinion, Mitchell and Moore (1998) are of the view that people's inability to plan for retirement is caused by inadequate knowledge. However, other researchers have revealed that financial knowledge, job-related factors, and income are interrelated to financial preparedness. These factors can lead to retirement planning behavior which will, in turn, result to financial security in the future (Anderson et al., 2000). Similarly, researches conducted by Maser (1995) and Schellenberg (1994) are agreement with Anderson et al. (2000) who have indicated a robust connotation between domestic income and financial preparedness.

2.11 The Relationship Between TPB Variables

Ajzen (1991) states that attitude, subjective norm and perceived behavioral control influence behavior, while personality trait and knowledge indirectly influence behavior. In line with the opinion of Ajzen (1991), the present study assesses how the variables theoretically relate to each other.

2.11.1 Attitude Toward Retirement Planning and Retirement Planning Behavior

This review is to show how the early optimism regarding the predictability of attitude-behaviors relationship paves the way for complete pessimism. Considering the connection mentioned thereof, this study examines the possible studies and results of the developments. The association between attitude and behavior, therefore, is controlled by the assumption of the reasoning action approach. It is argued that individual's behavior has a connection with their beliefs, attitude, and intentions (Ajzen, 2005). Our review has also indicated that behaviors can correlate effectively with measures of attitude (Ajzen, 1991). However, Festinger (1964) has argued that changes in attitude towards behavior has influenced behavioral performance, while the principle of compatibility explains the condition binding the relationship. The law has suggested that the measures of attitude towards the behavior and the behavioral act should be at the same level of specification (Ajzen & Fishbein, 1977; Ajzen, 1988).

The major problem of earlier studies regarding the attitude-behavior relationship has not always been significant; and they are full of inconsistencies (Corey, 1937; De Fleur & Westie, 1958; Wicker, 1969; Fishbein & Ajzen, 1974; Weigel & Newman, 1976; Werner, 1978). Though the early researchers did not highlight the factors causing the

poor results of the attitude behavior relationship, they maintained their belief in the predictive strength of the relationship. They reacted with logical conclusions that most of the results were full of methodological errors (LaPiere, 1934; Kutner, Wilkins & Yarrow, 1952; Dillehay, 1973; Kelman, 1974).

In contrast to the views of the early researchers, empirical studies, with regards to attitude toward retirement and retirement planning have yielded significant results. They suggested that those who adequately planned for their retirement have positive attitude compared to those who failed to plan. While negative attitude toward retirement is associated with poor retirement planning (Atchley, 1976; Joo & Grable, 2001). A study conducted by Griffin et al. (2012) suggested that personal attitude have a significant positive impact on retirement planning of the pre-retirees. Mohidin et al. (2013) indicated that attitude toward personal financial planning have a significant positive impact on retirement planning behavior of employees in Kota Kinabalu, Malaysia. Likewise, Hassan et al. (2016) proposed the that attitude toward retirement has impacted positively on retirement planning behavior. In a non-retirement study, using one-dimensional financial behavior, Godwin (1994) argued that attitude toward planning has a significant positive impact on cash flow management behavior.

On the other hand, the comparative study conducted by Chatterjee (2010) suggested that public workers are more likely to participate in defined benefit plans and less likely to hold defined contribution plans when compared with those who are working in the private sector. In another study, Munnell and Connolly (2001) suggested that

public sector workers have higher retirement savings compared to the private sector workers.

In view of the above discussion, the studies reviewed have shown that attitude has a significant positive influence on retirement planning and cash flow management (Godwin, 1994; Griffin et al., 2012; Hassan et al., 2016; Mohidin et al., 2013). Therefore, the present study postulate that there is a significant positive relationship between attitude toward retirement planning and retirement planning behavior. On the other hand, Chatterjee (2010) and Munnell & Connolly (2001) have reported a significant difference between the public and private workers regarding the selection of pension plans and retirement savings. This study expects a significant difference between attitude toward retirement planning and retirement planning behavior of the public and private sector workers in Nigeria.

2.11.2 Subjective Norms and Retirement Planning Behavior

The theory of planned behavior suggests that the association between subjective norm and behavior is mediated by behavioral intentions (Ajzen & Fishbein, 1973; Ajzen, 1991). Manning (2009) proposed two effects of subjective norm on behavior. The mediated effect of subjective norm on behavior through intention (Ajzen, 1991) and the direct effect of subjective norm on behavior. Manning (2009) further states that the belief on the direct relation between subjective norm and behavior may probably change over time. Therefore, the outcome of direct relationships will be more significant compared to indirect relation of subjective norm mediated by intentions leading to behavior. The predictive relevance of subjective norm is assumed to have a

significant impact on RPB because the influence of normative factors (e.g., “if others are doing it or recommending it”) on behavior recognize the direct effects of the subjective norm on behavior (Trafimow & Finlay, 2001; Christian & Armitage, 2002; Okun et al., 2002; Christian, Armitage & Abrams, 2003; Christian & Brans, 2004).

Review of literature has shown that there is a shortage of direct studies regarding the influence of subjective norm on retirement planning behavior. However, Griffin et al. (2012) suggested that social influence has a significant positive impact on the retirement planning of pre-retirees in Australia. Correspondingly, Moorthy et al. (2012) proposed that family members and relatives have a significant positive influence on retirement planning behavior of Malaysian workers. Consistent with the findings of Griffin et al. (2012) and Moorthy et al. (2012), the study conducted by Nofsinger & O’Neill (2004) and Davis & Hustvedt (2012) suggested that subjective norm has a significant positive influence on retirement savings. In a similar study, Croy, Gerrans & Speelman (2012) suggested that pressure from spouses has a significant positive impact on retirement savings of the workers in Australia. In a similar study, Duflo & Saez (2002; 2003) and Beshears et al. (2015) argued that peer effects significantly influenced the retirement savings decisions of their peers. On the other hand, the result obtained from a comparative study conducted by Ofili (2017) suggested that there is a significant difference between subjective norm and retirement saving behavior of the Mid-Career workers in the USA.

Thus, these analytical findings have suggested that the influence of spouses, parents and relatives have influenced positively on retirement savings and retirement planning

behavior of the workers (Croy et al., 2012; Moorthy et al., 2012; Nofsinger & O'Neill, 2004; Davis & Hustvedt, 2012). The present study, therefore, proposes that subjective norm will have a significant positive impact on retirement planning behavior of workers in Nigeria. In line with the study of Ofili (2017), this study assumes to have a significant difference in the relationship between subjective norms and retirement planning behavior of the public and private sector workers in Nigeria.

2.11.3 Perceived Control over Retirement Planning and Retirement Planning Behavior

The TPB proposed that perceived control over the behavior can indirectly affect behavior through intention (Ajzen, 1991) and serve as a direct predictor of behavior (Ajzen, 2002). Review of literature has shown that perceived control over behavior can predict retirement savings and planning. In studies conducted by Griffin et al. (2012) and Heenkenda (2016) argued that sense of control has a significant positive impact on the retirement planning in Australia and readiness for retirement planning of estate workers in Sri Lanka. Hira et al. (2009) conducted a study between two groups of workers and the result obtained shows that personal control has a significant negative impact on retirement savings of the first group compared to the second group which shows that personal control has a significant positive impact on the retirement savings of the second group.

On the other hand, Davis & Hustvedt (2012) conducted a study with the aim of determining positive retirement savings behavior among two groups of individuals. The first group consisted of respondents with low PBC, while the second group was

made up of respondents with high PBC. The result obtained indicates that the group with the low PBC group saved more for their retirement compared to those with high PBC. This suggests that individuals with low PBC managed their little financial resources more wisely compared to those with high PBC who had enough resources. This indicates that there is a significant difference between the two groups. In another study, Griffin et al. (2012) has proposed that there is a significant difference between the sense of control and retirement planning among Australian workers.

The literature reviewed so far indicates an inconclusive result because the findings of Heenkenda (2016) and Griffin et al. (2012) which suggested that the sense of control has a significant influence on the retirement planning is not similar to that of Hira et al. (2009) which has proposed that personal control has no significant impact on retirement savings. Thus, this study assumes that perceived control over retirement planning may have a significant positive impact on retirement planning behavior of workers in Nigeria. On the other hand, the present study expects a significant difference between the variables because Davis & Hustvedt (2012), Griffin et al. (2012) and Hira *et al.* (2009) have proposed that there is a significant difference between PBC, sense of control and personal control over retirement planning of different groups.

2.12 The Relationship Between Background Factors and TPB Variables

Personality trait and knowledge of individuals are some of the dispositional background factors that can influence behavior. It is possible to explore their effects

on the TPB framework by examining their influence on the attitude toward behavior, subjective norm and perceived control over the behavior as can be seen in this section.

2.12.1 Personality Trait and Attitude Toward Retirement Planning

Personality trait is a dispositional factor which correlates with attitude towards behavior (Ajzen, 1991; 20005). Empirical results have shown the practical function of the aggregation principle which indicates that general attitude toward behavior and personality trait positively predict behavioral aggregates (See Ajzen, 1988; 1991; 2005). The relationship between personality trait and TPB variables have been explained in different studies. Yet, the linkage between aggregate personality trait measures and attitude toward retirement planning has received little attention from the academia. However, Ajzen (1991) has proposed that personality trait better explain social attitude and behaviors, because they are personal features which increase the individual's social skills (Medland & Hatemi 2009; Yamagata et al. 2006).

To date, direct studies regarding personality trait and attitude toward retirement planning are relatively scarce. Review of literature regarding the individual's attitude toward retirement planning shows that some people do adequately plan for their retirement compared to others. Thus, personality features, to a large extent, explain the individual difference and their ability to plan for retirement. Yakoboski, Ostuw & Hicks (1998) conducted a study entitled 'Retirement Confidence Survey' which measure the attitude and personality of individuals toward retirement planning. The people were into six different groups consisting of cautious savers (21% of the population), deniers (10%), impulsive (20%), planners (23%), Retirement savers

(17%) and Strugglers (9%). The results obtained suggested that retirement savers, planners, and cautious savers actively engaged in retirement planning. The deniers, strugglers and the impulsive were at varying degrees less concerned about retirement planning.

Meta-analytical studies related to personality trait and attitude showed mixed results. For instance, Griffin et al. (2012) have suggested that stable trait have a significant influence on the retirement planning of the pre-retirees. Similarly, Hudomiet, Parker & Rohwedder (2015) argued that personality trait positively influenced attitude toward retirement. On a contrary note, Angrisani et al. (2013) have explained that personality trait has a significant negative effect on the retirement transition of the elderly workers. Although it's difficult to have comparative studies on the relationship between personality trait and attitude toward retirement planning, Yakoboski, Ostuw & Hicks, (1998) have suggested that there is a significant difference between personality trait and attitude toward retirement planning of individuals. In another study, Angrisani et al. (2013) have argued that differences in personality trait has a significant positive impact on the retirement transition of the elderly workers. Likewise, Chan (2014) has suggested that personality trait demonstrate differential effects on ownership of individual retirement accounts.

Thus, given the findings mentioned thereof, it shows that studies on personality trait and attitude yield an inconclusive result because Griffin et al. (2012) and Hudomiet et al. (2015) suggested that personality trait have a significant positive influence on retirement planning and retirement. In contrast, Angrisani et al. (2013) has argued that

personality trait negatively influenced attitude toward retirement transition. This study, therefore, may expect a significant positive relationship between personality trait and attitude toward retirement planning of workers in Nigeria. Our literature review has indicated that the relationship between personality trait and attitude yields a significant difference.

2.12.2 Personality Trait and Subjective Norm

The aggregation principle has proposed that any single individual behavior exhibits many other observable factors unique to a specific event, condition, and action (Ajzen, 1991). Hence, this theoretical proposition portrays the likely influence of personality trait as a background factor on subjective norms (Ajzen, 1991). Thus, personality trait or a combination of traits are important determinants of human behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1981; Furnham & Heaven, 1999). Personality trait inspire people's mode of life and general behavior (see Caspi & Shiner, 2006; Roberts, Kuncel, Shiner, Caspi & Goldberg, 2007). Review of literature has shown that personality differences among individuals transform their levels of experience which, in turn, lead to a wide range of developmental tasks, such as social relationships and work responsibilities (Caspi, Roberts & Shiner, 2005). For instance, compensatory acts and proper care of the spouse may have a significant impact on the workers' retirement security because the closeness between them enhances the level of openness and extroversion which eventually increase their retirement planning behavior.

Personality research has been given new motivations and directions over the past decades by a near consensus that personality trait of parents and peers have a

significant influence on children's behavior (Rowe, 1994; Harris, 1998; Collins, Maccoby, Steinberger, Hetherington & Bornstein, 2000; Knafo & Plomin, 2006). Furthermore, the review of literature has shown differences in the relationship between the personality trait and subjective norm. For example, Hurd M. et al. (2012) have suggested that there is a significant difference between personality trait and retirement preparation of men and women. In another study, Genowski (2013) has suggested that personality trait has different gender effect on lifetime earnings. Non (2017) found that peer's personality trait differs significantly from the observable features of other peer groups.

Review of the literature shows that the dominant arguments were in support of the influence of personality trait on family, friends, and peers (Rowe, 1994; Harris, 1998; Collins et al., 2000; Knafo & Plomin, 2006; Non, 2017). On the other hand, Caspi, Roberts & Shiner (2005) have argued that differences in the personality of the spouse enhance retirement security while Genowski (2013) and Hurd et al. (2012) have observed a significant gender difference between personality trait and retirement preparation. In line with these findings, the present study assumes that personality trait would have a significant positive effect on the subjective norm of workers in Nigerian.

2.12.3 Personality Trait and Perceived Control Over Retirement Planning

The relationship between personality trait and perceived control over retirement planning depend on the aggregation rules (Ajzen 1991). Though there is a shortage of study that directly captures the personality and perceived control over retirement planning. However, perceived behavioral control is well-matched with Bandura's

(1977; 1982) idea of perceived self-efficacy. Bandura's view of self-efficacy shows how an individual can perform sequences of actions required to deal with potential situations and decisions (Bandura, 1982). Review of literature indicates that perceived behavioral control is derived from Bandura's scientific works and his friends (e.g. Bandura, Adams & Beyer, 1977; Bandura, Adams, Hardy & Howells, 1980). These researchers have proposed that the individual's level of control positively influences their confidence and ability to perform behavioral acts. Consistent with the TPB rules, the general aggregation rule suggests that personality trait can predict actions, via intention or directly through perceived behavioral control. There is a good indication that many behaviors fall under volitional control which can only be predicted from people's intentions and behavior (Ajzen, 1991; 2005).

Ajzen (2005) has argued that personality trait is a weak predictor of attitude, subjective norm and perceived behavioral control. Review of studies has indicated that personality trait correlates with self-efficacy (Luszczynska, Gutierrez-Dona & Schwarzer, 2005). Bandura (1994) suggested that self-efficacy relates well with goal-oriented behavior because people with a high sense of self-efficacy are more likely to strive hard towards achieving their goals. Review of literature has shown the positive relationship between personality trait and pre-retirement planning. In a study conducted by Ekerdt (1987) argued that personality trait correlates with control of life satisfaction, work and retirement. In a similar view, van Solinge & Henkens (2007; 2008), have suggested that personality trait significantly correlates with retirement planning, satisfaction, and adjustment as previously recognized by other researchers.

Likewise, Löckenhoff, Terracciano & Costa (2009) posit that personality trait significantly influence retirement planning and self-control.

Empirical studies have suggested that personality trait can be used to explain behavioral difference among people and offer an appropriate means of analyzing human behavior across a broad range of spheres (De Feyter, Caers, Vigna & Berings, 2012; Poropat, 2009). In line with these views, Löckenhoff et al. (2009) conducted a longitudinal study in USA and find out that there is a significant difference between personality trait and self-control over retirement preparation of the workers. Similarly, Hurd et al. (2012) reported a significant difference between personality trait and control over retirement savings of workers in the USA. This study, therefore, proposes a significant positive relationship between personality traits and retirement planning behavior of the public and private sector workers in Nigeria. In line with the views of De Feyter et al. (2012) and Poropat (2009), this study therefore, expects a significant difference between the personality traits and their perceived control over retirement plans of the public and private sector workers in Nigeria.

2.12.4 Knowledge of Financial Planning for Retirement and Attitude toward Retirement Planning

Review of literature has indicated that knowledge influences individuals' choice as they move to act on the knowledge they have acquired (Moorman, Diehl, Brinberg & Kidwell, 2004). Therefore, financial knowledge is an antecedent to attitude toward financial behavior and retirement planning (Ekerdt et al., 2001; Lusardi and Mitchell, 2009). On a contrary note, Jamal et al. (2015) argued that acquiring financial

knowledge is not a guarantee for realizing a befitting lifestyle among the youth. It must be supported with a positive attitude toward financial decision. Several TPB-based types of research have suggested that financial knowledge positively influences financial attitude (Kidwell & Turrisi, 2004; Croy, Gerrans & Speelman 2010; Xiao et al., 2011; Mien & Thao, 2015). Likewise, Alessie, Rooij & Lusardi (2011) and Bucher-Koenen & Lusardi (2011) found a positive effect of financial knowledge on attitude of siblings toward retirement planning in the Netherland and Germany.

Sang et al. (2013) and Parrotta & Johnson (1998) have proposed that financial knowledge negatively affects individuals' and their financial attitude toward planning. Additionally, Jamal et al. (2015) suggested that financial literacy and savings behavior have no mediating effect on the financial attitude of University students in Kota Kinabalu Sabah, Malaysia. Likewise, Mien & Thao, (2015) have argued that there is no moderating effect between financial knowledge, financial attitude and financial management behavior among youths in Vietnam.

In a comparative study conducted by Anthony (2011) between medical practitioners working in Malaysian public and those in private hospitals has observed that there is no significant difference between financial knowledge and financial management attitude among the workers. In another study conducted by Atkinson and Messy (2012), they have argued that there is no gender difference across countries in financial knowledge and financial attitude. Likewise, Kirbiš, Vehovec & Galić (2017) did not find any gender difference between financial knowledge and financial attitude in Croatia. In contrast, Nano and Cani (2013) have revealed that there is a significant

difference between financial knowledge and financial attitude among the public and private university students in Albania.

Review of literature shows that knowledge is a precondition for effective behavior. In line with that view, most of the studies with regards to knowledge and attitude suggested a positive relationship (Alessie et al., 2011; Bucher-Koenen & Lusardi, 2011; Croy, Gerrans & Speelman 2010; Ekerdt et al., 2001; Kidwell & Turrisi 2004; Lusardi & Mitchell, 2009; Mien & Thao, 2015; Xiao et al., 2011). On the other hand, the comparative studies yielded mixed results. For instance, some studies have indicated that there is no significant difference between knowledge and attitude (Anthony, 2011; Atkinson & Messy, 2012; Kirbiš, Vehovec & Galić, 2017). In contrast, Nano and Cani (2013) have observed a significant difference between knowledge and financial attitude. In line with the previous studies, this study proposes that knowledge of financial planning for retirement will have a significant positive influence on attitude towards retirement planning of workers in Nigeria.

2.12.5 Knowledge of Financial planning for Retirement and Subjective Norms

Knowledge is one of the dispositional factors that are assumed to influence individual behavior (Ajzen, 1991). The relationship between knowledge and behavior can be traced to the work of Ajzen, et al. (2012). They viewed knowledge as the degree to which the people acquire accurate information that will facilitate behavioral performance. Theoretically, TPB studies have suggested that the fundamental sources of beliefs are rooted in information (Knowledge) which, in turn, determines individual behavior (Ajzen, et al., 2011). The TPB, therefore, uses information (knowledge) to

measure the individual's belief which eventually lead to behavior. Lusardi (2003) has argued that planning experience depends on the knowledge of a person's relations and parents while experiencing unfriendly situations during retirement, such as financial problems, health shocks and poor standard of living influence retirement planning.

Review of literature supports the relationship between financial knowledge and subjective norm. For example, Jamal et al. (2015) conducted a study with the aim of discovering the savings behavior amongst students of tertiary institutions in Kota Kinabalu, Malaysia. The results suggested that financial knowledge, influence of family and peers played a significant positive role in developing students' savings behavior. In contrast to this view, Gutierrez (2015) has argued that self-rated financial knowledge negatively correlates with spousal influence indicating that a decrease in self-rated financial knowledge leads to a decrease in collaboration and financial planning of the spouse.

In non-retirement planning studies, Ajzen et al. (2011) have argued that alcohol knowledge has no significant influence on subjective norms. In contrast to the study of Ajzen et al. (2011), Kim, Yun & Lee (2014) have argued that knowledge was found to have significant influence on subjective norms. Maichum, Parichatnon & Peng (2016) have suggested that environmental knowledge have a significant positive influence on subjective norms among adult consumers in Thailand.

Although there are no direct studies showing the difference between knowledge of financial planning for retirement and subjective norm. However, review of literature

has suggested that psychological differences have occurred in the prediction of individual retirement planning because knowledge of finance has been proved to be a source of individual retirement decision (Hilgert, Hogarth & Beverly, 2003; Kim, Kwon & Anderson, 2005; Lusardi & Mitchell, 2007; Howlett et al., 2008). Loibl & Hira (2006) have suggested that there is gender difference between financial knowledge and social network in the workplace. Using data from the Health and Retirement Study (HRS), Lusardi and Mitchell (2007; 2008) have reported significant gender differences in financial knowledge, with males displaying higher levels of financial knowledge than females.

From the studies reviewed, the knowledge-subjective norms relationship yields inconclusive results because Jamal et al. (2015) and Kim, Yun & Lee (2014) have suggested a positive relationship between knowledge and subjective norms. In contrast Ajzen, et al., (2011) and Gutierrez (2015) have argued that knowledge negatively influenced subjective norms. Therefore, the present study proposed a significant positive relationship between knowledge of financial planning for retirement and subjective norms. On the other hand, the literature review has shown that there are shortages of studies showing the difference between knowledge of financial planning for retirement and subjective norm. Thus, Loibl & Hira (2006) and Lusardi and Mitchell (2007; 2008) have reported gender difference between financial knowledge and social network and subjective norms of the workers.

2.12.6 Knowledge of Financial Planning for Retirement and Perceived Behavioral Control Over Retirement Planning

Understanding of the relationship between knowledge of financial planning for retirement and perceived control over retirement planning is an issue of critical economic importance. Theoretically, perceived control refers to the individual's ability to engage in the behavior which is determined by resources and opportunities (Ajzen, 1991). In general, knowledge is a precondition for effective behavioral performance. Though knowledge is assumed to be a sufficient or necessary condition for behavioral predictions, its role as a dispositional factor limits it from becoming a direct predictor of behavior (Ajzen, 1991). Knowledge is said to mediate perceived control and intention or behavioral act (Ajzen, 1991; 2006).

Empirical literature has indicated that there is a shortage of studies relating to knowledge of financial planning and perceived control. Other related studies have suggested that financial knowledge correlates with locus of control. For instance, a survey conducted by Mien et al. (2015) has proposed that financial knowledge has no indirect effect on the locus of control and financial management behavior of the workers in Vietnam. In another study, Dwiastanti (2017) has suggested that financial knowledge has a significant negative impact on locus of control and financial management behavior of the university students in Indonesia. Additionally, Thomas, Mulyono & Setiaji (2016) have suggested that financial education has a significant negative influence on self-efficacy among Indian University students. In contrast, Grable (2009) and Perry (2008) have argued that financial knowledge has a significant positive impact on the locus of control. In another study, Rothwell, Khan & Cherney

(2016) indicated that financial knowledge has a strong mediating effect on financial self-efficacy and savings education. The review of literature indicates that there is a significant difference between financial knowledge and self-efficacy which is related to perceived control. Danes & Haberman (2007) have proposed that there are gender differences between financial knowledge and self-efficacy. In another study, McLaughlin, Walsh & Bryant (2013) suggested that there is a significant difference between knowledge and control beliefs of healthcare workers.

Despite the shortage of studies relating to knowledge and perceived control, related studies have shown an inconclusive result between knowledge and the locus of control. Dwiastanti (2017) and Thomas, Mulyono & Setiaji (2016) have reported a significant negative relationship between financial knowledge and locus of control. In contrast, Grable (2009) and Perry (2008) have suggested a significant positive relationship between financial knowledge and locus-of-control while Rothwell et al. (2016) suggested that financial knowledge has a strong mediating effect on financial self-efficacy. In a different study, Danes & Haberman (2007) proposed gender differences between financial knowledge and self-efficacy while McLaughlin, Walsh & Bryant (2013) suggested a difference between financial knowledge and control. Hence, a difference may be anticipated between knowledge of financial planning for retirement and perceived control over retirement planning of the public and private sector workers in Nigeria.

2.13 Identification of Research Gap

Retirement planning behavior encompasses all aspects of retirement life. Though there are different views with regards to retirement planning behavior studies, scholars have agreed that it enhances the quality of retirement life of the workers. Review of literature shows that despite the availability of resources, individuals with reasonable financial means rarely save for retirement (Hershey et al. 2010; Marquis, 2002). Previous studies have argued that one's level of retirement planning influenced saving behavior (Stawski, Hershey & Jacobs-Lawson, 2007) and retirement preparation (Moen et al., 2000). Researchers have provided different viewpoints on issues surrounding retirement plans. For instance, economic researchers have focused on public policies and how such policies affect retirement planning decisions of individuals (Lusardi & Mitchell, 2009; Bucher-Koenen & Lusardi, 2011).

On the other hand, psychologists have looked at how financial and demographic factors affect retirement planning (Hershey et al., 2007; Hershey & Mowen, 2000; Jacobs-Lawson & Hershey, 2005; Stawski et al., 2007). Other psychologists have focused on how the big five personality traits affect the retirement planning of the individual workers (Costa & McCrae, 1986; Ersche et al., 2010; Feldman & Beehr, 2011; Hershey et al., 2007; Löckenhoff et al., 2009; Noller et al., 1987; Watson & Clark, 1984; Reis & Gold, 1993; Robinson et al., 2010). Most of these studies place emphasis on actual saving behavior thereby neglecting the main psychological (attitude, subjective norm perceived control and dispositional factors) indicators of retirement planning.

Studies conducted by Hira, Rock & Loibl, (2009) and Clark et al., (2015) have examined how behavioral factors played significant roles in influencing retirement planning behavior of the workers. The researchers identified demographic variables, ability to recover from loss, behavioral predispositions, financial knowledge and perceived personal control as significant factors affecting retirement planning behavior of the workers. However, the results obtained are based on a sample of high-income Americans signifying that it is difficult to generalize the results to any other group. Thus, the psychological factors that guide human behavior to act positively towards retirement planning are entirely lacking in their study, thereby paving way for future researchers to improve on the study.

In a related study, Moorthy et al. (2012) undertook a cross-sectional research to measure the association between retirement planning behavior and its determinants using a sample of 300 employees in Malaysia within the age set of 26 to 55 years. The results obtained recognized several significant variables that predicted retirement planning behavior of working people which include: age, educational qualification, and level of earnings. Many studies have acknowledged the significant role of financial knowledge for retirement. Their study used educational level as a determinant of retirement planning behavior. Yet the result obtained shows that educational knowledge played a less role in influencing the retirement planning behavior of the workers thereby increasing the chances for future studies to explore in that area.

On the other hand, Kajauchire, (2012) uses financial knowledge, retirement goal clarity, potential conflict in retirement and future time perspective as factors that have influenced the retirement planning behavior of workers in South Africa. The study, to some extent, has some limitations because variables that were earlier shown to influence retirement planning behavior were not included in the model that was tested. Moreover, Variables such as attitude towards retirement planning, subjective influences on retirement planning, ability to have control over retirement planning and personality trait, among others, were not assessed. Hence, the need to bridge the knowledge gap

Additionally, Mohidin et al., (2013) Conducted a research aimed at finding the relationship between attitude towards financial planning and retirement planning behavior among 200 employees in Kota Kinabalu, Malaysia. The results obtained showed that retirement planning behavior has a significant positive relationship with attitude towards personal financial planning, retirement planning, money management, investment planning, and estate planning. The moderating factor of age has a positive impact on estate planning. However, the study presents a brief review of factors influencing retirement planning behavior. Therefore, incorporating psychological variables (attitude, norms, control, traits, and knowledge) will serve as an addition to the existing pool of knowledge and bridge the gap in retirement planning literature.

Likewise, Clark et al. (2015) worked on employee financial planning behavior survey using an administrative record of 21,000 employees across the US. The variables

adopted for the research were economic/demographic factors and financial literacy. The result showed that those workers with financial literacy had an increase of 3% from their income to the plan than the less educated ones. After the financial planning behavior research, the workers planning behavior changes entirely. This is so because workers who attended the survey summit uniquely adjusted or stopped contributing.

In another related study. Hassan et al. (2016) used a sample size of 500 private-sector workers within the age of 40 years in Malaysia at the end of the day, they suggested that educational qualification, higher levels of income, financial literacy, retirement goal clarity, retirement saving and attitude towards retirement were factors that could influence retirement planning behavior of the private-sector workers. Talib & Manaf (2017) conducted another study aimed at exploring the factors influencing retirements planning behavior among workers who acquired Employees Provident Fund (EPF) in Kedah, Malaysia. Using a sample of 172 people, which include a diverse group of the professional and managerial cadre working within the organization, they have suggested that age group and self-awareness were factors that influence the retirement planning behavior of the workers.

Most of the studies on retirement planning behavior seem to focus on behavioral factors (both saving and investment behaviors) and demographic factors (Hira, 2009; Moorthy et al. 2012; Muhidin et al. 2013; Clark et al. (2015). Although, Hira (2009), Hassan et al. (2016), and Clark et al. (2015) Moorthy et al. (2012) have agreed that financial literacy significantly influenced retirement planning behavior. Yet, they have different views with regards to some factors. Hira, (2009) and Hassan, et al. (2016)

have argued that individual level of income influenced their retirement planning behavior. However, all the researchers have divergent views on factors like behavioral tendencies, financial planning, retirement planning, goal clarity and attitude towards retirement. From the literature so far reviewed, there is a shortage of studies on retirement planning behavior using the TPB variables. Therefore, the present research has bridged the knowledge gap by examining the relative influence of attitude, subjective norm, perceived control, personality trait and financial knowledge on planning behavior of the workers in the public and private sectors in Nigeria.

2.14 Conclusion

This chapter has critically reviewed works on retirement planning behavior and TPB variables (attitude, subjective norms, perceived control, personality traits and knowledge of financial planning for retirement). Scientific evidence from the reviewed literature indicates support for the relationship between the TPB variables and retirement planning behavior. Lastly, a research gap was identified, followed by some concluding remarks.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter is designed to explain the methodology of the study. It starts by presenting the theoretical background of the study, research framework and hypothesis development. It also covers the research design, operational definitions of terms, measurement of variables and the research instruments (questionnaire). Others are sampling, data collection, and techniques of data analysis.

3.2 Theoretical Background of the study

The theoretical background employed for this study are the Theory of Planned Behavior (TPB) and Theory of Reasoning Action (TRA).

3.2.1 The Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) (Ajzen, 1991) is the developed version of the theory of reasoned action (TRA). It was introduced to tackle the limitations noticeable in the TRA (Fishbein, 1967; Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980). The TPB consists of attitude toward the behavior, subjective norm, Perceived Behavioral Control (PBC) and background factors (Ajzen, 1985, 1991, 2002). The TPB assumes that behavior is the function of salient beliefs (behavioral, normative, and control beliefs) that are related to the behavior in question. People can hold to their beliefs on any given behavior but can only adapt to a small number at a time (Ajzen 1991).

In line with the aggregation principle, the theory (TPB) states that the behavioral belief constitutes the likely cause of action, leading to either favorable or unfavorable attitude towards the behavior. The normative belief guides the formation of perceived social pressure (subjective norm) from the referent others (family, friends and peers) to or not to engage in the behavioral performance. Also, the control belief motivates or limits the ability to perform the behavior leading to Perceived Behavioral Control (PBC). Aggregates of the attitude toward the behavior, subjective norm, and perceived behavioral control will result in the development of intention and behavior. Ajzen (1985) has argued that the more favorable the attitude towards the behavior and subjective norms, the higher the perceived behavioral control and the stronger the individual's intention to engage in the behavior. The relative significance of attitude, subjective norms and perceived control are expected to differ in the prediction of intention and behavior (Ajzen, 1988, 1991; Ajzen, 2001).

On the other side, some variables may have a significant impact on people's beliefs. For instance, gender, age, ethnicity, religious affiliation, education, socioeconomic status, nationality, personality, mood, emotion, general attitude and values, intelligence, group membership, past experiences, exposure to information, social support, coping skills, etc. (Ajzen 2006). These are called background factors which are classified into personal, social and information factors (Ajzen, 2005).

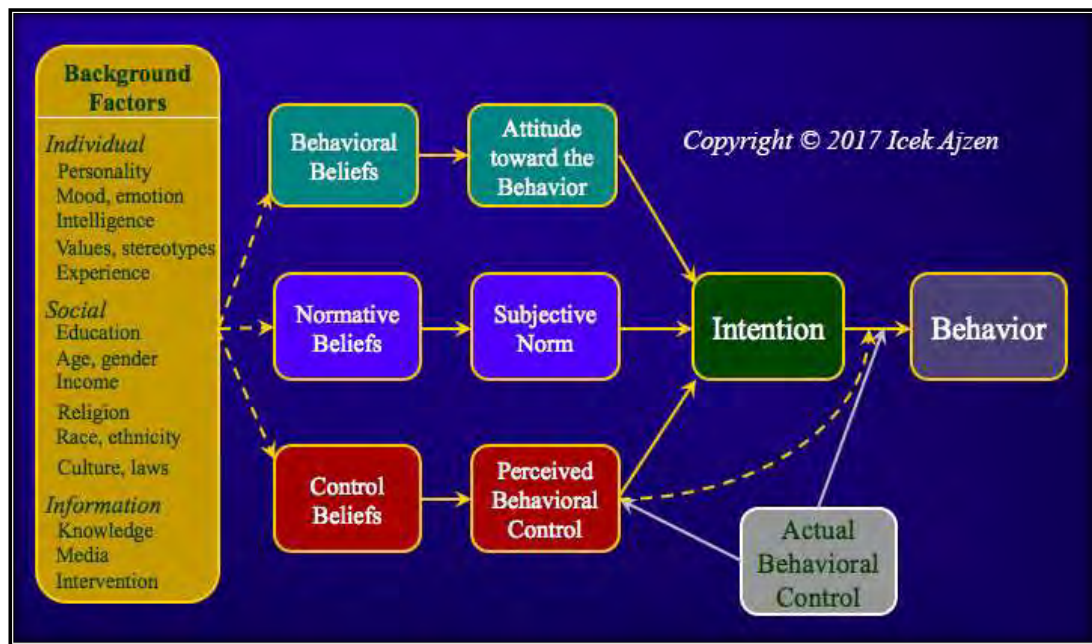


Figure 3.1

TPB Theoretical framework

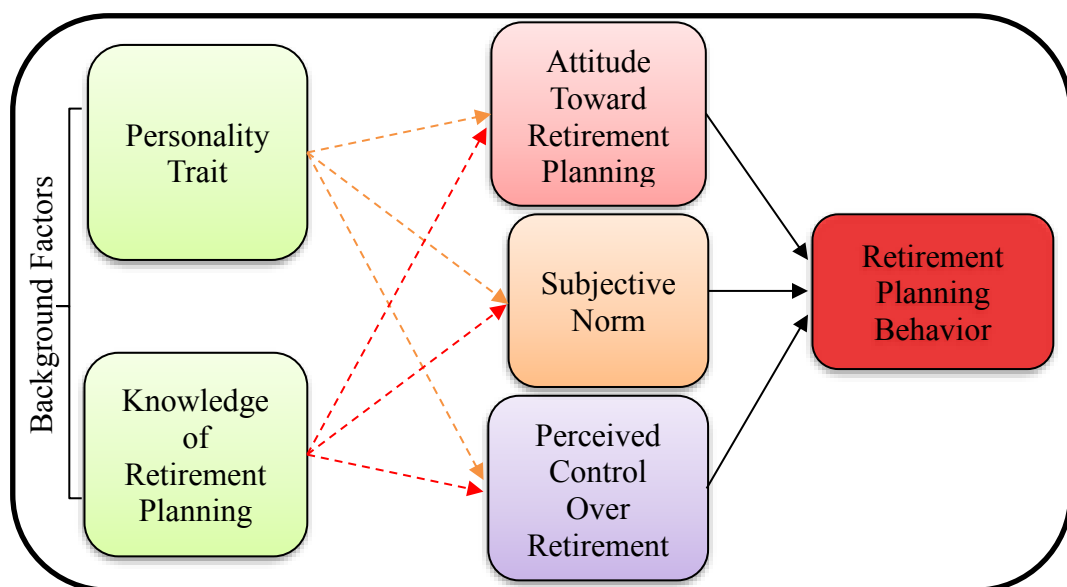
Source: Ajzen (2017) TPB with background Factors.

3.2.2 The Research Framework

The theoretical framework of this study is shown in figure 3.2. It consists of four TPB constructs and two background factors. The TPB constructs are: retirement planning behavior (dependent variable), attitude toward retirement planning, subjective norm, perceived control over retirement planning (independent variables). Whereas, the background factors are: knowledge of financial planning for retirement and personality trait. Retirement planning behavior is assumed to be the function of these independent variables. Firstly, the attitude toward retirement planning refers to the extent to which a worker has a favorable or an unfavorable assessment of his/her retirement planning goal. The second predictor of RPB is the subjective norm which signifies the perceived social pressure to plan or not to plan for retirement. The third is the perception of control over retirement planning serving as the perceived ease or

trouble of engaging in retirement planning as presented in Figure 3.2 (Ajzen, 1985, 1991, 2002).

As a rule in TPB, the more favorable the attitude towards retirement planning (Ajzen, 1991) and subjective norm with respect to positive retirement planning (see Armitage & Conner, 2001; Ravis & Sheeran, 2003; Manning, 2009), the higher the perceived control over retirement planning (Ajzen 1991) and the stronger the worker's retirement planning behavior (see Ajzen, 1991). Nevertheless, the degree of the success will be subject to the worker's desire and his ability to have control over resources: such as time, income, skills, willpower, knowledge, etc. (see Ajzen, 1985). A sizeable number of background factors may influence the people's attitude, subjective norms and perceived control over retirement planning. For instance, we have personality trait and exposure to information such as knowledge of financial planning (Ajzen, 1991; 2005) as some other components or the factors.



5
Figure 3.2
Research Framework

3.2.3 Development of Research Hypothesis

The TPB has been successfully used to predict a wide range of behaviors in different domains, (Fishbein & Ajzen, 2010). Thus, attitude towards the behavior has long been recognized as a construct that measure intention which ultimately leads to actual behavior. The Theory of Reasoning Action (TRA), which is the foundation of TPB, regards attitude as the positive or negative feeling of people in carrying out a behavior (Fishbein & Ajzen, 1975). Attitude towards a behavior is assumed to be the function of the individual belief that performs the behavior and it will result in the various evaluative outcome of that belief. Thus, the expectancy-value of attitude is obtained by weighing each individual's belief that outcome occurs (b_i , $i=1.....p$) by the implication of that outcome (e_i , $i=1.....p$). Thus, it can be assumed that one may likely plan for his retirement if taking such a step will yield a positive result. The expression will be as follow:

$$A_B \approx \sum_{j=1}^p b_i e_i \dots\dots\dots 1$$

Where A_B is the attitude towards behavior, B, b_i is the strength of the belief that B leads to an outcome. While e_i is the evaluation of the issue, the letters i and p are numbers of salient beliefs. Thus, an individual's positive attitude toward a behavior supports his/her intention to engage in the behavior. Current definition of attitude has suggested that it is the degree of favorable or unfavorable (positive or negative) thoughts of an individual towards retirement planning (Ajzen, 1987; 1991; Ajzen & Fishbein, 2000; 2005). Review of literature has shown that behaviors can be compatible with measures of attitude (Ajzen, 1991). Festinger (1964) states that changes in attitude towards behavior influence the behavior. While the principle of

compatibility explains the condition binding the attitude-behavior relationship, it is assumed that:

H1a: Attitude toward retirement planning positively influences retirement planning Behavior

General assumptions have suggested that attitude are poor predictors of behaviors because the attitude-behavior relationship yielded conflicting results (see Ajzen 1991). As can be seen in LaPiere (1934) Chinese couple study, Corey (1937) Students' attitude and cheating behavior, Stagner (1942) favorable attitude toward war among veterans, military training groups, and conservative political groups, etc. In a critical appraisal of these perceptions, scholars have maintained their belief in the predictive validity of attitude towards behavior and behavior. They reacted with logical conclusions that most of the results were full of methodological errors (LaPiere, 1934; Kutner, Wilkins, & Yarrow, 1952; Dillehay, 1973; Kelman, 1974). Thus, this study hypothesizes that there is a difference between attitude toward retirement planning and retirement planning behavior of the public and private sector workers in Nigerian.

H1b: There is a difference between attitude toward retirement planning and retirement planning behavior of public and private sector workers in Nigeria.

On the other side, the subjective norm is an original construct from the theory of reasoning action which deals with the influence of social and environmental pressure mounted on the individuals to either perform or not to perform the behavior.

Subjective norm is determined by sets of beliefs about the normative instruction or pressure of a particular reference group, weigh by the motivation to comply with each of them as can be seen in the following equation:

$$SN_B \approx \sum_{j=1}^q nb_j m_j \dots\dots\dots 2$$

Where SN_B is the subjective norm towards behavior, nb_j is the normative belief that the referent group j (family, friends and peers) thinks that the respondent should or should not perform the behavior. And m_j is the motivation to comply with the pressure of the referent group j , and q is the number of referents (Ajzen, 1991).

On the other side, the TPB postulates that the relationship between subjective norm and behavior is mediated (indirect) by behavioral intentions (Ajzen & Fishbein, 1973, Ajzen, 1991). Most of the studies that used normative constructs as predictors of behavior have found direct effects of subjective norm on behavior (Trafimow & Finlay, 2001; Christian & Armitage, 2002; Christian, Armitage & Abrams, 2003; Okun et al., 2002). Though the impact of normative component on intentions has received maximum attention compared to the direct effect of subjective norm on behavior (Armitage & Conner, 2001; Ravis & Sheeran, 2003; Manning, 2009), the primary reason that affects the studies on the likely direct effect of subjective norm on behavior may be due to nature under which most individuals report their perceptions regarding their behavior. Consequently, theoretical bases may not precisely reflect the association between the perceptions and behaviors that are apparent in real behavioral settings (Ajzen, Brown, & Carvajal, 2004). For instance, when a person shows his intention to engage in a specific behavior, there is a high probability that the behavioral

intention may likely change from intention to actual behavioral engagement (Ajzen, 1991). Thus, it is less likely that perceptions of subjective norms associated with the behavior will change over time (Manning, 2009). These logical combinations provide the opportunity to measure the possible direct effect of subjective norm on behavior within the TPB studies.

Review of literature suggests two significant ways in which subjective norm can influence the behavior in question. Firstly, there is the theoretically-hypothesized indirect effect of subjective norm on behavior mediated by behavioral intentions (Ajzen, 1991), and the direct effect of subjective norm on behavior. The overall effect, therefore, is the summation of these two effects (Manning 2009). The present study assumes that subjective norm has a significant positive influence on the retirement planning behavior of the public and private sector workers in Nigeria. The more workers' referent groups (families, friends, co-workers, or superior boss) plan for their retirement, the greater will be the workers confidence to participate in retirement planning behavior. Workers who comply with the behaviors of their referent groups are expected to be better and able to carry out their retirement planning than those who fail to comply. Thus, it will be hypothesised that:

H2a: Subjective norms positively influence retirement planning behavior.

The basic principles of behavioral performance comprise of action, circumstances and the time at which the behavior is to be performed (Ajzen, 1991). If all of these conditions are met, then the relationship between the behavioral predictors and the

period of behavioral engagement will be stronger. Though on the condition that the measures of behavioral predictors and the actual behavior ought to be compatible (Ajzen & Fishbein, 1977; Ajzen, 1996). The review of theoretical literature and existing studies on the relationship between subjective norm and behavior indicates that the relationship between subjective norms and behavior may not likely yield a significant difference (manning 2009; Griffing 2012). In contrast Ofili (2017) has suggested that there is a significant difference in the relationship between subjective norm and retirement savings behavior. Therefore, this study assumes that:

H2b: There is a difference between subjective norm and retirement planning behavior of the public and private sector workers in Nigeria.

Similarly, the TPB assumes that people's social behavior falls within the volitional control and can be predicted through behavioral intentions. These necessitate the introduction of perceived behavioral control purposely to solve the problems of situations where individual may lack volitional control over the behavior of their interest (Ajzen, 1991). Precisely, the ability of the individuals to perform the behavior depends on his /her level of control, belief and perceived control factors (resources, skills, income, time, and past experience) (Ajzen, 1991). The aggregate of these factors determines the chances of behavioral performance. All things being equal, the highest level of perceived behavioral control increases the individual's efforts, and intention to perform the behavior. In the same manner, therefore, perceived behavioral control indirectly affects behavior through intention and directly affects behavior (Ajzen, 1991; 2002; 2006). This necessitates the formation of equation three which implies:

$$PBC \propto \sum C_i P_i \dots\dots\dots 3$$

Where C_i = is the control belief and P_i = is the perceived power of the control factor.

The TPB assumes that the accuracy of the individual perceptions enhances his PBC. However, in a normal condition, the PBC may not likely be accurate if the person has low knowledge about the behavior, lacks the requisite resources, experience or he is unfamiliar with the new elements that may interfere with the process (Ajzen 1991). Considering the conditions mentioned thereof, perceived behavioral control increases the chances of behavioral prediction to the extent that the direct association between PBC and behavior become realistically truthful. Thus, PBC can directly influence behavioral performance (Ajzen, 1985). Therefore, in line with the aggregation rule, it will be assumed that if the worker has control over his/her skill, income, time and has the needed experience, he/she may likely plan for his/her retirement provided he/she has positive attitude toward retirement planning and he/she is willing to comply with the behavior of his/her referent group. It is hypothesized that:

H3a: Perceived control over retirement planning positively influences retirement planning behavior.

On a general note, the perceived behavioral control is intended to capture all control factors during the prediction of behavior. Review of literature from 90 studies within the context of TPB, has revealed that the measures of perceived behavioral control varied significantly across studies (Ajzen, 1991). These results have proposed that it is possible to obtain significant differences with the direct relationship of PBC. Thus,

this study assumes that the relationship between perceived control over retirement planning and retirement planning behavior of the public and private sector workers in Nigeria would yield a difference. Therefore, it is hypothesized that:

H3b: There is a difference between the perceived control over retirement planning and retirement planning behavior of the public and private sector workers in Nigeria.

The philosophy behind the principle of aggregation has suggested that individual behavior is slightly influenced by different factors. These factors affect some specific instance, conditions and observable actions. In line with the differences in behavior observed in different cases and situations, the causes of behavioral influence tend to neutralize each other. On the premise that the result of the aggregate will represent a substantial measure of a behavioral disposition than any individual behavior (Ajzen, 2005). Empirical researches have validated the useful functions of the principle of aggregation by suggesting that personality traits can directly predict general attitude towards behavior and can jointly predict behavioral aggregates (Ajzen, 2005).

In line with the principle of aggregation, this study is of the view that personality trait might likely have a significant positive influence on attitude towards retirement planning of the workers. Provided the personality trait of the workers is positive, he may have a positive attitude towards retirement planning which will, in turn, inspire him to engage in retirement planning behavior. Hence, the following hypothesis:

H4a: Personality traits positively influence attitude toward retirement planning.

The principle of aggregation further expresses the that the consistency of personality traits measure across different attitudinal behaviors and situations can be obtained using aggregates. Evidence in favor of this argument has long appeared in the convergent validity of personality trait and attitudinal measures (Ajzen, 2005). Comparatively, the empirical relationship between general personality traits and attitude towards behavior has yielded some theoretical debates. Researchers have argued that the concept of personality trait defined by the broad behavioral disposition (e.g., Attitude) is relatively weak and can vary across time and condition (Ajzen, 1991; 2005). Thus, personality traits can comparatively, relate the attitude toward behavior post-retirement planning (Ajzen, 1991). This study assumes that there is a difference between the personality traits and attitude toward retirement planning of the public and private sector workers in Nigeria. Therefore, hypothesis 4b is developed:

H4b: There is a difference between the personality traits and attitude toward retirement planning of the public and private sector workers in Nigeria.

The relationship between personality traits and subjective norms depends on the principle of aggregation (Ajzen, 2005). Going by the provision of the theory of planned behavior, the predictive ability of a personality trait and subjective norm can be traced to one or more of the behavioral determinants (Ajzen, 1991; 2005). Hence, the principle of aggregation has suggested that individuals' personality may likely influence subjective pressure from family members, friends, peers, or co-workers which will, in turn, lead to behavioral performance (Ajzen 2005). This study assumes that personality traits would have a significant positive influence on subjective norm.

Positive personality traits will make the workers to comply with the positive retirement planning behavior of the family members, friends, peers, or co-workers. Thus, the formation of hypothesis 5a:

H5a: Personality traits positively influence subjective norm.

In line TPB, dispositional factors (personality, knowledge etc.) can influence similar or dissimilar behavior in specific or repeated action (Ajzen, 2005). The act will lead to the achievement of result with a high degree of consistency. Thus, it is possible to aggregate different relationships in each behavioral domain observed on separate occasions and in different behavioral contexts. Such multiple connections will, therefore, serve as a useful underlying behavioral disposition (AJzen, 2005). Thus, this study assumes that there might be a difference between personality trait and subjective norm of the public and private sector workers in Nigeria. It is hypothesized that:

H5b: There is a difference between the personality trait and subjective norm of the public and private sector workers in Nigeria.

Empirical studies have suggested that personality trait poorly predict perceived locus of control (Warehime, 1972; Levenson, 1981; Lefcourt, 1982; Wallston & Wallston, 1981). However, the only way to remedy the situation is by aggregating personality traits across instances, circumstances, and act like perceived control (Epstein, 1983; Fishbein & Ajzen, 1974). In line with the principle of aggregation and dispositional rule, the relationship between personality traits may influence perceived behavioral

control, provided there is a positive attitude towards retirement planning and the individuals are willing to comply with the behavior of their referent groups (Ajzen, 1991; Ajzen 2005). Hence, it is assumed that personality trait will impact positively on perceived control over retirement planning. If the attitude towards retirement planning remain stable and the workers are willing to comply with the subjective pressure from their referent groups, they may engage in retirement planning behavior. Thus, the following hypothesis is formulated:

H6a: Personality trait positively influences perceived control over retirement planning.

In line with the aggregation principle, personality trait predictors may be considered as a disposition to hold specific belief rather than the desire to act in a particular manner. In general, individual behavior is assumed to be under his or her control and can relate to a broad range of trait predictors (Ajzen, 1991; 2005). However, the weak predictive validity of the personality trait measures may likely lead to an unfortunate result (Ajzen, 2005). Thus, this study assumes that the relationship between the personality trait and perceived control over retirement planning of the public and private sector workers in Nigeria might likely produce a difference. In line with this assumption, the following hypothesis states that:

H6b: There is a difference between the personality trait and perceived control over retirement planning of the public and private sector workers in Nigeria.

Review of literature has shown that knowledge as a dispositional factor is a necessary tool for effective behavioral performance (Ajzen et al., 2011). Consistent with the TPB (Ajzen, 1991), knowledge, though necessary, it is not enough to yield the desired behavior (Ploem, & Byers, 1997; Fisher & Fisher, 1992). Therefore, in addition to having the necessary knowledge, individuals must be motivated by another factor to engage in the behavior. Thus, the combination of these two factors, directly or indirectly, led to behavioral performance (Fisher & Fisher, 1992; Ajzen & Sheik, 2012). The beliefs acquired through information and knowledge are assumed to guide the behavior (Ajzen et al., 2011). Precisely, ideas about a behavior's likely outcomes (positive or negative) are expected to determine attitude toward the behavior. If the information obtained is positive, it will shape the individual belief which will, in turn, lead to a positive attitude toward behavior (Ajzen et al., 2011).

Ajzen et al., (2011) have argued that if responses in a knowledge survey are in a biased manner, it will follow the trend of the individual's attitude thereby making knowledge to correlate positively with the individual's attitude. However, the same biased response will equally produce negative results if the individual attitude is negative toward the behavior in question. Hence, such will be causing negative impacts on the knowledge attitude relationship. Additionally, if the knowledge question strikes a balance between the two, in such a way that equal numbers of correct answers have positive and negative implications, there should be a small correlation between the knowledge and attitude relationship. In line with this justification, this study, therefore, assumes that the knowledge of financial planning for retirement might significantly influence the attitude toward retirement planning of the public and private

sector workers in Nigeria. This means that if the workers acquired knowledge of financial planning for retirement, it would shape their attitude toward retirement planning. This will, in turn, have positive impact on the positive attitude of the worker. This will inspired him to engage in retirement planning behavior. Thus:

H7a: Knowledge of financial planning for retirement positively influences attitude toward retirement planning.

Review of literature has suggested that general attitude or dispositional variables are generally poor predictors of a specific behavioral act (Ajzen, 2005; Ajzen & Fishbein, 1977). A similar case replicates the knowledge-attitude relationship because general knowledge measured in a domain may not likely predict any specific behavioral act in that area (Ajzen et al., 2011). Thus, the measures of dispositional factors are compatible with the behavioral criterion in each spot, context. The time of behavioral performance positively predicts behavior better than global dispositions (Ajzen, 2005; Fishbein & Ajzen, 1974; Kraus, 1995). The present study, therefore, assumes that there is a difference between knowledge of financial planning and attitude toward retirement planning of the public and private sector workers in Nigeria.

H7b: There is a difference between the knowledge of financial planning for retirement and attitude toward retirement planning of the public and private sector workers in Nigeria.

In line with TPB, general knowledge relates to behavioral intentions and behaviors that are mediated through attitude, subjective norm and perceived control to influence the behavior in question (Ajzen et al., 2011). Correspondingly, in line with the principle of aggregation (Ajzen, 2005), this study assumes that if workers have the knowledge of financial planning for retirement, they are willing to comply with the behavior of their referent group, provided they have absolute control over their retirement planning and have a positive attitude towards retirement planning. The workers may likely engage in retirement planning behavior. Thus, the following hypothesis is formulated:

H8a: Knowledge of financial planning for retirement positively influences subjective norms.

The TPB has argued that knowledge, though necessary, is not enough to yield the desired behavior (Ajzen, 1991; Fisher & Fisher, 1992; Ploem, & Byers, 1997). Therefore, in addition to having the necessary knowledge, individuals must be motivated by another factor to engage in the behavior. Consistent with this view, it is likely to have a high level of predictive accuracy in the relationship between knowledge and subjective norm (Ajzen et al., 2011). It is hypothesized that:

H8b: There is a difference between the knowledge of financial planning for retirement and subjective norm of the public and private sector workers in Nigeria.

The Bandura's (1977; 1986) theory of self-efficacy Strengthening the predictive ability of the TPB. The central argument of the theory stipulates that people significantly process and utilize an implied knowledge rooted in their belief (control belief/self-efficacy) and, thereby, self-regulate their behavior (Bandura, 1977; 1986). Ajzen (1988) suggests that PBC may serve as a good predictor of behavioral performance if an individual has the control power over the behavior in question. However, if the individuals have no absolute control over their behavior, the PBC may not likely influence behavioral prediction because the individual does not have the required knowledge or experience to perform the behavior.

The TPB has suggested that general knowledge can relate to perceived control to influence the behavior in question (Ajzen et al., 2011). In line with the principle of aggregation, Ajzen (2005) has mentioned in the preceding sections, this study assumes that if workers acquire the knowledge of financial planning for retirement, they may have high degree of confidence with regards to financial planning for retirement and, thus, may likely have control over retirement planning which will eventually motivate him/her to engage in retirement planning behavior. It will be hypothesized that:

H9a: Knowledge of financial planning for retirement positively influences perceived control over retirement planning.

Ajzen & Sheik (2012) have noted that knowledge is neither adequate nor necessary for effective behavioral performance, though it is theorized to be a poor predictor of behavior. It all depends on the accuracy of the information which will then influence

the behavioral performance. In line with this position, the relationship between knowledge and PBC will likely yield mixed results due to its weak predictive ability. Therefore, the present study expects a difference between the knowledge of financial planning for retirement and the perceived control over retirement planning of the public and private sector workers in Nigeria. It is hypothesized that:

H9b: There is a difference between the knowledge of financial planning for retirement and perceived control over retirement planning of the public and private sector workers in Nigeria.

Figure 3.3 explicitly shows the position of each hypothesis developed and how they relate with each other in the research model.

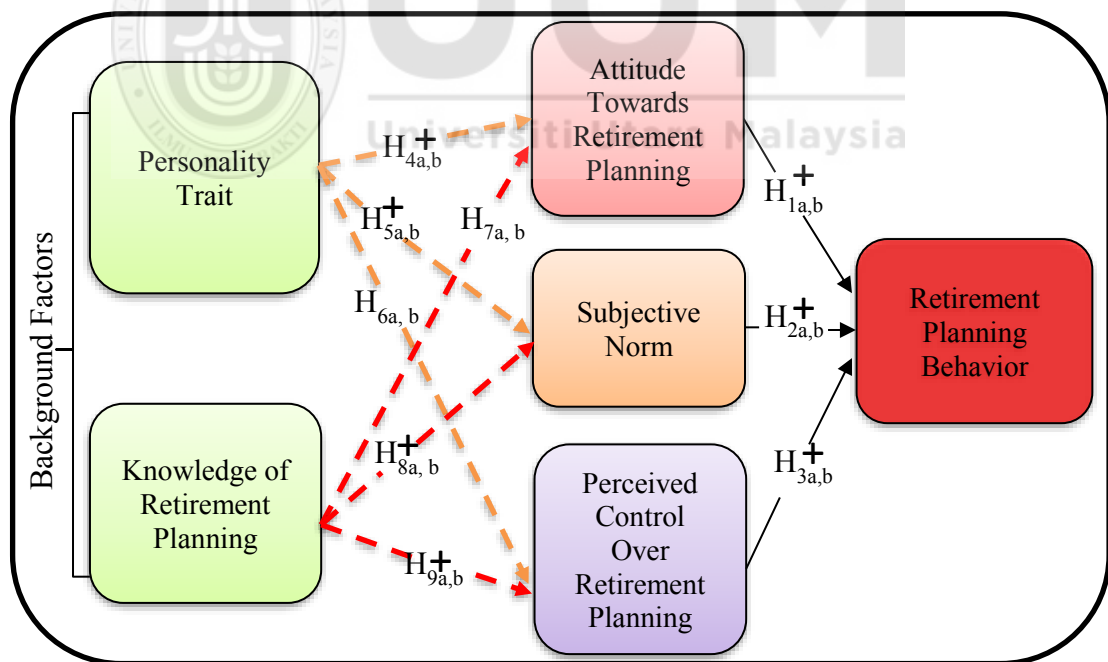


Figure 3.3
Hypothesis Development

3.3 Research Design

Research design is an outline or plan made by the researcher indicating the process to be used in carrying out the study (Saunders, 2009; Mouton, 2012). Thus, the present study is empirically designed to explore the factors influencing retirement planning behavior of the public and private sector workers in Nigeria. The existing literature on retirement planning behavior used questionnaires to generate data from the respondents (Moorthy et al. 2012). The present study followed the same process. Some of the advantages of a survey study entails the use of the questionnaire which allows the collection of data at a minimal cost (Saunders et al., 2009). It also facilitates the generation of data for statistical analysis in a specific, reliable and precise manner (Crotty, 1998; Silverman, 1993). This study, therefore, is cross-sectional in nature as it used structured questionnaires to collect data from the selected sample of the respondents. The survey method aimed to generate more knowledge about the broader population from the selected sample.

3.3.1 Research Paradigm

Research paradigm is the beliefs and assumptions about the development of knowledge which comprises of two main groups, namely: positivist paradigm and interpretive paradigm (Guba & Lincoln, 1994; Bryman & Bell, 2007; Saunders, 2009; Myers, 2009; 2013). The positivists have argued that the researcher should view the social world as an external phenomenon measured through observation. It depends on what the senses can see, perceive, or touch. It is analyzed on the experimental base and empirical observation as against the philosophical speculation. Correspondingly, Natural and social scientist share the same logical and methodological approach in

dealing with facts rather than values. The positivist researchers are of the view that the natural science is advancing through the collection of facts to provide scientific laws (Gray, 2013). The social science research adopts quantitative methods in determining the causes and effects of associations among variables using the hypothesis. Also, the positivists have used the deductive method of investigation which aims at testing their assumptions based on theories and empirical evidence (Tashakkori & Teddlie, 1998; Bryman & Bell, 2007; Creswell, 2009; Deshpande, 1983; Perlesz & Lindsay, 2003). The primary aim of deductive research is to give generalized conclusions that will pave the way for theoretical modifications (Deshpande, 1983; Bryman & Bell, 2007). In a nutshell, Neuman (2011) regards the positivist as a researcher who beliefs in value-free science, pursues reliable quantitative measures, reviews underlying theories with statistical data, and believes in the importance of reproducing studies.

In contrast to positivists, the position of the interpretive paradigm or anti-positivist is a philosophical thought adopted by a German philosopher and a mathematician named Edmund Husserl (1859-1938) (Mack, 2010; Willis, 2007). The dominant interpretive philosophy focused on culturally derived and historical explanations of the social life-world (Crotty, 1998). Interpretive philosophers have proclaimed that natural issues and social reality are dissimilar and they therefore, need a different method of analysis. The natural sciences depend on reliabilities of the data to come out with 'laws' (nomothetic). Whereas the social sciences frequently deal with the activities of the individuals (ideographic) (Gray, 2013), the Interpretive philosophers have argued that there is no direct relationship between the researcher and the social world because they view the social world through design and illustrations. Unlike the positivist

philosophers, the interpretivists assume that human social life could be analyzed qualitatively through direct observation, interviews, and case studies, among others (Williams & May, 1996; Neuman, 2011).

The aim of this study, therefore, is to test the TPB model based on a set of hypotheses. The model comprises of the TPB variables and background factors (personality trait and knowledge of financial planning for retirement). The TPB variables include: retirement planning behavior, attitude towards retirement planning, subjective norms and perceived control over retirement planning. In line with the objectives of this study, a total number of eighteen Hypotheses have been formed and tested. The work implements the positivist paradigm, based on empiricism and objectivity in testing of the research hypotheses.

3.4 Measurement of Variables and Instruments

This study is designed to examine the determinants of retirement planning behavior. The survey instrument used in this study consists of four sections. The first section comprises of the demographic variables made up of gender, age, marital status, educational qualification, number of children, employer, salary grade and ownership of retirement savings. Section two measures the retirement planning behavior of the workers. Section three measures attitude toward retirement planning, subjective norm and perceived control over retirement planning of the workers. Section four handles background factors such as personality trait and knowledge of financial planning for retirement.

Statements in the survey instruments are measured on seven Likert scales. Rensis Likert is the originator of the Likert method of measurement in 1932. He argued that the attitude of respondents varies along a given dimension ranging from positive to negative, just like the variations in height which starts from short to tall or wealth possession from poor to rich. According to Likert, the success of any measurement in research is to adequately pass the underlying dimension to the respondents (Johns, 2010). Therefore, choice of the respondents will reflect exactly their positions on the scale dimension provided on the measurement scale as listed below:

1.	Strongly Agree	Extremely Good	Extremely Likely
2.	Agree	Quite Good	Quite Likely
3.	Somewhat Agree	Slightly Good	Slightly Likely
4.	Neither	Neither	Neither
5.	Somewhat Disagree	Slightly Bad	Slightly Unlikely
6.	Disagree	Quite Bad	Quite Unlikely
7.	Strongly Disagree	Extremely Bad	Extremely Unlikely

3.4.1 The Dependent Variables (DV)

The retirement planning behavior is the only dependent variable in this study. It is measured using a five-item statements adapted from the work of Hershey & Jacobs-Lawson (2007). The dependent variable (RPB) is designed to evaluate individual's behavior toward retirement planning (See Appendix I). All the five-item statements were measured on a 7-point Likert scale response format (1=strongly agree to 7=strongly disagree).

3.4.2 The Independent Variables (IVs)

The present study consists of five independent variables. They are: attitude toward retirement planning, subjective norm, and perceived behavioral control. while Personality trait and knowledge of financial planning for retirement will served as background factors.

Firstly, attitude toward retirement planning is an independent variable with five-item statements adapted from Griffin et al. (2012) and measured on a seven Likert scale response format, e.g. (1= interesting or 7= Boring; 1= Productive use of time or 7= waste of time; 1=Helpful or 7= Not Helpful; 1=Worthwhile or 7= Useless; and 1=Easy or 7= Difficult.

Secondly, the subjective norm measures the subjective pressure and the ability of the respondents to comply with the behavior of their referent group (family, friends co-workers or supervisors). The Subjective norm consists of three-item statements adapted from Ajzen (2013).

Thirdly, the perceived control over retirement planning consists of six-item statements aimed at assessing the workers level of control. The six-item statements were adapted from Ajzen (2013).

Fourthly, personality trait is used in measuring the workers level of personality. It consists of five-item statements adapted from Gosling et al., (2003). Fifthly, knowledge of financial planning for retirement is a variable that is used to measure the

level of knowledge and awareness of workers about financial issues and planning. It consists of six-item statements adapted from Jacobs-Lawson, & Hershey (2005). All the items statement were measured on a seven-point Likert scale ranging from 1= strongly agree, to 7= strongly disagree).

3.4.3 Demographic Variables

The demographic section consists of 10 items aimed at measuring the demographic features of the respondents. The items were adapted from Moorthy et. al. (2012), National Bureau of Statistics (2010) and Obi & Idu (2011).

Table 3.1

Demographic Variables

S/n	Variables	Measurement
1	Gender	1 – Male 2 – Female
2	Marital Status	1 – Single 2 – Married 3 – Divorced 4 – Widow/Widower
3	Religion	1 – 26 – 35 years 2 – 36 – 45 3 – 46 – 55
4	Age	1 – Islam 2 – Christianity 3 – Others
5	Ethnic Groups	1 – Hausa 2 – Igbo 3 – Yoruba 4 – Others
6	Number of Children	1 – 1 – 3 children 2 – 4 – 6 3 – 7 – 9 4 – 10 and above
7	Academic Qualifications	1 – SSCE 2 – NCE/OND 3 – BSc/BA/HND 4 – MSc/MA/MABA/MPA 5 – PhD/ Professors

Table 3.1 (*Continued*)

S/n	Variables	Measurement
8	Salary Grade	1 – 01 – 06
		2 – 07 – 12
		3 – 13 – 17
9	Employer	1 – Public Sector
		2 – Private Sector
10	Ownership of Retirement Savings Account (RSA)	1 – Yes
		2 – No

3.4.4 Measurement of the Dependent and Independent Variables

Summary of items in the questionnaire includes the number of questions and authors for both the dependent and independent variables are stated in table 3.2.

Table 3.2
Survey Items

CONSTRUCTS	ITEMS CODE	SURVEY ITEMS	SOURCES
Retirement Planning Behavior	RPB01	I frequently read articles /brochures on investment or planning	(Stawski, Hershey & Jacobs-Lawson 2007)
	RPB02	I organized my financial records	
	RPB03	I conducted a thorough assessment of my financial net worth	
	RPB04	I identified specific spending plans for my future	
	RPB05	I discussed financial retirement plans with my pension managers	
Attitude Towards Retirement Planning	ATRP01	Retirement planning is Interesting / Boring	(Griffin, et al., 2012).
	ATRP02	Retirement planning is a productive use of time /waste of time	
	ATRP03	Retirement planning is Helpful/ Not Helpful	
	ATRP04	Retirement planning is Worthwhile / Useless	
	ATRP05	Retirement planning is Easy / Difficult	
Subjective Norm	SN01	Most people who are important to me planned for retirement	(Ajzen, 2013)
	SN02	The people in my life whose opinions I valued planned for retirement	
	SN03	Many people like me planned for retirement every month.	

Table 3.2 (Continued)

CONSTRUCTS	ITEMS CODE	SURVEY ITEMS	SOURCES
Perceived Control over retirement Planning	PCRP01	If I encountered unanticipated events that placed demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis.	(Ajzen, 2013)
	PCRP02	If I felt ill, tired or listless, it would make it more difficult for me to plan for retirement on a regular basis.	
	PCRP03	If I had family obligations that placed unanticipated demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis.	
	PCRP04	If work or employment placed unanticipated demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis.	
	PCRP05	If other activities placed heavy demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis.	
	PCRP06	If I failed to plan for retirement in time, it would make it more difficult for me to continue planning on a regular basis.	
Personality Trait	PT01	I see myself as someone who is extroverted and enthusiastic.	(Gosling, et al., 2003)
	PT02	I see myself as someone who is dependable and self-disciplined.	
	PT03	I see myself as someone who is Sympathetic and warm.	
	PT04	I see myself as someone who is Open to new experiences and complexes.	
	PT05	I see myself as someone who is Calm and emotionally stable.	

Table 3.2 (Continued)

CONSTRUCTS	ITEMS CODE	SURVEY ITEMS	SOURCES
Knowledge of Financial Planning for Retirement	KFPR01	I am very knowledgeable about financial planning for retirement.	Jacobs-Lawson, & Hershey, (2005)
	KFPR02	I know more than most people about retirement planning.	
	KFPR03	I am very confident in my ability to do retirement planning.	
	KFPR04	When I need information on financial services, I know exactly where to go.	
	KFPR05	I am knowledgeable on how Contributory Pension Scheme (CPS) works.	
	KFPR06	I am knowledgeable about how the Retirement Saving Account (RSA) work.	

3.5 Development of Research Instrument

The instrument used for data collection is a structured questionnaire which consists of the demographic variables, retirement planning behavior, subjective norm, perceived control over retirement planning, personality trait and Knowledge of financial planning for retirement. The respondents answered the questions in section one with utmost level of honesty. They also responded to other sections using the Likert scale format to show their level of agreement. The Likert scale format is a rating scale used in the measuring of behavior, attitude or any other issue of interest that requires evaluation (Leedy & Omrod 2010).

3.5.1 The Questionnaire

The instrument used for the collection of data is a structured questionnaire adapted from the existing literature. The questionnaire consists of one dependent variable (retirement planning behavior) and five independent variables. The independent variables are: attitude toward retirement planning, subjective norm and perceived

control over retirement planning. Others are personality trait and knowledge of financial planning for retirement. In line with some previous studies, the questionnaire comprises of four distinct sections. In constructing a questionnaire of this kind, Leedy and Omrod (2010) have highlighted some essential conditions to be strictly adhere to in the present study as follows:

1. The questionnaire should be short, precise and self-explanatory.
2. The questionnaire should be simple and stress-free during filling in.
3. The respondent should be allowed to choose freely from the alternative options.
4. The wordings of the questionnaire should not be misleading or ambiguous.
5. The questionnaire should be brief and consistent.
6. It should be proof read thoroughly and ensure that it meets the objectives of the research. It should take a professional outlook and be very educative.

The questionnaire is closed-ended and designed in such a way that the respondents will, freely, choose any answer from the options. The decision to choose closed-ended questions in consideration of the following advantages:

1. They are easy to answer and reduce time wastage.
2. It is easier during coding and analysis of the data.
3. It is easier in comparing and calculation of the observations.
4. It always generates high response rate from the respondents.
5. It reduces the chances of vague and irrelevant responses.

The questionnaire was designed in English language because it is the official language and medium of communication in Nigeria. Prior to the administration of the main

study, research experts were requested to assess the clarity of the wordings, ease of understanding, the level of language, length, format, and instructions for the overall questionnaire to reduce ambiguities and writing errors. After a reasonable discussion, many corrections and changes concerning the wordings, presentation and structure of the instruments were made. Likewise, a supporting letter was attached to the questionnaire explaining in details the research objectives, the usefulness of the study, how to fill in the questionnaires. We also assured the respondents of anonymity on their responses. Lastly, the questionnaire consists of 40 items (see appendix A).

3.6 Operational Definition of Terms

This section provides the operational definitions of the variables and how they are used in this study. The variables consist of retirement planning behavior, attitude toward retirement planning, subjective norm and perceived control over retirement planning. Others are personality trait and knowledge of financial planning for retirement.

Retirement Planning Behavior (RPB) is defined as a complex set of behaviors, determined by the individual's attitude toward retirement planning, subjective pressures from others and the ability to have control over retirement planning, all of which are influenced by the knowledge of financial planning for retirement and personality of the workers.

Attitude Towards Retirement Planning (ATRP): It is the positive or negative perception of workers toward retirement planning. Attitude toward retirement

planning is developed through learning, copying from others, or direct experiences acquired through people and situations.

Subjective Norm (SN): Subjective norm is the perception of individuals' social influence from very important personalities (e.g. family, friends and others) to engage or not to engage in the behavior. It is also the motivation to obey the behavior of those important personalities.

Perceived Control over Retirement Planning (PCRP): It is defined as the individual's perception, ability and control over retirement planning, Perceived control over retirement planning is determined by the individual's resources, skills, and availability of retirement planning information.

Personality Trait (PT): It is an active part of human physical systems which enables the persons to plan his/her social affairs and environment.

Knowledge of Financial Planning for Retirement (KFPR): It is defined as the individual beliefs that are established on the basis of acquiring information and awareness of financial issues which ultimately determines the individual's retirement planning decisions.

3.7 The Population of the Study

The population of a study is the gathering of visibly defined elements such as people, physical objects, or places in which the researcher intends to draw some inferences

(Cooper & Schindler, 2009). The present study focuses on public and private sector workers in Nigeria. The National Bureau of Statistics NBS (2016) has reported that there are 53,554,109 workers in both the public and the private sectors in the country. The Bureau issued the percentages of the workforce in both the public and private sectors. The figures are updated after every 10 years. Therefore, the 2010 data is the latest record from the National Bureau of Statistics. The leading employers of labor in Nigeria are the public sector which consists of the federal, state and local government, parastatals, and ministries. All the public sectors are spread across the six geopolitical zones. In line with the provision of the NBS, the percentages of the workers are presented in table 3.3 above and are calculated to the nearest 100%.

Table 3.3
Employers of Labour in the Public Sector

Geo-political Zones	Federal Govt	State Govt	Local Govt	Parastatals	Total %	Converted to 100%
North East	1.2	3.2	3.6	0.1	08.10	4.64
North West	1.5	3.0	2.7	0.2	07.40	4.24
North Central	3.3	4.8	4.2	0.3	12.60	7.22
South East	1.9	4.6	1.6	0.5	08.60	4.93
South West	2.3	4.4	2.0	0.7	09.40	5.45
South-South	2.9	5.3	2.3	0.4	10.90	6.24
Total	13.10	25.30	16.40	2.20	57	32.68

Sources: NBS Annual Statistical Abstract (2010)

Employers of labor in the Nigerian private sector consist of international organizations, large private and small enterprises, spread across the six-geo-political zones of the country. The NBS has also provided the percentages of the workers in each zone and it covers both the large and small private enterprises as well as international organizations. The percentages were converted to the nearest 100% and

then shared with the sample size across each geopolitical zone to come up with the actual percentage of samples as can be seen in Table 3.4 below.

Table 3.4
Employers of Labour in the Private Sector

Geo-political Zones	Large Private Enterprises	Small Private Enterprises	International Organization	Total %	Converted to 100%
North East	0.4	10.4	0.1	10.90	6.24
North West	0.9	26.3	0.1	27.30	15.64
North Central	0.8	15.8	0.1	16.70	9.57
South East	1.9	15.5	0.1	17.50	10.03
South West	4.1	25.0	0.2	29.30	16.79
South-South	2.8	12.7	0.3	15.80	9.10
Total	10.90	105.70	0.90	117.50	67.37

Sources: NBS Annual Statistical Abstract (2010)

3.7.1 Sample Size Determination

Several approaches have been suggested in determining the sample size of a population (e.g. Yamane, 1967; Krejcie & Morgan 1970; Sekara, Bougie 2010). This study adopts the Yamane (1967) method of calculating sample size of a population. According to Yamane (1967) the standard formulae for calculating the sample of a given population is as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where: n= Sample size

N= Population of the studies (53,554,109)

e = Level of precession at (0.05)

$$n = \frac{53554109}{1 + 53554109(0.05)^2} = \frac{53554109}{1 + 53554109(0.0025)} = \frac{53554109}{133886.27}$$

n = 399.99 Approximately 400.

The sample size that will be used for the study is be 400.

Salkind (1997) has suggested that in any survey research which requires the posting of questionnaires, it is essential to raise the sample size from 40 to 50% to avoid loss in the process of administering the surveys. Salant & Dillman (1994) have proposed that to minimize sample error due to the nature of the respondents, the sample size can be increased using the 50/50 split approach. Thus, going by the suggestion of the Salkind (1997) the sample was increased by 50%. The new sample size will be:

$$\frac{150}{100} * 400 = 600$$

Thus, the new sample size of the study is 600.

3.7.2 Sampling Frame

A sampling frame is a representation of all the components in the population from which sample size is carefully chosen (Sekaran & Bougie, 2010). The National Bureau of Statistics (NBS) provides the sampling frame for this study by publishing periodic statistics which indicates the percentage of the private and public sector workers across all the zones in Nigeria. The geo-graphical zones consist of 53,554,109 workers out of which a sample of 600 workers was calculated as shown in table 3.6 below.

Table 3.5
Sample Size of the Study

Geo-Political Zone	Public Sector (%)	Private Sector (%)	Total (%) by Zone	Sample Size of Public Sector	Sample Size of Private Sector	Total Sample Size by Zone
North East	4.64	6.24	10.88	28	37	65
North West	4.24	15.64	19.88	25	94	119
North Central	7.22	9.57	16.79	43	57	100
South East	4.93	10.03	14.96	30	60	90
South West	5.45	16.79	22.19	33	101	134
South-South	6.24	9.10	15.30	37	55	92
Total	32.68	67.32	100	196	404	600

Source: NBS Annual Statistical Abstract (2010).

In line with Yamane's (1967) position, a sample size of 600 was calculated to represent the entire population. The following states were selected randomly to represent each zone as indicated in table 3.5 above.

Table 3.6
Sample size by State

Geo-Political Zone	Selected State to Represent Zone	Sample Size of Public Sector	Sample Size of Private Sector	Total Sample Size
North East	Adamawa	28	37	65
North West	Kaduna	25	94	119
North Central	Kogi	43	57	100
South East	Enugu	30	60	90
South West	Cross Rivers	33	101	134
South-South	Lagos	37	55	92
Total		196	404	600

3.7.3 Sampling Techniques

Sampling techniques is a strategy used in selecting a representative from the population. It is divided into either probability sampling or non-probability sampling (Saunders et. al., 2009). The probability sampling technique enables each unit of the population to be represented in the selected sample through a random selection procedure (Leedy & Omrod, 2010). The non-probability sampling does not make adequate provisions for each element of the population to be represented in the sample. Consequently, a member of the population has no equal chances of being randomly selected to represent the larger society (Zikmund, 2003).

In this study, a stratified random sampling was adopted. Saunders et al. (2003) have posited that the stratified random sampling is a modified version of random sampling which allows the researcher to share the population into two or more distinct groups. Each group will fall into each stratum and shares the same characteristics. Coopeer &

Schindler (2008) proposed that stratified random sampling may likely reduce the problems of over-representation of sampling and vice versa. For that reason, the sample size of the workers (600) was randomly selected from the population of 53,554,109. The sample was divided into six different strata to ensure equal representation in the distribution across the six geo-political zones. A random number was designed to select a state from the number of states in each of the zones.

3.7.4 Procedures of Data Collection

This study is cross-sectional in nature which entails the collection of data from a single stratum. A cross-sectional survey is usually carried out to measure individual's behaviors, attitude or beliefs. It provides an opportunity to estimate the association between population and differences between the sub-groups (Visser, Krosnick & Lavrakas, 2000). Thus, the data used in this study was collected from the sample size of 53,554,109, private enterprises and the 338 federal/extra-ministerial departments across Nigeria (SMEDAN, 2013; NBS, 2016). A survey of this kind needs quick response and coverage within the shortest time. Therefore, to ease the selection of the targeted respondents, the researcher employed the services of six research assistant across the six geo-political regions for adequate coverage and administration of the questionnaires. The research assistants were taught how to administer the questionnaire at the organizational level.

3.8 Techniques of Data of Analysis

The data analysis was carried out using the statistical package for the social sciences (SPSS 24.0) and the partial least squares structural equation model (PLS-SEM 3.0).

The most salient reason for using PLS-SEM in social science studies is due to non-normal data, small sample sizes and formative nature of the constructs. Most of the social science data collected usually fails to meet the multivariate normal distribution which may likely underestimate the standard errors and increases the measures of goodness-of-fit (Lei & Lomax, 2005). As a solution to that problem, PLS-SEM accommodates non-normal data. Following the central limit theorem, the PLS algorithm converts non-normal data to normal data (Beebe et al., 1998; Cassel et al., 1999).

Sometimes, the sample size, parameter estimates, or the model fit may affect the statistical power of some software such as CB-SEM (Shah and Goldstein, 2006). However, PLS-SEM functions much better with both smaller sample sizes and complex data. In such situations, PLS-SEM usually achieves better convergence validity and higher levels of statistical power (Henseler, 2010; Reinartz et al., 2009). Thus, PLS-SEM has gained much support as a recommended method for researchers because evaluating the formative indicators with other software usually leads to many problems (Hair et al., 2014; Jarvis et al., 2003). Therefore, it is not surprising for scholars to believe that PLS-SEM is a better option for estimating formative indicators.

3.9 The Pilot Study

A pilot study is an important stage in research which assists the researcher to identify the potential problems that may come up during the main study. A pilot study is defined as a test run of the research instruments intended to be used in the actual research (Monette et al., 2002). In this study, the questionnaire was pre-tested to

guarantee clarity and ease of comprehension because the original measures were used in different countries such as the United States of America, the United Kingdom, and Australia (Ajzen 2002; 2013; Flynn et al., 1990; Griffin, 2012; Stawski, Hershey & Jacobs-Lawson, 2005; 2007;). In line with Riefler and Siguaw (2012) guidelines, a total of 100 questionnaires were used for the pilot study in the north-central and north-west geo-political zones of Nigeria. Out of the 100-questionnaires issued, only 81 staff from both the public and private sectors filled in the questionnaires signifying a response rate of 81%.

Smart PLS 3.0, was used to determine the internal consistency reliability and discriminant validity of the constructs used in the pilot study. PLS algorithm was applied to measure the average variance extracted and the composite reliability coefficients (Geladi & Kowalski, 1986). The individual item reliability of the instruments was used to determine the internal consistency and reliability of the instruments (Creswell, 2005). Individual item reliability was measured by assessing the outer loadings of a particular construct (Hulland, 1999; Duarte & Raposo, 2010; Hair et al., 2016; Hair et al., 2012). Following the rule of thumb regarding the keeping of items with loadings between 0.40 and 0.70, it was observed that eight (8) items did not reach the level of acceptable reliability. Therefore, the items were deleted due to poor loadings while 22 items were retained in the model because they are within the recommended loadings (Chin 1998; Hair et al., 2016). The affected items were Retirement planning behavior (RPB05), Attitude towards retirement planning (ATRP01 ATRP05), Perceived control over retirement planning (PCRP06),

Personality traits (PT01, PT02, and PT03) and knowledge of financial planning for retirement (KFPR02).

In line with the rule of thumb proposed by Bagozzi & Yi (1988) and Hair et al. (2011), the composite reliability coefficient should be at least 0.70 or above for a suitable model. Table 3.7 shows that the composite reliability coefficient of each latent construct ranged between 0.803 to 0.921 indicating that all the constructs used in the pilot study have adequate internal consistency and reliability (Bagozzi & Yi, 1988; Hair et al., 2011). To achieve an excellent convergent validity in the pilot study, the AVE of each variable should be 0.50 or above (Fornell & Larcker, 1981). Table 3.7 below presents that the values of AVE showed high loadings ($p > 0.50$) on their corresponding constructs (items) signifying good convergent validity.

Table 3.7
Reliability and Validity of the Constructs

Latent Variables	Number of Indicators	Average Variance Extracted	Composite reliability Coefficient
Attitude Toward Retirement Planning	3	0.704	0.876
Knowledge of Financial Planning for retirement	6	0.593	0.897
Perceived Control over retirement Planning	5	0.655	0.904
Personality Trait	3	0.575	0.803
Retirement Planning Behavior	3	0.699	0.873
Subjective Norm	3	0.796	0.921

Source: PLS Algorithm

Discriminant validity is the extent to which constructs differ from one another (Hair et al., 2014). In line with Fornell-Lacker criterion for evaluating the discriminant validity, the construct compares the square root of the AVE with values of the latent constructs (Hair et al., 2014). The square root of each AVE should have a higher value

than the correlations with other constructs. Fornell & Larcker (1981) have recommended that the square root of AVE loading of 0.50 and above indicates good discriminant validity. Table 3.8 below shows that the square root of the AVE ranged between 0.77 - 0.89 signifying good discriminant validity of the variables.

Table 3.8

Latent Variables Correlation and the Square root of AVE

Latent Variables	1	2	3	4	5	6
1 Attitude Toward Retirement Planning	.84					
2 Knowledge of Financial Planning for retirement	.49	.77				
3 Perceived Control over retirement Planning	.23	.29	.81			
4 Personality Trait	.51	.54	.33	.76		
5 Retirement Planning Behavior	.39	.45	.15	.31	.84	
6 Subjective Norm	.33	.32	.29	.20	.45	.89

Lastly, the final questionnaire adopted for this study consist of retirement planning behavior (4 items), attitude towards retirement planning (3 items), subjective norms, (3 items) and perceived control over retirement planning (5 items). Others are knowledge of financial planning for retirement (5 items) and personality trait (2 items).

3.10 Conclusion

This chapter has discussed the underpinning theory, the research model and the procedure for the model estimation. Areas examined in this chapter include: hypothesis development, research design, measurement of variables and development of the questionnaire. The chapter has also discussed the results of the pilot study which show the reliability, validity and discriminant validity of the variables used and those adopted for the study.

CHAPTER FOUR

RESULTS OF THE STUDY

4.1 Introduction

The chapter discusses the process of data cleaning and the results of the study. The chapter was divided into three (3) sections. The first section covered the data cleaning process and presentation of the initial analysis of the results. The second section assessed the preliminary analysis using the measurement and the structural model to ascertain the significance of path coefficients of the models and compare the retirement planning behavior of the workers in the public and private sectors using Wilcoxon matched pairs signed-rank analysis. The third section examines the variance explained using exogenous latent variables, effect size, and predictive relevance of the models and make a conclusion.

4.2 The Response Rate

Preparing a sample is a critical stage in the cross-sectional study which if not carried out properly, could negatively affect the response rates. To attain a high response rate, a cross-sectional survey requires direct administration of the questionnaires to the targeted respondents (Baruch & Holtom, 2008; Dillman et al., 2009; Cook et al., 2000; Sangha et. al., 2003). Therefore, the researcher is motivated to directly administer the questionnaires in two phases to a total of 600 respondents selected from the public and private sectors across the six geo-political zones of Nigeria. Consequently, the first phase produced poor response rate. A month later, the second phase of the questionnaires was issued to different respondents. After four weeks, a follow-up

through direct contacts and phone calls to those who could not return their questionnaires was made as recommended by Salim Silva et al. (2002) and Traina et al. (2005). In some instances, SMS messages were sent to them as suggested by Sekaran (2003). As a result of these efforts, 425 questionnaires were returned out of 600 administered to the targeted respondents given a response rate of 70.83%. Though, about 18 cannot be used because the respondents did not complete an essential part of those questionnaires. Whereas 407 were accurately filled and used for the analysis. Thus, the response rate of 70.83% is suitable for the analysis because, Sekaran (2003) recommended that a response rate of 30% is enough to give a good result in survey research (see table 4.1).

Table 4.1
Questionnaire Distribution and Response Rate

Items	Frequency	Percentage (%)
Number of questionnaires distributed	600	100
Number of questionnaires returned	425	70.83
Number of questionnaires not returned	175	29.16
Number of returned /valid questionnaires	407	67.83
Number of returned /invalid questionnaires	18	03.00
Response Rate	425	70.83

4.3 Data Cleaning and Initial Analysis

Data cleaning is a process of identifying and removing errors and inconsistencies from the data (Rahm & Do, 2000). Data cleaning is essential in multivariate analysis, and it assists the researcher to detect missing information or other invalid data that may likely violate the assumptions of techniques of data analysis. Data cleaning improves the quality of the data and pave way for a better understanding of the content of the data (Hair et al., 2007). Before the cleaning process, all the 407 usable questionnaires were coded and keyed into SPSS. However, one Item from the personality construct was

reverse coded. Namely, PT04 “I see myself as someone who is open to new experiences and complex.” Sequel to the coding and entry, the data were treated to eliminate any missing values, outliers, normality test, and multicollinearity issues (Tabachnick & Fidell, 2007; Hair et al., 2010).

4.3.1 Missing Values

The statisticians have regarded missing data or values as common issues in social. However, the original dataset for this study consists of 12, 210 observations out of which two were omitted, which accounted for 0.02%. Specifically, attitude towards retirement (ATRP01) planning and personality trait (PT05) were omitted from the datasets. The process could not record any missing values in retirement planning behavior (RPB), subjective norm (SN), perceived control over retirement planning (PCRP) and knowledge of financial planning for retirement (KFPR). Studies have pointed out that in making statistical inferences, there is no any standard percentage of missing values that is adequate for making a valid analytical judgment. Schafer (1999) and Tabachnick & Fidell (2007) suggested 5% or less than as insignificant and accurate for any study. Also, scholars recommended that the mean substitution is the proper means of substituting the missing values provided the missing data is 5% or below (Little & Rubin, 1987; Raymond, 1986; Tabachnick & Fidell, 2007). Thus, this study, replaced its missed values using the mean substitution method (Tabachnick & Fidell, 2007).

4.3.2 Treatment of Outliers

The important aspect of data analysis is the examination of the data to find out whether all the data points are suitable for further analysis. Thus, outliers are data points which differs significantly from the others and can affect the model estimation (Orr et al., 1991; Sathe & Agarwal, 2016). Ben-Gal (2005) argued that there are two types of outlier's identification methods. They are the univariate and the multivariate methods of treating outliers. These methods formed the bases of regression.

The appearance of outliers in any dataset can change the estimations of the regression coefficients and thus, lead to erroneous results (Verardi and Croux, 2008). Therefore, to identify observations which fall outside the SPSS values due to wrong entries, the data was screened for univariate outliers using the mean of constant values with a baseline of ± 3.29 where $p < .001$ as suggested by Tabachnick and Fidell (2007). Using standardized values of identifying outliers, 39 possible univariate outliers were identified and removed from the dataset (Tabachnick and Fidell, 2007). Also, the Mahalanobis distance was used in identifying the multivariate outliers (Leroy & Rousseeuw, 1987; Martens & Naes, 1992; Tabachnick & Fidell's, 2007). Considering the values of 30 observations, the suggested chi-square is 52.336 where ($p = 0.005$). All the Mahalanobis distance values that go beyond 40.289 were identified. In line with the Mahalanobis distance criteria for removing multivariate outliers, a total number of 61 multivariate outliers was removed from the data since they could affect the accuracy of the analysis. Accordingly, after removing 39 cases of univariate and 61 multivariate outliers, the final dataset remained 307.

4.3.3 Normality Test

Statistical errors are common in scientific research (Curran-Everett & Benos, 2007; Ghasemi & Zahediasl, 2012). Most of the statistical methods (correlation, regression, t-tests) assumed that the data follows a normal distribution. The assumption of normality is critical when constructing reference intervals between two or more variables (Driscoll & Lecky, 2001; Ghasemi & Zahediasl, 2012). Therefore, normality assumptions should be given due consideration because when these assumptions failed to hold, it is difficult to draw accurate conclusions (Öztuna, Elhan & Tüccar, 2006).

Review of the literature indicates that PLS-SEM provided better estimation with non-normal data (Cassel et al., 1999; Joe et al., 2014; Reinartz et al., 2009; Wetzels et al., 2009). However, Hair et al. (2012) suggested that researchers ought to perform normality test on their data before any analysis. Though extremely skewed data can increase the bootstrapping estimation error (Chernick, 2008; Joe et al., 2014), thereby affecting the significance of the path coefficients (Dijkstra, 1983; Ringle, Sarstedt & Straub, 2012). Thus, the present study applied a graphical method to check the normality of the data collected (Tabachnick & Fidell, 2007). Field (2009) recommended that a sample of 200 or more responses decreases the standard errors and raises the value of the skewness and kurtosis. Therefore, using the graphical method of normality test is suitable for a study of this kind. In line with Field (2009), this study examined the histogram and normality curve. Thus, Figure 4.1 illustrates that the data collected followed the normality pattern. All the bars on the histogram were closed to the normality curve, indicating that the present study did not violate the assumptions of normality.

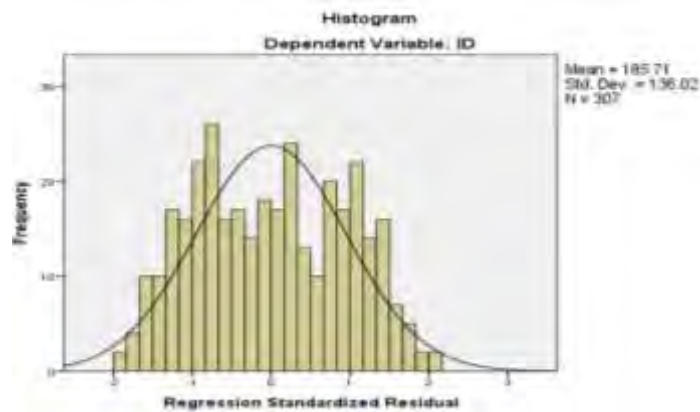


Figure 4.1
Normality Graph

4.3.4 Multicollinearity Test

Multicollinearity is the circumstances where one or more exogenous latent constructs become highly correlated. The existence of multicollinearity between the exogenous latent constructs can significantly change the estimate of regression coefficients and their statistical significance (Chatterjee and Yilmaz, 1992; Hair, Black, Babin, Anderson & Tatham, 2006). Multicollinearity rises the standard errors of the coefficients and ultimately lead to statistically nonsignificant (Tabachnick & Fidell, 2007). To find out the multicollinearity, the present study, adopted two methods of identifying multicollinearity issues (Chatterjee & Yilmaz, 1992; Peng & Lai, 2012). Firstly, the correlation matrix and the variance inflated factor (VIF), tolerance value and condition index were used to find multicollinearity problem (Hair et al., 2011). Hair et al. (2010) suggested that the correlation matrix coefficient of 0.90 and above indicates multicollinearity issues between the exogenous latent constructs. Table 4.2 shows the correlation matrix of all exogenous latent constructs in the model with a complete data (N=307). As can be observed from the correlation matrix, the relationships between the constructs were below the proposed values of 0.90 or above,

indicating that the constructs were autonomous and not highly correlated in the model with complete data set (n=307).

Table 4.2

Correlation Matrix of the Exogenous Latent Constructs of Workers in Nigeria (n=307)

No.	Latent Construct	1	2	3	4	5	6
1	Behavior	1					
2	Attitude	.148**	1				
3	Norm	.354**	.204**	1			
4	Control	.093**	.027	.135**	1		
5	Personality	.131**	.172**	.112**	.108**	1	
6	Knowledge	.266**	.183**	.235**	.092**	.309**	1

Note: **Correlation is significant at the 0.01 level

Similarly, the correlation matrix of the latent constructs in the public (n=155) and private sector (n=152) was displayed in Table 4.3. In line with the suggestion of Hair et al. (2010), the correlation coefficient of the exogeneous and endogenous variables were all below 0.90 indicating that the constructs were independent and not highly correlated in the public and privates sector model.

Table 4.3

Correlation Matrix of the Exogenous Latent Constructs (Public and Private)

Workers in the Public-Sector (n=155)							
No.	Latent Construct	1	2	3	4	5	6
1	Behavior	1					
2	Attitude	.159**	1				
3	Norm	.326**	.159**	1			
4	Control	.046	.040	.040	1		
5	Personality	.083	.218**	.119*	.071	1	
6	Knowledge	.247**	.177**	.233**	.072*	.310**	1
Workers in the Private-Sector (n=152)							
1	Behavior	1					
2	Attitude	.151**	1				
3	Norm	.387**	.248**	1			
4	Control	.110**	.013	.206**	1		
5	Personality	.179**	.151**	.104	.140*	1	
6	Knowledge	.291**	.187**	.240**	.128**	.309**	1

Note: **Correlation is significant at the 0.01 level

*Correlation is significant at the 0.05 level

Secondly, the variance inflated factor (VIF), tolerance value and condition index were used to find out multicollinearity problem. Hair et. al. (2011) recommended that multicollinearity issues may become a problem if the VIF value is greater than 5, the tolerance value is less than .20, and condition index exceeds 30. Table 4.4 displayed the VIF values, tolerance values and condition index for the exogenous latent constructs. The results indicate that there is no any issue of multicollinearity within the exogenous latent constructs in the model with complete data set (n=307) because all the VIF values were less than 5, the tolerance values exceeded .20, and condition index was lower than 30 (Hair et al., 2011). Thus, multicollinearity is not a problem in this study.

Table 4.4
Tolerance, Variance Inflation Factors (VIF) and Condition Index of Workers in Nigeria (n=307)

Latent Construct	Collinearity Statistics		Condition Index
	Tolerance	VIF	
			1.000
Attitude Toward Retirement Planning	.931	1.074	4.615
Subjective Norm	.915	1.093	4.963
Perceived Control over Retirement Planning	.970	1.031	5.423
Personality Trait	.882	1.134	6.017
Knowledge of Financial Planning for Retirement	.855	1.170	8.820

On the other hand, Table 4.5 shows the tolerance, VIF values, and condition index of the exogenous latent constructs in the public (n=155) and private sectors (n=152). The result indicates that there is no issue of multicollinearity within the exogenous latent constructs because all the VIF values were less than 5, the tolerance values exceeded .20 and condition index were lower than 30 as recommended by Hair et al. (2011). Thus, multicollinearity is not an issue in the public and private-sector model.

Table 4.5

Tolerance, Variance Inflation Factors (VIF) and Condition Index of Workers in the Public and Private Sector

Workers in the Public-Sector (n=155)			
Latent Construct	Collinearity Statistics		Condition Index
	Tolerance	VIF	
			1.000
Attitude Towards Retirement Planning	.928	1.078	4.573
Subjective Norm	.917	1.091	4.956
Perceived Control over Retirement Planning	.991	1.009	5.506
Personality	.873	1.146	6.043
Knowledge of Financial Planning for Retirement	.841	1.188	9.141
Workers in the Private-Sector (n=152)			
			1.000
Attitude Towards Retirement Planning	.923	1.084	4.588
Subjective Norm	.887	1.127	4.913
Perceived Control over Retirement Planning	.924	1.082	5.713
Personality	.882	1.134	6.062
Knowledge of Financial Planning for Retirement	.865	1.156	8.617

4.4 Non-Response Bias

Non-response is the significant difference between individuals who responded to the survey and those who failed to do so (Lambert & Harrington, 1990). To estimate the likelihood of non-response bias, Armstrong and Overton (1977) recommended a time-trend extrapolation approach, which involves comparing results from the early and late respondents. They maintained that the late respondents share similar features with the non-respondents. To reduce the issues of non-response bias, Lindner and Wingenbach (2002) recommended a minimum of 50% response rate. This study divided the respondents into early and late respondents. The early respondents are those who filled their questionnaires within 30 days while the late respondents responded after 30 days (Armstrong & Overton, 1977). A total number of 600

questionnaires were shared to the respondents out of which 217 (36.16%) respondents filled and returned their questionnaires within 30 days while 208 (34.67%) responded after 30 days. A total of 425 questionnaires were returned amounting to 70.83% response rate while 175 questionnaires were not return which gives a none response rate of 29.16%. In line with the recommendation of Lindner and Wingenbach (2002), a response rate of 70.83% is adequate for this study. Thus Table 4.6 presents the summary of the response rate, frequency and percentages of the questionnaires issued and return.

Table 4.6
None Response Bias

Response	Frequency	Percentage (%)
Number of questionnaires distributed	600	100
Early Response (within 30 days)	217	36.16
Late Response (After 30 days)	208	34.67
Total Response (Late + Early Response)	425	70.83
None Response (No. Distributed – Total Response)	175	29.17

4.5 Common Method Variance Test

The common method variance (CMV) or mono-method bias is a variance connected with the measurement method instead of the construct of interests (Podsakoff et. al., 2003). Empirical studies have argued that common method variance is the main concern of self-report surveys (Lindell & Whitney, 2001; Podsakoff et al., 2003; Spector, 2006). For instance, Conway and Lance (2010) suggested that common method variance increases the value of relationships between variables measured in the self-reports. Organ and Ryan (1995) posit that studies using self-report surveys may likely have poor correlations values due to common method variance.

This study, therefore, has taken steps to minimize the effects of common method variance (Podsakoff & Organ, 1986; Podsakoff et al., 2003; MacKenzie & Podsakoff, 2012; Podsakoff, MacKenzie & Podsakoff, 2012; Viswanathan & Kayande, 2012). Firstly, to reduce the respondent's anxiety during the data collection, the respondents were informed that all items in the questionnaire have no right or wrong answers and assurance was given to them that their answers will be treated with high level of confidentiality throughout the research. Secondly, all items in the questionnaires were well structured and scaled to reduce the rate of method biasness. This was achieved through the reduction of unclear concepts and use of simple language.

4.6 Demography of the Respondents

The demographic characteristics of the respondents observed in this study include gender, marital status, age, religion, ethnic groups, number of children, academics education, salary grade, employer and ownership of retirement savings account (see Table 4.7).

Table 4.7
Demography of the Respondents (n=307)

Demography	Frequency	Percentage
Gender		
Male	218	71.0
Female	89	29.0
Marital Status		
Single	64	20.8
Married	237	77.2
Divorced	6	2.0
Age		
26-35	105	34.3
36-45	133	43.3
46-55	56	18.2
55 & Above	13	4.2

Table 4.7 (Continued)

Demography	Frequency	Percentage
Religion	181	59.0
Islam	124	40.3
Christianity	2	0.7
Other Religion		
Ethnic Background		
Hausa	108	35.2
Igbo	43	14.1
Yoruba	64	20.8
Others	92	29.9
Number of Children		
None	67	21.8
1-3	133	43.3
4-6	93	30.3
7-9	11	3.6
10 & Above	3	1.0
Academic Qualifications		
Senior School Certificates/ General Certificate of Education	16	5.2
National Certificate of education /Ordinary National Diploma	60	19.5
Bachelor of Science/High National Diploma	157	51.2
Masters	70	22.8
Doctor of Philosophy/Professor	4	1.3
Salary Grade		
01-06	80	26.1
07-12	188	61.2
13-17	39	12.7
Employer		
Public Sector	155	50.5
Private Sector	152	49.5
Ownership of Retirement Savings Account		
Yes	262	85.3
No	45	14.7

As can be seen from Table 4.7, 218 respondents representing (71%) of the sample were males while the remaining 89 representing females (29%). Review of related study also established a similar gender distribution of the respondents. For instance,

Yean, Johari & Sukery (2015) reported that most of the employees in a social security organization were males (75.62%) compared to their female counterparts (24.38%). Likewise, the marital status of the respondents indicates that 64 (20.8%) were single, 237 (77.2%) were married and 6 (2.0%) were divorced. Table 4.7 presented that 105 (34.3%) respondents were within the age of 26-35, 133 (43.3%) respondents were 36-45 years, 56 (18.2%) ranged between 46-55 years and 13 (4.2%) respondents were 55 and above years. Table 4.7 further showed that the respondents came from different ethnic groups such as Hausa, Igbo, Yoruba, and other ethnic groups. About 108 (35.2%) were Hausa, 43 (14.1%) were Igbo, 64 (20.8%) were Yoruba and the remaining 92 (29.9%) represents other ethnic groups. Almost half of the respondents 181 (59%) were Muslims, while 124 (40.3%) were Christians and only 2 (0.7%) practiced other religion. It is observed that 67 (21.8%) doesn't have any child, 133 (43.3%) has 1-3 children, 93 (30.3%) has 4-6 children, 11 (3.6%) has 7-9 children and 3 (1%) respondent has above 10 children.

The level of workers academics qualification varied where 16 (5.2%) obtained secondary school certificates and 60 (19.5%) were holders of national certificates of education or ordinary national diploma and 157 (51.2%) respondents were graduates with either bachelor's degree or Higher National Diploma. Less than one-third of the respondents (22.8%) were master's degree holders, and 4 respondents (1.3%) were either Ph.D. holders or professors. Approximately 80 (26.1%) respondents have a salary grade of 01-06 (Junior cadre), 188 respondents (61.2%) were within the salary grade of 07-12 (senior cadre) and 39 (12.7%) fall within salary grade of 13-17 (managerial Cadre). The result further shows that 155 (50.5%) are working in the

public sectors while 152 (49.5%) are workers in the private-sectors. About 262 (85.3%) hold a retirement savings account (RSA) whereas 45 (14.7%) have no retirement savings account (RSA) account.

4.7 Descriptive Analysis of the Latent Construct

The descriptive statistics explained the mean and standard deviations of each latent variables. As indicated in the instrument used, all the latent variables were measured using a seven-point Likert type scale where 1 = Strongly Agree to 7 = Strongly Disagree. The results of the descriptive statistics were presented in Table 4.8 and the seven-point Likert type scale was divided into three categories namely, high, moderate and low. For instance, any variable that has a mean value of 3 (highest value 4 - 3/3) are high. Likewise, a score with less than 2 (3/3 + lowest value 1) is regarded as low, and those values within low and high scores are rated as moderate (Sassenberg, Matschke & Scholl, 2011).

Table 4.8
Descriptive Statistics of the Latent Variables

Latent Variables	Number of Items	Mean	Standard Deviation
Retirement Planning Behavior	4	2.83	1.535
Attitude Toward Retirement Planning	3	1.93	.998
Subjective Norm	3	2.87	1.580
Perceived Control over retirement Planning	5	2.75	1.544
Personality Trait	2	2.08	1.178
Knowledge of Financial Planning for retirement	5	2.59	1.456

Table 4.8 explains that the mean values of the latent variables ranged between 1.93 and 2.87. Specifically, the retirement planning behavior as the dependent variable have a mean and standard deviation of 2.83 and 1.649, suggesting that the respondents have

a moderate level of awareness on retirement planning behavior. The result further explained that attitude towards retirement planning have a mean score of 1.96 and standard deviation of 0.998 implying that the respondent's attitude towards retirement planning was relatively low. The descriptive statistics result presented indicates that subjective norms have a mean score of 2.87 and standard deviation of 1.580 signifying that the ability of the workers to comply with the behavior of their referent groups was equally moderate. The ability of the respondents to have control over retirement planning was equally moderate with a mean score of 2.75, and standard deviation of 1.544. The respondent's personality trait was rated as reasonably moderate because the mean score was 2.08 and the standard deviation was 1.178. Lastly, the respondent's knowledge of financial planning for retirement was moderate with a mean value of 2.59 and standard deviation of 1.456.

4.8 General Assessment of PLS-SEM Model Results

Structural Equation Model (SEM) comprise of statistical procedures intended to evaluate causal associations established by theoretical model which linked different latent constructs. Each of the constructs was estimated through some observable symbols (Bollen, 1989; Kaplan, 2008). The principle of PLS-SEM is to show the causality link between the latent constructs, described as Latent Variables (LV) estimated by sets of indicators named as Manifest Variables (MV). Therefore, PLS-SEM Models provide a link between the Path Analysis and Confirmatory Factor Analysis (CFA) (Thurstone, 1931; Tukey, 1964; Alwin & Hauser, 1975). In line with this statement, Tenenhaus et al. (2004) proposed a standard fit index in PLS-Path Modeling named as the goodness of Fit-index which served as a global criterion

established to take care of the performance in both the measurement and structural model by providing a unique measure for the general prediction of the model (Vinzi et al., 2010). Henseler & Sarstedt (2013) argued that goodness-of-fit (GoF) index is not a suitable index for confirming path model performance (see also Hair et al., 2014). For example, the authors argued that the goodness-of-fit index cannot separate real from invalid models (Hair, Ringle & Sarstedt, 2013). This study, therefore, adopted a two-step method for evaluating and reporting the PLS-SEM path results as proposed by Henseler, Ringle & Sinkovics (2009). The method comprises of the measurement model and the structural model as depicted in Figure 4.2 (Henseler et al., 2009; Hair et al., 2012; Hair et al., 2014).

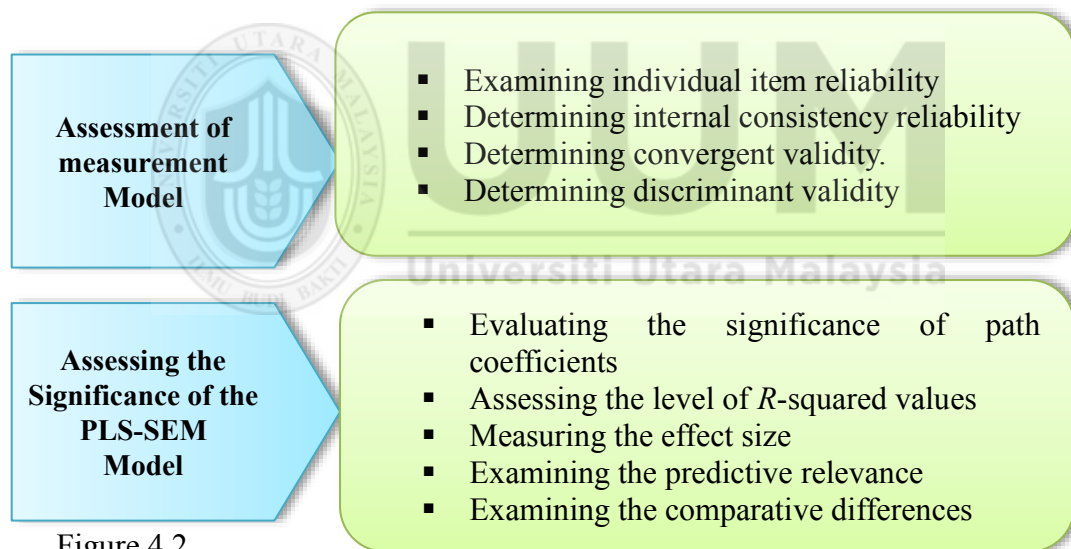


Figure 4.2
Two-Step Method of PLS Path Model Assessment
Source: Henseler et al., 2009

4.9 Assessment of Measurement Model

The measurement model shows the associations between the latent variables and the measures of each original construct. The measurement model examined the individual item reliability, internal consistency reliability, convergent validity and discriminant

validity of the main model (n=307) and the sub-groups (public and Private) as shown in figure 4.3, 4.4 and 4.5 (Henseler et al., 2009; Hair et al., 2011; Hair et al., 2014).

Figure 4.3 presents the measurement model of the workers in Nigeria with a data set of (n=307). It shows the associations between retirement planning behavior of Nigerian workers and other constructs. The model measures the individual item reliability, internal consistency reliability, convergent validity and discriminant validity of the main model (n=307) (Henseler et al., 2009; Hair et al., 2011; Hair et al., 2014).

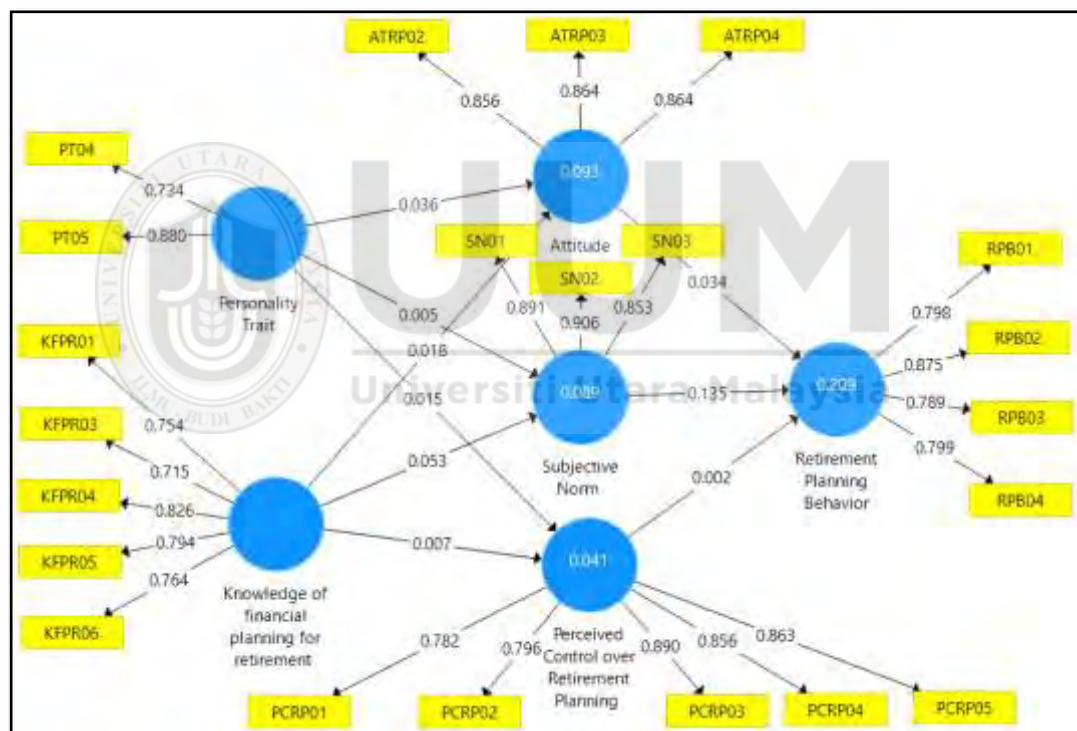


Figure 4.3
Measurement Model of Workers in Nigeria (n=307)
Sources: PLS-SEM Bootstrapping Output

Figure 4.4 and 4.5 are the measurement models of the workers in the public (n=155) and private sector (n=152). The models present the relationship between retirement planning behavior of the workers and other latent constructs. The models measure

individual item reliability, internal consistency reliability, convergent validity and discriminant validity of each sector (Henseler et al., 2009; Hair et al., 2011; Hair et al., 2014).

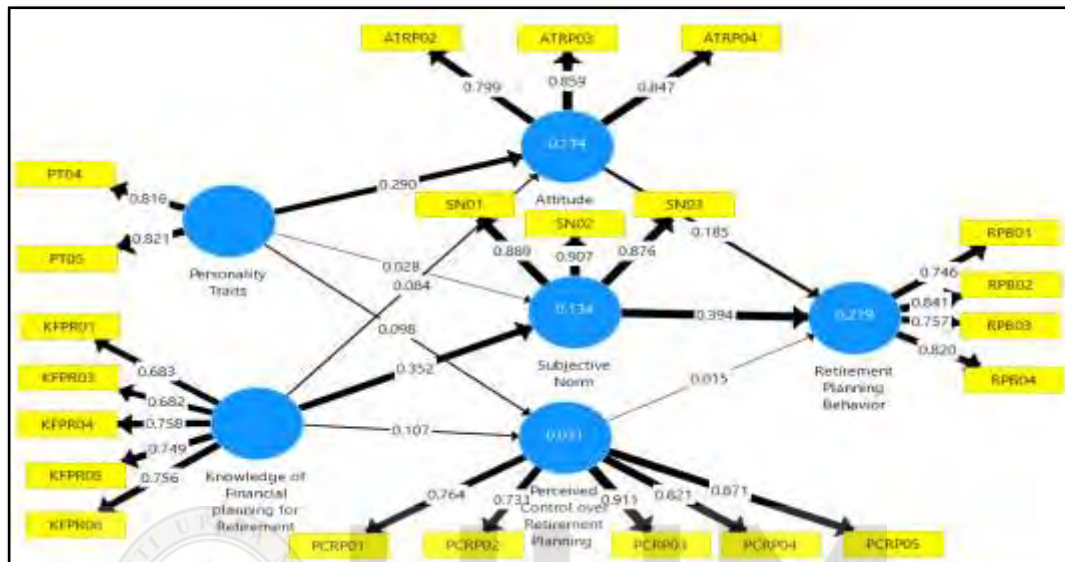


Figure 4.4
Measurement Model of Workers in the Public Sector (n=155)
Sources: PLS-SEM Output Bootstrapping Output

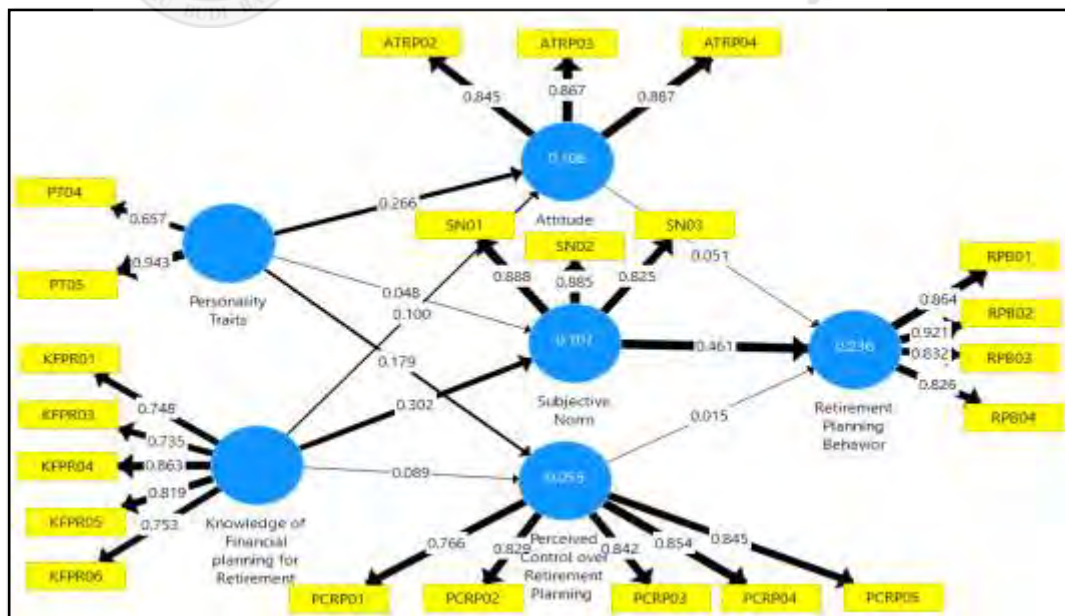


Figure 4.5
Measurement Model of Workers in the Private Sector (n=152)
Sources: PLS-SEM Output Bootstrapping Output

4.9.1 Individual Item Reliability

The individual item reliability of the instruments was used to determine the stability and consistency of the instruments (Creswell, 2005). Individual item reliability was measured by assessing the outer loadings of a construct (Hulland, 1999; Duarte & Raposo, 2010; Hair et al., 2016; Hair et al., 2012). Following the rule of thumb regarding the retaining of items with loadings between 0.40 and 0.70, it was observed that all the 22 items reached the level of acceptable reliability. Therefore, the items were retained because they are within the recommended loadings (Chin 1998; Hair et al., 2016).

4.9.2 Internal Consistency and Reliability

The internal consistency and reliability is the assessment of the reliability and validity of the reflective outer model. The Cronbach alpha and Composite reliability coefficient are the most common estimators of internal consistency and reliability (e.g., Bacon, Sauer & Young, 1995; McCrae, Kurtz, Yamagata & Terracciano, 2011; Peterson & Kim, 2013). In this study, therefore, the composite reliability coefficient was used to measure internal consistency and reliability of the latent constructs. There are two reasons behind the use of composite reliability coefficient. Firstly, it offers a less biased estimate of reliability than Cronbach alpha because the latter ensures that all items in the constructs contribute equal weight in the individual loadings (Barclay, Higgins & Thompson, 1995; Gotz, Liehr-Gobbers & Krafft, 2010).

Secondly, the Cronbach alpha may under or over-estimate the reliability scale. Thus, the composite reliability ensures that all formative indicators (the linkage between one

variable to another) in the model had different loadings and interpreted in the same way as the Cronbach alpha. However, the interpretation of internal consistency and reliability using composite reliability coefficient depends on the rule of thumb proposed by Bagozzi & Yi (1988) and Hair et al. (2011). They suggested that the composite reliability coefficient should be at least 0.70 or more for a model and any value below 0.60 indicates poor internal consistency and reliability suggesting that the model is not fit. Table 4.9 and 4.10 presents the standard loadings, composite reliability coefficients and the Average Variance Extracted (AVE) of the latent constructs. The composite reliability coefficient of each latent constructs in the main model (n=307) ranged from 0.791 to 0.922, with each above 0.70, signifying satisfactory internal consistency and reliability of the measures used in this study (Bagozzi & Yi, 1988; Hair et al., 2011).

Table 4.9
Loadings, Composite Reliability and AVE of Workers in Nigeria (n=307)

Latent Constructs and Items	Standard Loadings	Composite Reliability (pc)	Average Variance Extracted (AVE)
Retirement Planning Behavior (RPB)		0.888	0.666
I frequently read articles/brochures on investment or financial planning	0.798		
I organized my financial records.	0.875		
I conducted a thorough assessment of my financial net worth.	0.789		
I Identified specific spending plans for my future.	0.799		
Attitude Towards Retirement Planning (ATRP)		0.896	0.742
Retirement planning is:			
A productive use of time or a waste of time	0.856		
Helpful: or Not helpful	0.864		
Worthwhile or Useless	0.864		
Subjective Norm (SN)		0.914	0.780
Most people who are important to me plan for retirement at least every month	0.891		
The people in my life whose opinions I value plan for retirement at least every month	0.906		
Many people like me plan for retirement at least every month	0.853		

Table 4.9 (*Continued*)

Latent Constructs and Items	Standard Loadings	Composite Reliability (pc)	Average Variance Extracted (AVE)
Perceived Control Over Retirement Planning (PCRP)		0.922	0.703
If I encountered unanticipated events that placed demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis.	0.782		
If I felt ill, tired, or listless, it would make it more difficult for me to plan for retirement on a regular basis	0.796		
If I had family obligations that placed unanticipated demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis.	0.890		
If work or employment placed unanticipated demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis	0.856		
If other activities placed heavy demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis	0.863		
Personality (PT)		0.791	0.656
I see myself as someone who is Open to new experiences and complex.	0.734		
I see myself as someone who is Calm and emotionally stable	0.880		
Knowledge of Financial Planning for Retirement (KFPR)		0.88	0.595
I am very knowledgeable about financial planning for retirement	0.754		
I am very confident in my ability to do retirement planning	0.826		
When I need information on financial services, I know exactly where to go	0.794		
I am knowledgeable on how Contributory pension scheme (CPS) works.	0.764		
I am knowledgeable about how retirement saving account (RSA) work	0.754		

Table 4.10 shows the loadings, composite reliability, and the average variance extracted of the public and private sector. The results indicate that the internal consistency of the items was satisfied because the composite reliability of all the constructs were higher than 0.7 across the two sectors (Hair et al., 2010).

Table 4.10

Loadings, Composite, Reliability and AVE of Workers in the Public and Private Sectors

Latent Constructs and Indicators	Standard Loadings		Composite Reliability (ρ_c)		(AVE)	
	Public (n=155)	Private (n=152)	Public	Private	Public	Private
Retirement Planning Behavior (RPB)			0.859	0.915	0.605	0.730
RPB01	0.728	0.854				
RPB02	0.830	0.917				
RPB03	0.757	0.826				
RPB04	0.793	0.817				
Attitude Towards Retirement Planning (ATRP)			0.877	0.908	0.704	0.767
ATRP02	0.818	0.874				
ATRP03	0.870	0.867				
ATRP04	0.828	0.886				
Subjective Norm (SN)			0.928	0.812	0.794	0.747
SN01	0.903	0.879				
SN02	0.930	0.884				
SN03	0.870	0.830				
Perceived Control Over Retirement Planning (PCRP)			0.920	0.698	0.674	0.702
PCRP01	0.771	0.793				
PCRP02	0.767	0.818				
PCRP03	0.905	0.875				
PCRP04	0.839	0.864				
PCRP05	0.887	0.836				
Personality Trait (PT)			0.785	0.646	0.590	0.655
PT04	0.821	0.663				
PT05	0.787	0.933				
Knowledge of Financial Planning for Retirement (KFPR)			0.874	0.887	0.518	0.612
KFPR01	0.732	0.777				
KFPR03	0.730	0.701				
KFPR04	0.807	0.846				
KFPR05	0.779	0.812				
KFPR06	0.759	0.767				

4.9.3 Convergent Validity

The Convergent validity is defined as the extent at which items genuinely represent the proposed latent construct and correlate well with other measures of the similar

latent construct (Hair et al., 2006). The convergent validity is measured by assessing the average variance extracted (AVE) of each latent construct as recommended by Fornell & Larcker (1981). The AVE value is calculated as the mean of the squared loadings for all indicators associated with a construct as follows:

$$AVE_{ej} = \frac{\sum_{k=1}^{kj} \lambda_{jk}^2}{\sum_{k=1}^{kj} \lambda_{jk}^2 + \theta_{jk}}$$

Where

AVE_{ej} = Average Variance Extracted

λ_{jk}^2 = Sum of standardized loadings square

θ_{jk} = Error variance of the k^{th} indicator ($k = 1, \dots, K_j$)

To achieve a good convergent validity, the average variance extracted (AVE) of each latent construct should be 0.50 or above which indicates that on average, the construct explains over 50% of the variance of its items (Chin, 1998; Sarstedt, et al., 2014). In line with the recommendation of Chin (1998), the values of AVE in the main model (n=307) (see Table 4.10) showed high loadings ($p > 0.50$) on their constructs, signifying good convergent validity. Table 4.11 shows the average variance extracted (AVE) of the public and private sectors generated through measures of the same construct was also higher than the recommended value of 0.5 and satisfied the standard of convergent validity at construct level of each subgroup (public and Private) (Fornell & Larcker, 1981).

4.9.4 Discriminant Validity

The discriminant validity is the extent to which the construct differs empirically from one another. It is the rate of changes between one construct and the other (Hair et al., 2014). The estimation of the discriminant validity can be done through cross loading of indicators known as Fornell & Larcker criterion or Heterotrait-monotrait (HTMT) ratio of correlation. The Fornell-Lacker criterion for evaluating the discriminant validity compares the square root of the AVE ($\sqrt{AVE}$) with the other latent constructs (Hair et al., 2014). Fornell-Lacker (1981) recommended that the latent constructs should explain the variance of its indicator. Thus, the square root of AVE ($\sqrt{AVE}$) should have a higher value than other latent constructs. Therefore, the correlations between the latent constructs of the model with a complete data sets (n=307) were compared with the square root of AVE ($\sqrt{AVE}$) (see Table 4.11). The findings indicate that all the square root of AVE were higher compared to the correlations between the latent constructs indicating adequate discriminant validity within the latent constructs in the model with a complete data sets (n=307) (Fornell & Larcker, 1981).

Table 4.11

Discriminant Validity of Workers in Nigeria (n=307)

Latent Variables			ATRP	KFPR	PCRP	PT	RPB	SN
Attitude	Toward	Retirement	0.861					
Planning								
Knowledge of Financial Planning			0.247	0.772				
for retirement								
Perceived Control over Retirement			0.050	0.162	0.838			
Planning								
Personality Trait			0.278	0.488	0.184	0.81		
Retirement planning Behavior			0.290	0.483	0.149	0.36	0.816	
Subjective Norm			0.319	0.290	0.268	0.202	0.426	0.883

Note: The square root of the AVE are the shaded values

On the other hand, the correlations between the latent constructs of the public and private sector models were compared with the square root of AVE ($\sqrt{\text{AVE}}$) (see Table 4.12). The results showed that the square root ($\sqrt{\text{AVE}}$) of the latent construct in the public (n=155) and private (n=152) sector model were higher compared to the correlations between the latent constructs in the two models signifying good discriminant validity within the latent constructs of the public and private sector model (Fornell & Larcker, 1981).

Table 4.12
Discriminant Validity of Workers in the Public and Private Sectors

Latent Variables (Public Sector)			ATRP	KFPR	PCRP	PT	RPB	SN
Attitude Toward Retirement Planning			0.839					
Knowledge of Financial Planning for retirement			0.239	0.762				
Perceived Control over Retirement Planning			0.020	0.192	0.836			
Personality Trait			0.325	0.473	0.165	0.804		
Retirement planning Behavior			0.300	0.570	0.090	0.350	0.778	
Subjective Norm			0.208	0.338	0.158	0.212	0.433	0.901
Latent Variables (Private Sector)								
Attitude Toward Retirement Planning			0.876					
Knowledge of Financial Planning for retirement			0.273	0.782				
Perceived Control over Retirement Planning			0.100	0.14	0.838			
Personality Trait			0.292	0.494	0.202	0.809		
Retirement planning Behavior			0.318	0.400	0.209	0.383	0.854	
Subjective Norm			0.427	0.233	0.401	0.194	0.423	0.865

Note: The square root of the AVE are the shaded values

The second method for verifying discriminant validity is examining the cross loadings of the indicators. This method requires that the loadings of each indicator on its construct are higher than the cross loadings on other constructs (Chin, 1998; Hair et al., 2014; Henseler et al., 2009). Chin (1998) recommends that all the indicator loadings should be greater than the cross-loadings. Table 4.13 presents how the

indicator loadings relates with other indicators. The result shows that all indicator loadings were higher than the cross loadings signifying that the discriminant validity is fit for further analysis in the main model (N=307).

Table 4.13
Cross Loading of Workers in Nigeria (n=307)

	ATRP	KFPR	PCRP	PT	RPB	SN
ATRP02	0.856	0.221	0.023	0.267	0.292	0.303
ATRP03	0.864	0.191	0.004	0.214	0.210	0.234
ATRP04	0.864	0.221	0.100	0.229	0.235	0.279
KFPR01	0.240	0.754	0.057	0.395	0.409	0.250
KFPR03	0.167	0.715	0.223	0.417	0.394	0.184
KFPR04	0.238	0.826	0.147	0.405	0.414	0.216
KFPR05	0.134	0.794	0.128	0.323	0.283	0.205
KFPR06	0.154	0.764	0.073	0.328	0.344	0.260
PCRP01	0.009	0.109	0.782	0.129	0.091	0.204
PCRP02	-0.010	0.100	0.796	0.119	0.090	0.150
PCRP03	0.045	0.144	0.890	0.184	0.129	0.230
PCRP04	0.104	0.163	0.856	0.201	0.175	0.269
PCRP05	0.018	0.146	0.863	0.106	0.109	0.245
PT04	0.168	0.363	0.082	0.734	0.262	0.188
PT05	0.270	0.427	0.200	0.880	0.319	0.151
RPB01	0.125	0.393	0.231	0.228	0.798	0.324
RPB02	0.247	0.328	0.123	0.265	0.875	0.406
RPB03	0.174	0.406	0.051	0.329	0.789	0.363
RPB04	0.380	0.463	0.095	0.352	0.799	0.291
SN01	0.237	0.239	0.256	0.185	0.379	0.891
SN02	0.289	0.217	0.28	0.182	0.360	0.906
SN03	0.317	0.305	0.181	0.170	0.385	0.853

Sources PLS-SEM Output.

Note: The shaded portions represent the indicator loadings.

In line with the recommendation of Chin (1998), Table 4.13 and Table 4.14 show the cross-loading of the public (n=155) and private (n=152) sector model. The indicator loadings in the tables relate with other indicators in each model. The result indicates that all the indicator loadings were higher than the cross -loadings suggesting that the discriminant validity is suitable for analysis in the public and private sector model.

Table 4.14

Cross Loading of Workers in the Public-Sectors (n=155)

	ATRP	KFPR	PCRP	PT	RPB	SN
ATRP02	0.818	0.201	-0.063	0.283	0.294	0.189
ATRP03	0.870	0.177	0.003	0.267	0.238	0.187
ATRP04	0.828	0.222	0.123	0.264	0.214	0.143
KFPR01	0.194	0.732	0.031	0.368	0.471	0.335
KFPR03	0.147	0.730	0.194	0.454	0.476	0.246
KFPR04	0.221	0.807	0.210	0.414	0.494	0.227
KFPR05	0.137	0.779	0.171	0.268	0.328	0.200
KFPR06	0.197	0.759	0.131	0.282	0.380	0.269
PCRP01	-0.002	0.128	0.771	0.066	0.022	0.080
PCRP02	0.057	0.108	0.767	0.126	0.069	0.121
PCRP03	0.041	0.208	0.905	0.179	0.121	0.165
PCRP04	0.015	0.141	0.839	0.167	0.067	0.175
PCRP05	-0.032	0.186	0.887	0.115	0.066	0.098
PT04	0.292	0.357	0.076	0.821	0.296	0.192
PT05	0.227	0.407	0.194	0.787	0.266	0.147
RPB01	0.082	0.410	0.217	0.126	0.728	0.299
RPB02	0.202	0.371	0.075	0.253	0.830	0.402
RPB03	0.211	0.496	-0.033	0.350	0.757	0.369
RPB04	0.399	0.499	0.062	0.326	0.793	0.270
SN01	0.134	0.287	0.148	0.206	0.389	0.903
SN02	0.206	0.290	0.192	0.198	0.352	0.930
SN03	0.218	0.333	0.095	0.170	0.421	0.870

Source: PLS-SEM Output.

Note: The shaded portions represent the indicator loadings.

Table 4.15

Cross Loading of Workers in the Private-Sectors (n=152)

	ATRP	KFPR	PCRP	PT	RPB	SN
ATRP02	0.874	0.252	0.111	0.304	0.314	0.405
ATRP03	0.867	0.230	0.040	0.233	0.232	0.287
ATRP04	0.886	0.232	0.105	0.219	0.278	0.417
KFPR01	0.283	0.777	0.097	0.434	0.356	0.152
KFPR03	0.206	0.701	0.245	0.374	0.308	0.114
KFPR04	0.265	0.846	0.091	0.388	0.340	0.201
KFPR05	0.135	0.812	0.090	0.362	0.241	0.210
KFPR06	0.143	0.767	0.007	0.363	0.299	0.249
PCRP01	0.025	0.085	0.793	0.176	0.156	0.350
PCRP02	-0.055	0.094	0.818	0.106	0.101	0.182
PCRP03	0.068	0.069	0.875	0.173	0.118	0.311
PCRP04	0.200	0.183	0.864	0.227	0.271	0.377
PCRP05	0.063	0.101	0.836	0.092	0.133	0.404
PT04	0.092	0.361	0.091	0.663	0.226	0.179
PT05	0.321	0.445	0.209	0.933	0.371	0.156
RPB01	0.186	0.370	0.254	0.336	0.854	0.356
RPB02	0.297	0.281	0.190	0.289	0.917	0.411
RPB03	0.176	0.302	0.128	0.301	0.826	0.356
RPB04	0.403	0.419	0.143	0.384	0.817	0.320
SN01	0.343	0.182	0.380	0.174	0.373	0.879
SN02	0.362	0.142	0.376	0.163	0.372	0.884
SN03	0.400	0.275	0.285	0.165	0.352	0.830

Source: PLS-SEM Output.

4.10 Assessing the Significance Level of the Structural Model

The PLS-SEM generates T-statistics for testing of the structural model (inner and outer model) using a method called bootstrapping. Therefore, bootstrapping is a non-parametric process which permits the testing of statistical significance of different PLS-SEM results. The bootstrapping procedure has many advantages, as indicated below:

1. The method is very open and needs little mathematical knowledge or probability theory.
2. It depends on non-restrictive statistical assumptions.

3. Bootstrapping is generally used in situations where traditional systems may be difficult or unsuitable for measuring significance.

It is very simple to conduct bootstrapping within the PLS-SEM settings (Mooney & Duval, 1993; Wood, 2005; Streukens et al., 2016). This study, therefore, applied the standard bootstrapping technique with 500 bootstrap samples and 307 cases to evaluate the significance of the path coefficients of the main model (Henseler et al., 2009; Hair et al., 2011; Hair et al., 2012; Hair et al., 2014).

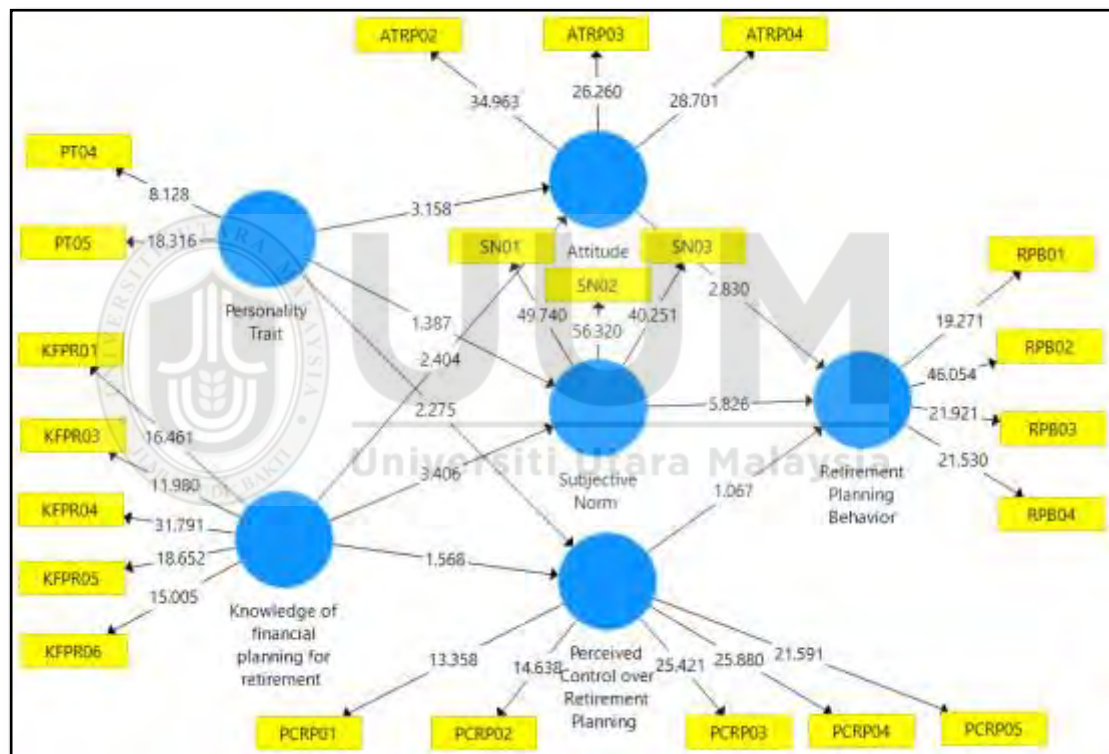


Figure 4.6
Structural Model of Workers in Nigeria (n=307)
 Source: PLS-SEM Output Bootstrapping Output

The bootstrapping result of the structural model of the workers in Nigeria with a data set (n=307) is presented in Figure 4.6 and table 4.16. The bootstrapping procedure measures hypothesis 1a which examines whether attitude towards retirement planning have a positive impact on retirement planning behavior (RPB) of public and private

workers in Nigeria or not. Thus, Figure 4.6 and Table 4.16 indicate that attitude toward retirement planning significantly influence the RPB of public and private workers in Nigeria ($\beta = 0.17$, $t = 2.83$, $p < 0.005$). This supports hypothesis 1a. Hypothesis 2a assumes that subjective norm has a positive impact on retirement planning behavior. The result obtained shows that subjective norm has a significant positive impact on retirement planning behavior ($\beta = 0.36$, $t = 5.83$, $p < 0.000$). Hence, this is supporting hypothesis 2a. Likewise, hypothesis 3a examines the impact of perceived control over retirement planning on retirement planning behavior. The result indicates that perceived control over retirement planning has a significant negative relationship with RPB ($\beta = 0.06$, $t = 1.07$, $p > 0.287$). This is signifying that hypothesis 3a is not supported.

On the other hand, hypothesis 4a assumes that personality trait is positively related to attitude towards retirement planning. Table 4.16 indicates a significant positive relationship between the personality trait and attitude toward retirement planning ($\beta = 0.21$, $t = 3.16$, $p < 0.002$). This is indicating support for Hypothesis 4a. hypothesis 5a examines the influence of personality on subjective norm as can be seen in (Table 4.16, and Figure 4.6). The result suggests that personality trait has a significant negative relationship with subject norm ($\beta = 0.09$, $t = 1.39$, $p > 0.166$). This is indicating that Hypothesis 5a is not supported. hypothesis 6a proposes that personality is positively related to perceived control over retirement planning. The result displayed in table 4.16 shows a significant positive relationship between personality trait and perceived control over retirement planning ($\beta = 0.15$, $t = 2.28$, $p < 0.023$). Thus, hypothesis 6a supported.

Hypothesis 7a assumes that knowledge of financial planning for retirement has a positive significant impact on attitude toward retirement planning of the public and private sector workers in Nigeria. The result displayed in table 4.16 and figure 4.6 indicate support for hypothesis 7a because knowledge of financial planning for retirement has a significant positive relationship with attitude towards retirement planning ($\beta = 0.15$, $t = 2.40$, $p > 0.017$). Similarly, hypothesis 8a proposes a positive relationship between knowledge of financial planning for retirement and subjective norms. The results obtained in support of the hypothesis because a significant positive relationship between knowledge of financial planning for retirement and the subjective norm are supported ($\beta = 0.26$, $t = 3.41$, $p < 0.005$). Hypothesis 9a predicts a positive correlation between Knowledge of financial planning for retirement and perceived control over retirement planning behavior was not supported because the estimations from the PLS model were not significant ($\beta = 0.11$, $t = 1.57$, $p > 0.117$).

Table 4.16
Structural Model Result of Workers in Nigeria (n=307)

Hypothesis	Relationship	Mean	Standard Deviation	T-Value	P-Value	Decision
H1a	Attitude → RPB	0.17	0.06	2.83	0.005**	Supported
H2a	Norms → RPB	0.36	0.06	5.83	0.000***	Supported
H3a	Control → RPB	0.06	0.04	1.07	0.287	Not Supported
H4a	Personality → Attitude	0.21	0.07	3.16	0.002**	Supported
H5a	Personality → Norms	0.09	0.06	1.39	0.166	Not Supported
H6a	Personality → Control	0.15	0.06	2.28	0.023*	Supported
H7a	Knowledge → Attitude	0.15	0.06	2.40	0.017*	Supported
H8a	Knowledge → Norms	0.26	0.07	3.41	0.001**	Supported
H9a	Knowledge → Control	0.11	0.06	1.57	0.117	Not Supported

Note: ***Significant at 1%,
 **Significant at 5%,
 *Significant at 10%

4.11 Assessing the Differences Between Public and Private Sectors

The objective of the present study is to compare the determinants of retirement planning behavior between the two prominent workforces in Nigeria. Two methods were used to determine if there is a difference in the retirement planning behavior of workers in the public and private sectors. The first method was to test the level of significance of each model (Public and Private) using PLS-SEM. This procedure provides for each model to be examined for significant changes. The structural model of the two sectors was obtained by splitting the data into two groups thereby creating two models: the public sector model (n=155) and the private sector model (n=152). The PLS-SEM bootstrapping procedure has been applied to assess the level of significance in each model (see Figure 4.7 and 4.8).

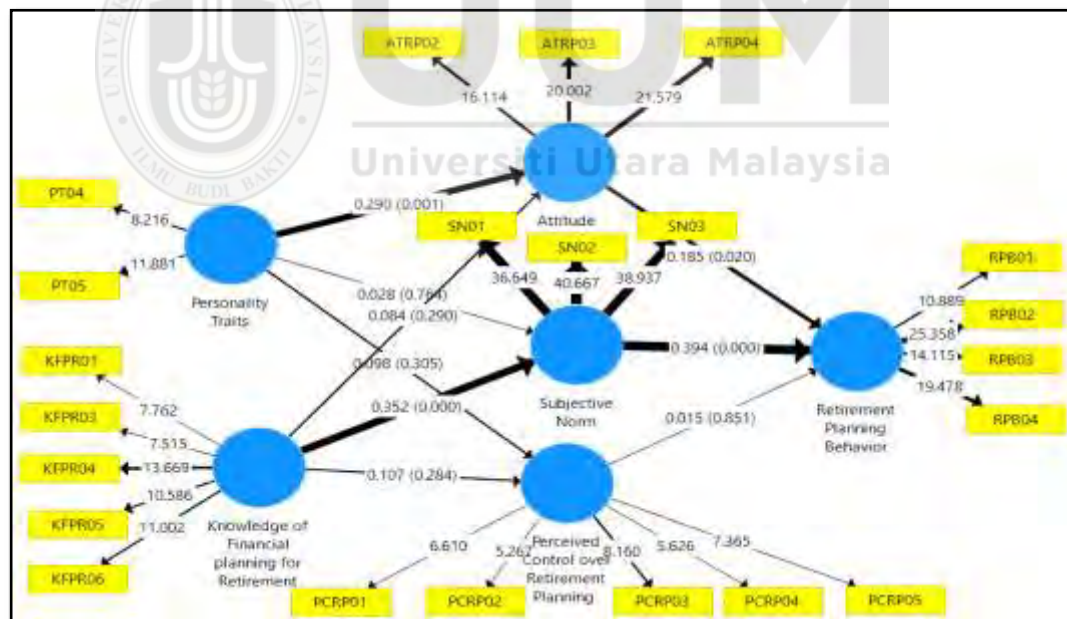


Figure 4.7

Structural Model of Workers in the Public Sector (n=155)

Sources: PLS-SEM Output Bootstrapping Output

Table 4.17 presents the path coefficient, mean, standard error and the p-values of the model variables. The result of the relationship between the study variables were tested and significantly confirmed as presented below. Hypothesis 1b is designed to find out whether there is a difference between attitude towards retirement planning and retirement planning behavior of the public and private sector workers. The result presented in Table 4.17 shows that there is a significant positive relationship between attitude toward retirement planning and retirement planning behavior of the public sector workers ($M = 0.186$, $t = 2.34$, $p < 0.05$). In contrast, Table 4.18 shows that the result of the private sector indicates a significant negative relationship between attitude toward retirement planning and retirement planning behavior of the private sector works ($M = 0.06$, $t = 0.566$, $p > 0.05$).

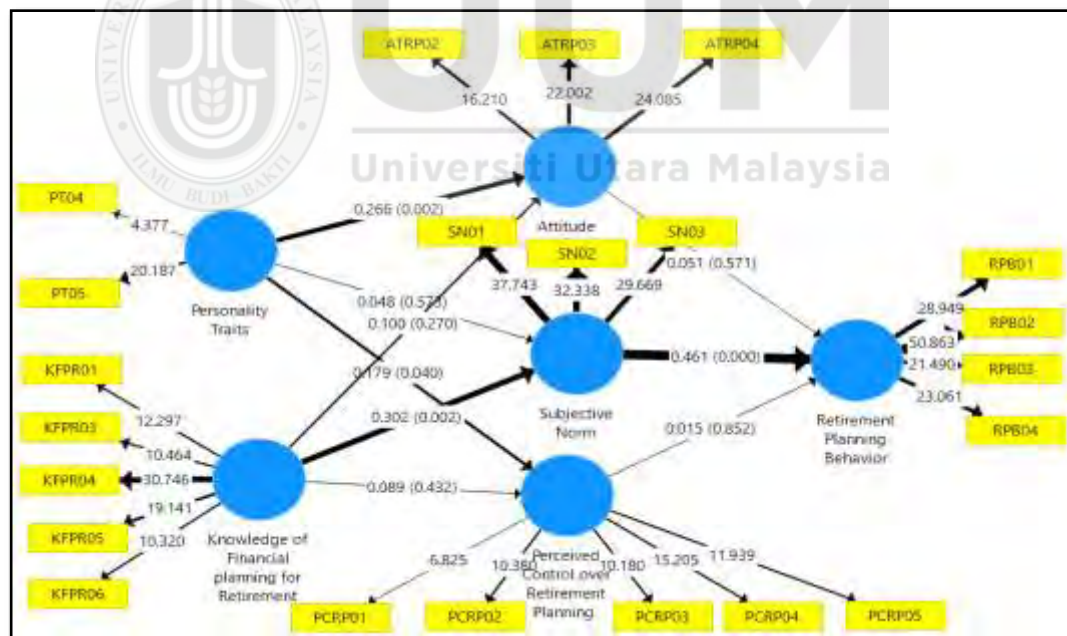


Figure 4.8
Structural Model of Workers in the Private Sector (n=152)
 Source: PLS-SEM Bootstrapping Output.

Hypothesis 2b assumes that there is a difference between subjective norms and retirement planning behavior of the public and private sector workers. The relationship between the variables in the public and private sector indicates a significant positive result ($M = 0.40$, $t = 5.675$, $p < 0.01$; $M = 0.0461$, $t = 6.014$, $p < 0.01$). Likewise, hypothesis 3 assumes that there is a difference between perceived control over retirement planning and retirement planning behavior of the public and private sector workers. The results presented in Table 4.17 and 4.18 indicate that the relationship between perceived control over retirement planning and retirement planning behavior of workers in the public and private sectors shows a significant negative correlation between the variables ($M = 0.025$, $t = 0.188$, $p > 0.05$; $M = 0.02$, $t = 0.187$, $p > 0.05$).

Table 4.17
Structural Model Result of Workers in the Public Sector (n=155).

Hypothesis	The Latent Variables	Path Coefficient	Mean	SE	T-Value	P- Value
H1b	Attitude → RPB	0.185	0.186	.079	2.340	0.020*
H2b	Norms → RPB	0.394	0.404	.069	5.675	0.000***
H3b	Control → RPB	0.015	0.025	.08	0.188	0.851
H4b	Personality → Attitude	0.290	0.308	.088	3.296	0.001**
H5b	Personality → Norms	0.028	0.032	.094	0.301	0.764
H6b	Personality → Control	0.098	0.111	.095	1.028	0.305
H7b	Knowledge → Attitude	0.084	0.082	.079	1.060	0.290
H8b	Knowledge → Norms	0.352	0.358	.084	4.168	0.000***
H9b	Knowledge → Control	0.107	0.112	.100	1.072	0.284

Note: ***Significant at 1%,
 **Significant at 5%,
 *Significant at 10%

On the other hand, hypothesis 4b proposes that there is a difference between personality trait and attitude toward retirement planning of the public and private sector workers. The results presented in Table 4.17 and Table 4.18 show a significant positive relationship between personality trait and attitude toward retirement planning

of the workers in the public and private sectors ($M = 0.308$, $t = 3.296$, $p < 0.05$; $M = 0.278$, $t = 3.168$, $p < 0.05$). Hypothesis 5b proposes that there is a difference between personality trait and subjective norms of the public and private sector workers. The result indicates a significant negative relationship between personality trait and subjective norms of workers in the public and private sectors ($M = 0.032$, $t = 0.301$, $p > 0.05$; $M = 0.06$, $t = 0.564$, $p > 0.05$). Hypothesis 6b assumes that there is a difference between personality trait and perceived control over retirement planning of the public and private sector workers. The results presented in Table 4.17 shows a significant negative relationship between personality trait and perceived control over retirement planning of the public-sector workers ($M = 0.111$, $t = 1.028$, $p > 0.05$). In contrast, Table 4.18 shows that there is a significant positive relationship between personality trait and perceived control over retirement planning of the workers in the private sector ($M = 0.191$, $t = 2.056$, $p < 0.05$).

Hypothesis H7b is intended to find out whether there is a difference between knowledge of financial planning for retirement and attitude towards retirement planning of the public and private sector workers. Result of the study shows that knowledge of financial planning for retirement has a significant negative relationship with attitude toward retirement planning of workers in the public and private sector ($\beta = 0.082$, $t = 1.06$, $p > 0.05$; $\beta = 0.107$, $t = 1.104$, $p > 0.05$). Likewise, hypothesis 8b assumes that there is a difference between knowledge of financial planning for retirement and subjective norms of the public and private sector workers. The result presented shows that knowledge of financial planning for retirement has a significant positive relationship with subjective norms of workers in the public and private sectors

($M = 0.358$, $t = 4.168$, $p < 0.01$; $M = 0.303$, $t = 3.16$, $p < 0.05$). Lastly, hypothesis 9b assumes that there is a difference between knowledge of financial planning for retirement and perceived control over retirement planning of the public and private sector workers in Nigeria. Results presented in Table 4.17 and Table 4.18 show that there is a significant negative relationship between knowledge of financial planning for retirement and perceived control over retirement planning of the public and private sector workers in Nigeria ($M = 0.112$, $t = 1.072$, $p > 0.01$; $M = 0.101$, $t = 0.787$, $p > 0.05$). this is signifying that there is no difference between the workers in the two sectors.

Table 4.18

Structural Model Result of Workers in the Private Sector (n=152)

Hypothesis	The Latent Variables	Path Coefficient	Mean	SE	T-Value	P-Value
H1b	Attitude → RPB	0.051	0.060	.089	0.566	0.571
H2b	Norms → RPB	0.461	0.461	.077	6.014	0.000***
H3b	Control → RPB	0.015	0.02	.081	0.187	0.852
H4b	Personality → Attitude	0.266	0.278	.084	3.168	0.002**
H5b	Personality → Norms	0.048	0.06	.085	0.564	0.573
H6b	Personality → Control	0.179	0.191	.087	2.056	0.040*
H7b	Knowledge → Attitude	0.100	0.107	.091	1.104	0.270
H8b	Knowledge → Norms	0.302	0.303	.095	3.160	0.002**
H9b	Knowledge → Control	0.089	0.101	.113	0.787	0.432

Note: ***Significant at 1%,

**Significant at 5%,

*Significant at 10%

Results of the PLS SEM presented above will be compared with the result of the Wilcoxon matched pairs signed-rank analysis to find out if there is a difference in the retirement planning behavior of workers in the public and private sectors in Nigeria.

4.11.1 The Wilcoxon Matched Pairs Signed-Rank Test Analysis

The Wilcoxon matched pairs signed-rank analysis is a non-parametric statistical hypothesis test used in comparing two related samples to assess whether there are differences between the population samples. The test is normally used when the assumption of the paired t-test is not met (Lowry, 2014). The Wilcoxon matched pairs signed-rank analysis is more robust in detecting a paired difference between two population samples. Even under conditions suitable to the paired t-test, Wilcoxon matched pairs signed-rank analysis is powerful as the paired t-test (Conover, & Iman, 1981; Zimmerman, 1996). Wilcoxon matched pairs signed-rank analysis was used in different studies as an alternative to the paired t-test (Dickerson, Fenge & Rosenorn-Lanng, 2017; Habib & Burnett, 1989; He, 2010).

The Wilcoxon matched pairs signed-rank analysis is assessed as paired differences determined by combinations of “negative” and “positive” ranks. In this study, therefore, the Wilcoxon matched-pairs signed-ranks analysis for statistically significant differences between the workers in public and private sectors was conducted. The datasets used for the analysis consists of 155 responses from workers in the public sectors and 152 from the private sectors. The comparison was made with the Wilcoxon matched-pairs signed-ranks analysis ($p < 0.01$; $p < 0.05$) and compared with the PLS SEM results. Aggregated data analysis, in which the samples of the public and the private sectors workers were compared, shows that the differences in retirement planning behavior between the two groups of workers were statistically significant as presented in Table 4.19.

Therefore, Table 4.19 presents the results of the Wilcoxon matched pairs signed-rank analysis for workers in the Nigerian public and private sectors. The test was used to evaluate hypothesis H1b which assumes that there is a difference between the attitude towards retirement planning and retirement planning behavior of the public and private sector workers in Nigeria. The result obtained was in support of H1b because there is a difference between attitude toward retirement planning and retirement planning behavior of the public and private sector workers ($Z = -15.768$, $P < 0.001$). The PLS SEM result presented in Table 4.17 shows that there is a significant positive relationship between attitude towards retirement planning and retirement planning behavior of the workers in the public sector ($M = 0.186$, $t = 2.34$, $p < 0.05$). In contrast, Table 4.18 shows that there is a significant negative relationship between attitude towards retirement planning and retirement planning behavior of workers in the private sector ($M = 0.06$, $t = 0.566$, $p > 0.05$). This indicates that there is a difference between the two sectors.

Hypothesis H2b assumes that there is a difference between subjective norms and retirement planning behavior of the public and private sector workers in Nigeria. The result presented in table 4.19 indicates that there is no difference between subjective norms and retirement planning behavior of the workers in the two sectors ($Z = -00.399$, $P > 0.05$). This signifies that H2b was not supported. Table 4.17 and 4.18 indicate that there is a significant positive relationship between subjective norms and retirement planning behavior of the workers in the public and private sectors ($M = 0.40$, $t = 5.675$, $p < 0.01$; $M = 0.461$, $t = 6.014$, $p < 0.01$). This is suggesting that there is no difference between the two sectors.

The relationship between perceived control over retirement planning and retirement planning behavior leads to the formation of hypothesis H3b which proposes that there is a significant difference between perceived control over retirement planning and retirement planning behavior of the public and private sector workers in Nigeria. The result presented in Table 4.19 was in support of hypothesis H3b because the Wilcoxon matched pairs signed-rank analysis indicates that there is a difference between perceived control over retirement planning and retirement planning behavior of the public and private sector workers in Nigeria ($Z = -03.332$, $P < 0.005$). Similarly, the result presented in Table 4.17 and 4.18 show that there is a significant negative relationship between perceived control over retirement planning and retirement planning behavior of the public and private sector workers ($M = 0.025$, $t = 0.188$, $p > 0.05$; $M = 0.02$, $t = 0.187$, $p > 0.05$). This is signifying that there is a difference between the two sectors because the mean score (0.025) of the workers in the public sector is higher compared to the means; core (0.020) of the workers in public sector.

On the other hand, hypothesis H4b assumes that there is a difference between personality trait and attitude towards retirement planning of the public and private sector workers in Nigeria. The result obtained from the Wilcoxon matched pairs signed-rank analysis shows support for hypothesis H4b. This is signifying that there is a difference between personality trait and attitude toward retirement planning of the public and private sector workers in Nigeria ($Z = -06.066$, $P < 0.001$). The results of PLS SEM presented in Table 4.17 and 4.18 show a significant positive relationship between personality trait and attitude toward retirement planning of the public and private sector workers ($M = 0.308$, $t = 3.296$, $p < 0.05$; $M = 0.278$, $t = 3.168$, $p < 0.05$)

with the workers in the public sector having high mean (0.308) score compared to the private sectors with a low mean score of (0.278). This is signifying that there is difference between the workers in the two sectors.

The relationship between personality trait and subjective norms leads to the formation of hypothesis H5b which assumes that there is a difference between personality trait and subjective norms of the public and private sector workers in Nigeria. However, the result of the Wilcoxon matched pairs signed-rank analysis presented in table 4.19 shows that there is no difference between personality trait and subjective norms of the public and private sector workers ($Z = -00.036$, $P > 0.05$). Hence, hypothesis H5b not supported. Correspondingly, result of the PLS- SEM presented in Table 4.17 and 4.18 indicate a significant negative relationship between personality trait and subjective norms of the public and privates sector workers ($M = 0.032$, $t = 0.301$, $p > 0.05$; $M = 0.06$, $t = 0564$, $p > 0.05$). This is suggesting that there is no difference between workers in the two sectors.

Hypothesis H6b assumes that there is a difference between personality trait and perceived control over retirement planning of the public and private sector workers in Nigeria. The result presented in Table 4.19 supports hypothesis H6b because there is a difference between personality trait and perceived control over retirement planning of the public and private sector workers ($Z = -03.125$, $P < 0.05$). The results presented in table 4.17 show a significant negative relationship between personality trait and perceived control over retirement planning of workers in the public sector ($M = 0.111$, $t = 1.028$, $p > 0.05$). In contrast, the PLS- SEM result presented in Table 4.18 shows

that personality trait has a significant positive relationship with perceived control over retirement planning of the private sector workers ($M = 0.191$, $t = 2.056$, $p < 0.05$). This is indicating that there is a difference between workers in the two sectors.

The relationship between knowledge of financial planning for retirement and attitude toward retirement planning leads to the development of hypothesis H7b which assumes that there is a difference between knowledge of financial planning for retirement and attitude towards retirement planning of the public and private sector workers in Nigeria. The result obtained from Wilcoxon matched pairs signed-rank analysis for two related samples shows that there is a difference between knowledge of financial planning for retirement and attitude towards retirement planning of the public and private sector workers in Nigeria ($Z = -03.665$, $P < 0.001$). This is indicating support for hypothesis H7b. The results presented in Table 4.18 and 4.19 show that knowledge of financial planning for retirement has a significant negative relationship with attitude towards retirement planning of the public and private sector workers ($M = 0.082$, $t = 1.06$, $p > 0.05$; $M = 0.107$, $t = 1.104$, $p > 0.05$) with the workers in the private sectors having high mean score of ($M = 0.107$) compared to workers in the public sectors with a mean score of ($M = 0.082$). This is indicating a difference between the workers in the two sectors.

Likewise, the relationship between knowledge of financial planning for retirement and subjective norms leads to the formation of hypothesis H8b which assumes that there is a difference between knowledge of financial planning for retirement and subjective norms of the public and private sector workers in Nigeria. The result presented in table

4.19 indicates support for hypothesis H8b because there is a difference between knowledge of financial planning for retirement and subjective norms of the public and private sector workers ($Z = -03.665$, $P < 0.001$). Table 4.17 and 4.18 show that knowledge of financial planning for retirement has a significant positive relationship with subjective norms of the public and private sector workers ($M = 0.358$, $t = 4.168$, $p < 0.01$; $M = 0.303$, $t = 3.16$, $p < 0.05$). However, the mean score ($M = 0.358$) of the workers in the public sector was higher compared to the mean score (0.303) of workers in the private sector. This is signifying that there is a difference between workers in the two sectors.

Hypothesis H9b was designed to find out whether there is a difference between knowledge of financial planning for retirement and perceived control over retirement planning of the public and private workers in Nigeria. The result of the Wilcoxon matched pairs signed-rank analysis presented in Table 4.19 shows that there is no difference between knowledge of financial planning for retirement and perceived control over retirement planning of the public and private sector workers in Nigeria ($Z = -00.317$, $P > 0.05$). This is signifying that hypothesis H9b not support. Correspondingly, Table 4.17 and Table 4.18 indicate that there is a significant negative relationship between knowledge of financial planning for retirement and perceived control over retirement planning of the public and private sector workers ($M = 0.112$, $t = 1.072$, $p > 0.01$; $M = 0.101$, $t = 0.787$, $p > 0.05$). This is suggesting that there is no difference between the workers in the two sectors.

Table 4.19

Wilcoxon Signed Ranks Test (Public Versus Private)

Hypothesis	Relationship	Mean Rank	Z- Value	P-Value	Decision
H1b	Attitude → RPB	633.23 499.55	-15.768 ^a	0.000***	Supported
H2b	Norms → RPB	123.04 122.96	-00.399 ^a	0.690	Not Supported
H3b	Control → RPB	136.66 118.26	-03.332 ^a	0.001**	Supported
H4b	Personality → Attitude	96.96 126.02	-06.066 ^b	0.000***	Supported
H5b	Personality → Norms	129.20 125.85	-00.036 ^b	0.971	Not Supported
H6b	Personality → Control	109.39 118.77	-03.125 ^b	0.002**	Supported
H7b	Knowledge → Attitude	105.41 114.43	-03.665 ^b	0.000***	Supported
H8b	Knowledge → Norms	130.40 ⁻ 103.65 ⁺	-03.499 ^a	0.000***	Supported
H9b	Knowledge → Control	126.42 ⁻ 115.80 ⁺	-00.317 ^a	0.751	Not Supported

Note: ***Significant Difference at 1%

**Significant Difference at 5%

a. Based on positive ranks.

b. Based on negative ranks.

In summary, the objective of this study is to compare the retirement planning behavior between the public and private sectors in Nigeria. In line with the objective, the PLS structural model and the Wilcoxon matched pairs signed-rank analysis were used to find a paired difference between workers in the two sectors. The analyses yielded two forms of results. The PLS structural model results show that there are differences in attitude to retirement planning behavior (H1b) relationship and personality trait to control relationship (H6b). On the other hand, the Wilcoxon signed-rank test that was

used in comparing two related samples supports six hypotheses which assumes that there are differences between the TPB variables and retirement planning behavior of the public and private sectors. The supported relationships are attitude to RPB (H1b), control to RPB (H3b), personality trait to attitude (H4b), personality to control (H6b), knowledge to attitude (H7b) and knowledge to norms (H8b). Three hypotheses were not supported indicating that there are no differences between the public and private sector workers in Nigeria. The hypotheses are norms to RPB (H2b), personality to norms (H5b) and knowledge to control (H9b). The summary of the results are presented in table 4.20 below:

Table 4.20

Summary of Significant Differences Result (Public Versus Private)

Hypothesis	The Latent Variables	PLS-SEM (Mean Differences)		Wilcoxon Signed Ranks Test (P-Value)	Decision
		Public	Private		
H1b	Attitude → RPB	0.186*	0.060	0.000*** ^a	Difference
H2b	Norms → RPB	0.404***	0.461***	0.690	No Difference
H3b	Control → RPB	0.025	0.02	0.001*** ^a	Difference
H4b	Personality → Attitude	0.308**	0.278**	0.000*** ^b	Difference
H5b	Personality → Norms	0.032	0.060	0.971	No Difference
H6b	Personality → Control	0.111	0.191*	0.002*** ^b	Difference
H7b	Knowledge → Attitude	0.082	0.107	0.000*** ^b	Difference
H8b	Knowledge → Norms	0.358***	0.303**	0.000*** ^a	Difference
H9b	Knowledge → Control	0.112	0.101	0.751	No Difference

Note: ***Significant at 1%

**Significant at 5%

*Significant at 10%

a. Based on positive ranks.

b. Based on negative ranks.

4.12 Evaluation of the Variance Explained Using Endogenous Latent Variables

The primary evaluation criteria for the structural model is the use of R^2 or coefficient of determination which measures the significance level of the path coefficients

Henseler et al., 2009; Hair et al., 2011; Hair et al., 2012). The coefficient of determination R^2 is the percentage of variation in the dependent variable defined by one or more independent variables (Hair et al., 2006; Elliott & Woodward, 2007; Hair et al., 2010). The adequate level of R^2 value depends on the nature and context of the research (Hair et al., 2010). Chin (1998) recommends that the R^2 values of 0.19 (weak), 0.33 (moderate) and 0.67 (Substantial) are acceptable for any research. However, Falk and Miller (1992) have suggested that an R^2 value of 0.10 is not a suitable value and, therefore, cannot be used for any research. Table 4.21 presents the R^2 values of the endogenous latent variable of the main model, public sector model and the private sector model.

Table 4.21
Variance Explained in the Endogenous Latent Variable of the Models.

Endogenous Latent Variable	Variance Explained (R^2)		
	Full Model (%) (n = 307)	Sub-Model for Workers in the Public Sector (%) (n = 155)	Sub-Model for Workers in the Private Sector (%) (n = 152)
Retirement Planning Behavior	45	35	33

As can be seen in Table 4.21 above, the research model explains 45% of the total variance in retirement planning behavior. This is Signifying that the five sets of exogenous latent variables (i.e., attitude toward retirement planning, subjective norms, perceived control over retirement planning, personality trait and knowledge of financial planning for retirement) collectively explain 45% of the variance in the retirement planning behavior. This is in line with the recommendation of Chin (1998) that the R^2 value is moderate.

Correspondingly, Table 4.21 indicates that the research model of the public sector explained about 35% of the total variance in retirement planning behavior of the public sector. This is proposing that the five sets of exogenous latent variables (i.e., attitude toward retirement planning, subjective norm, perceived control over retirement planning, personality trait and knowledge of financial planning for retirement) have collectively explained 35% of the variance in the retirement planning behavior of the public sector model.

Similarly, Table 4.21 explains the research model of the private sector. The model explains 33% of the total variance in retirement planning behavior of the private sector workers. This suggests that the exogenous latent variables in the model (i.e., attitude toward retirement planning, subjective norm, perceived control over retirement planning, personality trait and knowledge of financial planning for retirement) have jointly explained 33% of the variance in the retirement planning behavior of the private sector. In line with the recommendations of Chin (1998), the model is termed as moderate because the R^2 value fall within the acceptable range of 0.33.

4.12.1 Evaluation of Effect Size (f^2)

The Effect size (f^2) is used in evaluating the relative impact of one construct (variables) in terms of its predictive relevance. The effect size for each path model can be determined by calculating Cohen's f^2 . The f^2 is estimated by recording the changes in coefficient of determination R^2 when a specific construct (variable) is deleted from the model. The f^2 is calculated using two PLS path models. The first PLS path model should be the full model as defined by the hypotheses of the study, yielding the R^2 of

the full model called R^2_{Included} . The second path model should be identical with the first path model but with an eliminated construct generating a new R^2 from the reduced model called R^2_{Excluded} as expressed in the following formula (Chin, 1998). Based on the value of f^2 , the effect size of the omitted variable for a particular endogenous construct (dependent variable) can be determined. If the independent variable strongly contributes to explaining the dependent variable, the difference between R^2_{Included} and R^2_{Excluded} will be leading to a high F^2 value.

$$\text{Effect Size } (f^2) = \frac{R^2_{\text{Included}} - R^2_{\text{Excluded}}}{1 - R^2_{\text{Included}}}$$

Cohen (1988) further describes f^2 as weak, moderate and has strong effects, respectively. This is expressed as follows:

$$0.02 \leq f^2 < 0.15 = \text{Weak effect}$$

$$0.15 \leq f^2 < 0.35 = \text{Moderate effect}$$

$$f^2 \geq 0.35 = \text{Strong effect}$$

This study, therefore, shows the f^2 of the latent variables of the structural model as indicated in Table 4.22. The result shows the f^2 of the attitude towards retirement planning, subjective norm, perceived control over retirement planning, personality trait and knowledge of financial planning for retirement as 0.01, 0.18, 0.00, 0.00 and 0.00, respectively.

Table 4.22

Effect Sizes of Workers in Nigeria (n=307) Using Cohen's (1988)

	R-Squared (R2)	Included	Excluded	F2	Effect Size
1	Attitude towards retirement Planning	0.209	0.185	0.030	Weak
2	Subjective norm	0.209	0.117	0.120	Moderate
3	Perceived Control over Retirement Planning	0.209	0.208	0.001	Weak
4	Personality Trait	0.209	0.209	0.000	Weak
5	Knowledge of Financial Planning for Retirement	0.209	0.209	0.000	Weak

On the other side, Table 4.23 indicates the effect sizes of the latent variables in the public sector model. The variables are: the attitude toward retirement planning, subjective norm, perceived control over retirement planning, personality trait and knowledge of financial planning for retirement. The result indicates that only subjective norm the latent variable of the subjective norms is moderate with the effect size of 0.15. Attitude towards retirement planning, perceived control over retirement planning, personality trait and knowledge of financial planning for retirement have a relatively weak effect on the model. This is signifying that if any variable is remove from the model it will affect the retirement planning behavior of the workers.

Table 4.23

Effect Sizes of Workers in the Public-Sector (n=155)

	R-Squared (R2)	Included	Excluded	F2	Effect Size
1	Attitude towards retirement Planning	0.234	0.193	0.05	Weak
2	Subjective norm	0.234	0.123	0.15	Moderate
3	Perceived Control over Retirement Planning	0.234	0.234	0.00	Weak
4	Personality Trait	0.234	0.234	0.00	Weak
5	Knowledge of Financial Planning for Retirement	0.234	0.234	0.00	Weak

Similarly, Table 4.24 indicates the effect sizes of the latent variables in the private sector model. The result indicates that the latent variable of the subjective norm is also moderate with the effect size of 0.20. Attitude towards retirement planning, perceived control over retirement planning, personality trait and knowledge of financial planning for retirement have a relatively weak effect on the private sector model.

Table 4.24
Effect Sizes of Workers in the Private Sector (n=152)

	R-Squared (R²)	Included	Excluded	F2	Effect Size
1	Attitude towards retirement Planning	0.205	0.182	0.03	Weak
2	Subjective norm	0.205	0.090	0.15	Moderate
3	Perceived Control over Retirement Planning	0.205	0.202	0.01	Weak
4	Personality Trait	0.205	0.205	0.00	Weak
5	Knowledge of Financial Planning for Retirement	0.205	0.205	0.00	Weak

In conclusion, Cohen (1988) states that the effect size is a criterion for assessing the effect of the independent variables on the structural model. However, the F² may not have effect on the result of this study because it is useful in assessing a model with interaction or moderating variable (Hair et al., 2014; Sarstedt et al., 2014). Likewise the results show that if any of the variable is remove from the combinations of other variables may work poorly thereby determining poor retirement planning behavior among the workers. However, the results indicate that only subjective norms can work in the model without the presences of other variables.

4.12.2 Evaluation of Predictive Relevance

The coefficient of determination R² is frequently used as a measure of predictive power (Hair et al., 2012; Henseler et al., 2011; Sarstedt et al., 2013). However, the R² provide inadequate information with regards to sample prediction (Sarstedt, Ringle,

Henseler, & Hair, 2014). As a measure of predictive relevance, Stone-Geisser's Q^2 provides a standard for sample prediction (Geisser 1974; Stone 1974). The Stone-Geisser method of predictive relevance is mostly used as a substitute for goodness-of-fit in PLS-Path model research (Duarte & Raposo, 2010). Apart from the use of R^2 , the predictive sample technique Q^2 can be efficiently used as a measure for predictive relevance (Stone 1974; Geisser 1975; Fornell & Cha 1994; Chin 2010). Thus, Q^2 shows the degree to which an empirical data can be reconstructed with the aid of model and the PLS parameters to achieve the predictive relevance (Fornell & Cha 1994). The Q^2 can be obtained from two different types of prediction techniques; that is, cross-validated communality and cross-validated redundancy.

The cross-validated communality (Q^2) is the first prediction techniques designed by Stone-Geisser. It consists of key components of the PLS path model which assists in predicting the omitted data points. The Q^2 values are evaluated through the blindfolding method which measures the extent to which the path model can predict the originally observed values. During the estimations of Q^2 , a blindfolding procedure was used to calculate the Q^2 by omitting one case at a time and re-estimating the model parameters based on the remaining cases and predict the omitted case values (Esposito Vinzi, Chin, Henseler, & Wang, 2010). The procedure results in the Stone-Geisser Q^2 test statistics which shows how well-observed values are reconstructed by the model and its parameter estimates (Chin 1998). If $Q^2 > 0$, the model has predictive relevance. On the contrary, if it is $Q^2 < 0$, the model will lack predictive relevance. Thus, Q^2 can be used to measure the relative impact of the structural model on the observed measures for each dependent latent variable through cross-validation (Tenenhaus et

al., 2005). Esposito et al. (2010) have suggested that the cross-validation communality can be calculated using the stone-Geisser criterion test Q^2 as follows:

$$\text{Stone – Geisser test criterion } Q_j^2 = 1 - \frac{\sum_k E_{jk}}{\sum_k O_{jk}}$$

Where: Q_j^2 = Stone – Geisser test Criterion

E_{jk} = Squares of the predicting error

O_{jk} = Squares of the trivial prediction error

On the other hand, cross-validated redundancy (Q^2) is the second Stone-Geisser's prediction techniques which is used for assessing the predictive relevance of the inner model. The inner model or structural model represents the relationships between the evaluated constructs or variables (Hair et al., 2014). The Cross-validated redundancy (Q^2) assesses the predictive relevance of the inner model using a sample re-use technique excludes a part of the data matrix, calculates the model parameters and predicts the omitted part using the estimates. The smaller the difference between the original and predicted values, the greater the Q^2 and thus the model's predictive accuracy (Hair et al., 2014; McMillan & Conner, 2003). Henseler et al. (2009) have proposed that if the value of cross-validated redundancy is $Q^2 > 0$ for particular endogenous construct it indicates that the path models have predictive relevance. On the contrary, if it is $Q^2 < 0$, the construct in the inner model lacks predictive relevance. However, Rigdon (2014) and Sarstedt et al. (2014) did not say anything about the quality of the prediction. Cross-validated redundancy (Q^2) can be assessed using the following statistical formula:

$$Q_J^2 = 1 - \frac{\sum_G SSE_{JG}}{\sum_G SSO_{JG}}$$

Where: Q_J^2 = Cross-validated redundancy

$\sum_G SSE_{JG}$ = Sum of squares of prediction errors for Block J

$\sum_G SSO_{JG}$ = Sum of squares of original data observations for Block J

Table 4.25 presents the cross-validated redundancy of the research models which consist of main model (n = 307), sub-model for workers in the public sector (n = 155) and private sector (n = 152).

Table 4.25

Constructs Cross-Validated Redundancy of the Research Models

Model	Latent Variable	SSO	SSE	$Q^2 = 1 - \frac{SSE}{SSO}$
Workers in Nigeria (n=307)	Retirement Planning Behavior	1,096.00	958.49	0.125
Workers in the public sector (n=155)	Retirement Planning Behavior	544	481.02	0.126
Workers in the private sector (n=152)	Retirement Planning Behavior	552	480.07	0.130

As can be observed from Table 4.25 result of the cross-validation redundancy was retrieved from blindfolding output of the PLS-SEM. The cross-validated redundancy evaluates the capacity of the model to predict the endogenous variables and explain the quality of the model. Thus, the cross-validation redundancy measures Q^2 for the endogenous latent variable (retirement Planning behavior) was above zero. This is indicating the predictive relevance of the research models (Chin, 1998; Henseler et al., 2009).

4.13 Conclusion

The chapter discusses the process of data cleaning and the results of the study. The chapter divided into three (3) sections. The first section covered the data cleaning

process and presentation of the initial analysis of the results. A total of 600 questionnaires were distributed to the respondents out of which 407 were returned which gives a response rate of 70.83%. The preliminary data cleaning process recorded a 0.02% missing values, 39 univariate outliers, and 61 multivariate outliers. The cleaning process showed that the data is free from multicollinearity issues.

The second section assessed the preliminary analysis using the PLS Algorithm to generate the measurement model. The data was divided into three sets which consist of the overall dataset with ($n = 307$) samples, the samples of workers from the public sectors ($n = 155$) and samples: of workers from the private sectors ($n = 152$). After satisfying the conditions of the measurement model, the structural model was obtained to ascertain the significance of the path coefficients of the 3 models. The results of the analysis using the model with ($n=307$) samples have supported the six hypotheses. Attitude and norms have positively influenced retirement planning behavior of the works while Personality trait has positively, influenced attitude and control. knowledge positively influenced attitude and norms. Hypotheses variables that are in not support of three are: control to retirement planning behavior, personality to norms and knowledge to control. On the other hand, the Wilcoxon Signed-Rank for Two Related Samples was used to compare the retirement planning behavior of the workers in the public and private sectors. The result shows support for six hypotheses, indicating a difference between the workers in the public and private sectors. The supported hypotheses are attitude to retirement planning behavior, control to retirement planning behavior, personality to attitude. Others are personality to control, knowledge to attitude and norms. However, three hypothesis shows that there is no

difference between workers in the public and private sectors. The unsupported hypotheses are norms to retirement planning behavior, personality to norms and knowledge to control.

The third section has discussed the variance explained using exogenous latent variables, evaluation of effect sizes, and predictive relevance of the models which comprises of cross validation communality, redundancy and a conclusion was presented at the end of the chapter.



CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter discusses the findings of the study. The chapter starts by summarizing the findings of the study followed by discussions of the research findings we will make some concluding remarks to close this chapter.

5.2 Summary of the Research Findings

The objective of this research is to find out the determinants of retirement planning behavior and make a comparative assessment of the workers in the Nigerian public and private sectors. Generally, the study has shed light on the key determinants of retirement planning behaviors of the workers. It provides answers to these research questions:

- 1a. What is the relationship between attitude toward retirement planning and retirement planning behavior?
- b. Is there a difference between attitude toward retirement planning and retirement planning behavior of public and private sector workers in Nigeria?
- 2a. What is the relationship between subjective norms and retirement planning behavior?
- b. Is there a difference between subjective norms and retirement planning behavior of public and private sector workers in Nigeria?
- 3a. What is the relationship between perceived control over retirement planning and retirement planning behavior?

- b. Is there a difference between perceived control over retirement planning and retirement planning behavior of public and private sector workers in Nigeria?
- 4a. What is the relationship between personality trait and attitude toward retirement planning?
- b. Is there a difference between personality trait and attitude toward retirement planning of public and private sector workers in Nigeria?
- 5a. What is the relationship between personality trait and subjective norms?
- b. Is there a difference between personality trait and subjective norms of public and private sector workers in Nigeria?
- 6a. What is the relationship between personality trait and perceived control over retirement planning?
- b. Is there a difference between personality trait and perceived control over retirement planning of public and private sector workers in Nigeria?
- 7a. What is the relationship between knowledge of financial planning for retirement and attitude toward retirement planning?
- b. Is there a difference between knowledge of financial planning for retirement and the attitude toward retirement planning of public and private sector workers in Nigeria?
- 8a. What is the relationship between knowledge of financial planning for retirement and subjective norms?
- b. Is there a difference between knowledge of financial planning for retirement and subjective norms of public and private sector workers in Nigeria?
- 9a. What is the relationship between knowledge of financial planning for retirement and perceived control over retirement planning?

- 9b. Is there a difference between knowledge of financial planning for retirement and perceived control over retirement planning of public and private sector workers in Nigeria?

The Findings of this study are:

- H1a Attitude toward retirement planning is found to have a significant positive relationship with retirement planning behavior.
- H2a Subjective norms are found to have a significant positive relationship with retirement planning behavior.
- H4a Personality trait is found to have a significant positive relationship with attitude towards retirement planning.
- H6a Personality trait is found to have a significant positive relationship with perceived control over retirement planning.
- H7a Knowledge of financial planning for retirement is found to have a significant positive relationship with retirement attitude towards retirement planning.
- H8a Knowledge of financial planning for retirement is found to have a significant positive relationship with subjective norms.

However, the result of the study indicates that there is a significant negative relationship between:

- H3a Perceived control over retirement planning is found to have a significant negative relationship with retirement planning behavior.
- H5a Personality trait is found to have a significant negative relationship with subjective norms.

H9a Knowledge of financial planning for retirement is found to have a significant negative relationship with perceived control over retirement planning.

Figure 5.1 presents the summary of the results (workers in Nigeria, n=307)

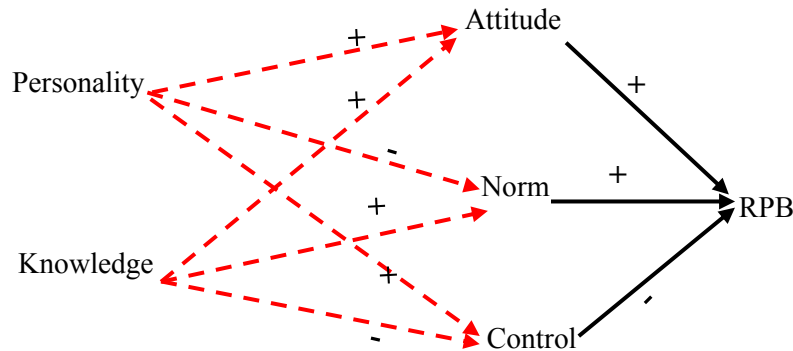


Figure 5.1

Summary of Relationship Result of the Workers in Nigeria (n=307)

Note: Positive sign (+) = Significant relationship

Negative sign (-) = Non-significant relationship

On the other hand, result of this study shows that there are significant differences between Nigerian workers in the public and private sectors in the following areas:

H1b There is a significant difference between attitude toward retirement planning and retirement planning behavior of public and private sector workers in Nigeria.

H3b There is a significant difference between perceived control over retirement planning and retirement planning behavior of public and private sector workers in Nigeria.

H4b There is a significant difference between personality trait and attitude toward retirement planning of public and private sector workers in Nigeria.

H6b There is a significant difference between personality trait and perceived control over retirement planning of public and private sector workers in Nigeria.

H7b There is a significant difference between knowledge of financial planning for retirement and attitude towards retirement planning of public and private sector workers in Nigeria.

H8b There is a significant difference between knowledge of financial planning for retirement and subjective norms of public and private sector workers in Nigeria.

However, the result of the study indicates that there is no significant difference between:

H2b There is no significant difference between subjective norms and retirement planning behavior of public and private sector workers in Nigeria.

H5b There is no significant difference between personality trait and subjective norms of public and private sector workers in Nigeria.

H9b There is no significant difference between knowledge of financial planning for retirement and perceived control over retirement planning of public and private sector workers in Nigeria.

Figure 5.2 presents the summary of the significant differences results (public vs private)

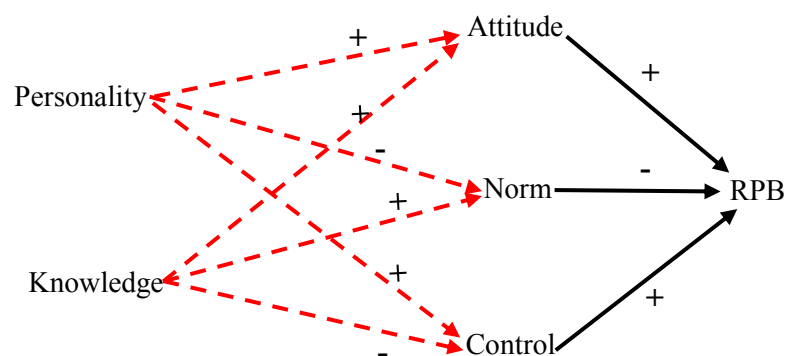


Figure 5.2

Summary of Significant Differences Result (Public Versus Private)

Note: Positive sign (+) = Significant difference

Negative sign (-) = No significant difference

5.3 Discussion of Research Findings

This section deliberates on the research findings in the light of related theory and results of previous studies.

5.3.1 Influence of Attitude Towards Retirement Planning on Retirement Planning Behavior

The principle of compatibility describes the conditions binding the attitude-behavior relationship. The principle suggests that the measures of attitude toward behavior and behavior should focus on the same context (Ajzen & Fishbein, 1977; Ajzen, 1988). Hence, leading to the formation of hypothesis 1a on the assumption that attitude toward retirement planning has a significant positive relationship with retirement planning behavior. Thus, hypothesis 1a was tested using the PLS path model. The result presented in Figure 5.1 indicates that there is a positive significant relationship between attitude toward retirement planning and RPB of the workers signifying that workers in Nigeria may likely have positive attitude toward retirement planning which will, in turn, encourage them to engage in retirement planning behavior.

Consistent with this finding is the study of Griffin et al. (2012) which suggested that personal attitude have a significant positive impact on the extent to which pre-retirees engaged in retirement planning. It is equally consistent with Mohidin et al. (2013) who suggested that attitude toward personal financial planning have a significant positive impact on retirement planning behavior. Likewise, Hassan et al. (2016) have reported that attitude towards retirement have impacted positively on retirement planning behavior of the private sector workers in Malaysia. The result of this study is also

consistent with financial behavior study conducted by Godwin et al. (1994) which suggested that attitude toward planning has a significant positive impact on cash flow management behavior.

5.3.1.1 The Difference Between Attitude Towards Retirement Planning and RPB of the Public and Private Sector workers in Nigeria

Hypothesis 1b was formulated to find the significant difference between attitude towards retirement planning and RPB of the public and private workers in Nigeria. The result obtained from the Wilcoxon matched pairs signed-rank analysis indicates that there is a difference between attitude toward retirement planning and RPB of the public and private workers in Nigeria. Thus, workers in the public sectors may likely have positive attitude towards retirement planning which will encourage them to engage in retirement planning behavior. In contrast, the workers in the private sectors may likely have negative attitude toward retirement planning which, in turn, may discourage them from engaging in retirement planning behavior.

The result of this study is consistent with the research of Chatterjee (2010) which suggested that public workers are more likely to participate in defined benefit plans and less likely to hold defined contribution plans when compared with those working in the private sector. In another study, Munnell and Connolly (2001) have suggested that public sector workers have higher retirement savings compared to the private sector workers.

5.3.2 The Influence of Subjective Norms on Retirement Planning Behavior

Review of literature has suggested that subjective norms can relate positively with behavior (Ajzen, 1991; Manning, 2009). In line with this theoretical justification, hypothesis 2a was developed to find out whether subjective norms have a significant positive relationship with RPB of workers in Nigeria. The result obtained from the PLS path analysis provides empirical support for the theoretical framework of this study. This is because subjective norms has a significant positive relationship with RPB of the workers in Nigeria. Thus, the more workers' referent groups (families, friends, co-workers, or superior boss) plan for their retirement, the greater will be the workers' confidence to participate in retirement planning behavior. Workers who comply with the behaviors of their referent groups are expected to far better and be able to carry out their retirement planning than those who fail to comply.

The result of this study is consistent with the findings of Griffin et al. (2012) which suggested that social influence has a significant positive impact on the retirement planning of pre-retirees in Australia. Correspondingly, the result confirms the findings of Moorthy et al. (2012) that family members and relatives have a significant positive influence on retirement planning behavior of Malaysian workers. The result is consistent with the findings of Nofsinger & O'Neill (2004) and Davis & Hustvedt (2012) that subjective norm has a significant positive influence on retirement savings. In a similar, Croy, Gerrans & Speelman (2012) have suggested that pressure from spouses has a significant positive impact on the retirement savings of workers in Australia. Likewise, the study of Duflo & Saez (2002; 2003) and Beshears et al.

(2015) suggested that peer pressure significantly influenced the retirement savings decisions of their peers or friends.

The result of this study supports the cultural norms of the Nigerian society which shows that family members do play a significant positive role in influencing the financial decision of the workers. These decisions include retirement planning, acquisition of assets or investment for retirement. It is a norm that the family members, especially the spouse, must agree between themselves on the issues mentioned above. Otherwise the entire plan may be distorted thereby creating disputes within the family (Adewuyi, 2009; CBN 2015). Thus, the more the workers' referent groups (families or friends) plan for their retirement, the higher will be the worker's willingness to engage in retirement planning behavior.

5.3.2.1 The Difference Between Subjective Norm and RPB of the Public and Private Sector Workers in Nigeria

The second part of hypothesis two (H2b) proposes that there is a significant difference between subjective norms and retirement planning behavior of the public and private sector workers in Nigeria. However, the result obtained from the Wilcoxon matched pairs signed-rank analysis indicates that there is no significant difference between subjective norms and retirement planning behavior of workers in the public and private sectors. The result indicates that the workers in the public and private sectors are willing to comply with the behaviors of their referent groups (family, friends, peers and co-workers) which, in turn, may likely encourage them to engage in retirement planning behavior. The result of this study is not consistent with that of Ofili (2017)

which suggested that there is a significant difference between subjective norms and retirement saving behavior of the Mid-Career workers in the USA.

5.3.3 The Influence of Perceived Control over Retirement Planning on Retirement Planning Behavior

Perceived control over retirement planning is coined out from perceived behavioral control. It is designed to solve issues that have to do with lack of volitional control over individual behavior due to lack of skills, resources, and information to engage in the behavioral act (Fishbein & Ajzen, 1975; Ajzen, 1985). It is on this basis that hypothesis 3a was developed to find out if perceived control over retirement planning has a significant positive relationship with the RPB of workers in Nigeria.

The result obtained from the PLS path analysis indicates that perceived control over retirement planning has a significant negative relationship with RPB of workers in Nigeria. The results show that the level of skills, resources or essential information required to engage in retirement planning is relatively weak among the workers in Nigeria. This is signifying that the workers may not have control over their retirement planning. Hence, the workers may not likely engage in retirement plans behavior. The result of the present study is consistent with the findings of a study between two groups of workers conducted by Hira et al. (2009) which suggested that personal control of the first group of workers has no significant impact on retirement savings. In contrast, the result of the second group suggested that personal control has a significant positive impact on retirement savings. The findings of Heenkenda (2016) is equally not consistent with the result of this study because the sense of control was found to have

a significant positive impact on readiness to embark on retirement planning of the estate workers in Sri Lanka.

5.3.3.1 The Difference Between Perceived Control over Retirement Planning and RPB of the Public and Private Sector Workers in Nigeria

The TPB proposes that the measures of perceived control varied significantly across studies (Ajzen,1991). These findings suggest that it is possible to have significant differences if the measures of PBC relate to behavior in different instances. It is in line with this position that hypothesis 3b was developed to find out whether there is a significant difference between perceived control over retirement planning and retirement planning behavior of the public and private sector workers in Nigeria.

The result obtained from the Wilcoxon matched pairs signed-rank analysis was in support of hypothesis 3b because there is a significant difference between perceived control over retirement planning and RPB of the public and private sector workers in Nigeria. The results indicate that the two groups differ significantly from each other because the mean score of the workers in the public sector was higher compared to those in the private sector. The result indicates that the level of retirement planning skills, resources and information needed to have control over retirement planning which will eventually lead to retirement planning behavior, was high among workers in the public sector. The result further shows that the level of retirement planning skills, resources and information needed to have control over retirement planning was relatively low among the workers in the private sector. Hence, workers in the private

sectors may have less chances of engaging in retirement planning behavior compared to their counterparts in the public sector.

The result of this study is consistent with the findings of Hira et al. (2009) which has suggested that there is a significant difference in the retirement savings of the workers. Likewise, it is consistent with the findings of Davis & Hustvedt (2012) that there is a significant difference between perceived behavioral control and retirement savings behavior of two groups of workers. The result of the present study is similar to the findings of Griffin et al. (2012) that there is a significant difference between the sense of control and retirement planning of workers in Australia.

5.3.4 Influence of Personality Trait on Attitude Toward Retirement Planning

Personality trait is a dispositional factor which correlates with attitude toward behavior (Ajzen, 1991; 20005). The aggregation principle assumes that individual behavior is governed by his/her personality trait in a specific instance, and conditions just as observable actions can influence other exclusive factors (attitude, norms, and control). This will, in turn, result to using reliable measures of an underlying behavioral disposition than any single behavior (Ajzen 1991; Ajzen 2005). This statement suggests that personality trait can directly predict attitude toward behavior (Ajzen 2005). It is in line with this theoretical justification that hypothesis 4a was developed to find out if personality trait has a significant positive relationship with attitude toward retirement planning of workers in Nigeria. The result obtained from the PLS path analysis shows that personality trait has a significant positive relationship with attitude towards retirement planning of workers in Nigeria. The result indicates that

the personality trait of the workers is positive, Therefore, they may likely have a positive attitude toward retirement planning which will, in turn, inspire them to engage in retirement planning behavior.

The result of this study is consistent with the findings of Griffin et al. (2012) that stable traits have a significant impact on the retirement planning of pre-retirees. Likewise, Hudomiet, Parker & Rohwedder (2015) have argued that personality trait, has a significant influence on the attitude of workers towards retirement. Putting forward a contrasting view, Angrisani et al. (2013) have argued that that personality trait has a significant negative impact on retirement transition of the elderly workers.

5.3.4.1 The Difference Between Personality Trait and Attitude Towards Retirement Planning of the Public and Private Sector Workers in Nigeria

Theoretical justifications have proposed that personality trait of individuals can relate with attitude toward behavior (Ajzen, 1991). However, review of literature has shown that the relationship between personality trait and attitude toward behavior had yielded an in-conclusive results (Angrisani et al., 2013; Griffin et al., 2012; Hudomiet, Parker & Rohwedder, 2015). Hence, the development of hypothesis 4b which proposes that there is a significant difference between personality trait and attitude toward retirement planning of the public and private sector workers in Nigeria.

The result obtained from the Wilcoxon matched pairs signed-rank analysis was in support of hypothesis 4b because there is a significant difference between personality trait and attitude toward retirement planning of the public and private sector workers

in Nigeria. The personality trait of the workers in the public sector is positive and relatively high compared to the personality trait of those workers in the private sector. The result signifies that the workers in the public sector may likely have positive attitude towards retirement planning which will eventually inspire them to engage in retirement planning behavior compared to workers in the private sectors. Thus, the result is consistent with the findings of Yakoboski, Ostuw & Hicks (1998) and Angrisani et al. (2013) that there is a significant difference between personality trait and attitude toward retirement planning and transition of the workers. The result is also consistent with the findings of Chan (2014) that personality factors demonstrate differential effects on ownership of individual retirement accounts.

5.3.5 The Influence of Personality Trait on Subjective Norm

Personality trait or a combination of traits are important determinants of human behavior (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1981; Furnham & Heaven, 1999). It is in line with this position that hypothesis 5a was designed to examine the influence of personality trait on the subjective norms of workers in Nigeria. In contrast to Hypothesis 5a, the result obtained from PLS path analysis showed that personality trait has a significant negative influence on the subjective norms of workers, this is signifying that personality trait have a negative impact on the workers' ability to comply with the subjective pressure from the family members, friends, peers or co-workers which will, in turn, motivates him to engage in retirement planning behavior. The result of the present study is not consistent with positions of the previous studies which state that personality traits of parents and peers have a significant positive

influence on children's behavior (Rowe, 1994; Harris, 1998; Collins et al., 2000; Knafo & Plomin, 2006).

5.3.5.1 The Difference Between Personality Trait and Subjective Norms of the Public and Private Sector workers in Nigeria

The TPB has proposed that dispositional factors (personality trait) can influence similar or dissimilar behavior in specific or repeated action (Ajzen, 2005). The act will lead to the achievement of result with a high degree of consistency. This will lead to the formation of hypothesis 5b which assumes that there is a significant difference between personality trait and subjective norms of the public and private sector workers in Nigeria. However, the result of the Wilcoxon matched pairs signed-rank analysis shows that there is no difference between personality trait and subjective norms of the public and private sector workers because personality trait has a significant negative influence on the subjective norms of the workers. This means that personality trait has a negative impact on workers' ability to comply with the subjective pressure from the family members, friends, peers, or co-workers which will, in due course, motivate the workers to engage in retirement planning behavior.

Therefore, the result of this study is not consistent with the findings of Hurd et al. (2012) that there is a significant difference between personality trait and retirement preparation of workers in the USA. The result is not similar to the findings of the study conducted by Genowski M. (2013) which suggested that personality trait has a different gender effect on the lifetime earnings of individuals, there is also the study

conducted by Non (2017) which has suggested that peer's personality trait differ significantly from the observable features of other peer groups.

5.3.6 The Influence of Personality Trait on Perceived Control over Retirement Planning

The relationship between personality trait and perceived control over retirement planning was formed on the premise that individual behavior is assumed to be under his or her control and can relate to a broad range of personality traits (Ajzen, 1991; 2005). It is in line with this assumption that hypothesis 6a was designed to find out whether there is a significant positive relationship between personality trait and perceived control over retirement planning. The result obtained from the PLS path analysis was in support of hypothesis 6a because there is a significant positive relationship between personality trait and perceived control over retirement planning of the workers. This is signifying that personality trait has a positive impact on workers' ability to have control over factors (skills, resources and information) that will inspire them to engage in retirement planning behavior.

The result of this study is consistent with the findings of Löckenhoff, Terracciano & Costa (2009) that personality trait significantly influences self-control and retirement planning. It is also consistent with the study of Cobb-Clark et al. (2013) and Schäfer (2016) that personality trait have a significant positive influence on the locus of control and retirement saving decisions.

5.3.6.1 The Differences Between Personality Trait and Perceived Control over Retirement Planning of the Public and Private Sector Workers in Nigeria

The relationship between personality trait and perceived control over retirement planning was designed to find out whether there is a significant difference between public and private sector workers in Nigeria. Consistent with hypothesis 6b, the result obtained from the Wilcoxon matched pairs signed-rank analysis was in support of hypothesis 6b because there is a significant difference between personality trait and perceived control over retirement planning of the public and private sector workers in Nigeria. The result shows that personality trait have a negative impact on perceived control over retirement planning of the workers in the public sector. The negative impact of personality trait may likely affect the ability of the workers in the public sector to have control over factors (skills, resources and information) that may inspire positive retirement planning. Hence, the workers in the public sector may not likely engage in retirement planning behavior. In contrast, personality trait have a positive impact on perceived control over retirement planning of the workers in the private sector. The result indicates that the positive impact of personality trait will motivate the workers in the private sector to have control over factors (such as skills, resources and information) that can lead to positive retirement planning which will, in turn, lead to positive retirement planning behavior of the workers.

The result of this study is consistent with the findings of a longitudinal study conducted by Löckenhoff et al. (2009) that there is a significant difference between personal trait and self-control over retirement preparation of workers in the USA. The result is also consistent with a panel survey conducted by Hurd et al. (2012) that there

is a significant difference between personality trait and control over retirement savings of workers in the USA.

5.3.6.2 The Influence of Knowledge of Financial Planning for Retirement on Attitude Towards Retirement Planning

The theory of planned behavior assumes that knowledge, though necessary, but it is not a sufficient condition to produce the desired behavior in the individual (Ploem, & Byers, 1997; Fisher & Fisher, 1992). Acquisition of basic knowledge may directly or indirectly serve as a motivating factor for behavioral performance (Fisher & Fisher, 1992; Ajzen & Sheik, 2012). This assertion led to the formation of hypothesis 7a which assumes that knowledge of financial planning for retirement has a significant positive influence on attitude toward retirement planning of workers in Nigeria. In line with Hypothesis 7a, the result obtained shows that knowledge of financial planning for retirement has a significant positive influence on attitude towards retirement planning of workers in Nigeria. The result indicates that positive knowledge of financial planning for retirement would shape the workers' attitude toward retirement planning. At the end, the positive attitude toward retirement planning of the workers will encourage them to engage in retirement planning behavior.

Consistent with the result of this study is the findings of Ekerdt, et al. (2001) and Lusardi & Mitchell (2009) that financial knowledge positively influence attitude toward financial behavior and retirement planning. The findings also validate the theory of planning behavior which has suggested that financial knowledge has a significant positive influence on financial attitude (Kidwell and Turrisi 2004; Croy,

Gerrans, & Speelman 2010; Xiao et al. 2011; Mien, & Thao, (2015). Likewise, the findings of this study confirm the result of Alessie et al. (2011) and Bucher-Koenen & Lusardi (2011) that there is positive causal relationship between financial knowledge and attitude toward retirement planning of siblings in Germany.

5.3.6.3 The Difference Between Knowledge of Financial Planning for Retirement and Attitude Towards Retirement Planning of the Public and Private Sector workers in Nigeria

A study conducted by Ajzen et al., (2011) has suggested that general knowledge, can relate positively to behavioral intentions and behavior through the mediating role of attitude, subjective norms and perceived control to influence the behavior in question. Ajzen et al. (2011) further suggested that if the question about knowledge have an equal number of accurate responses, the expected result will portray positive or negative implications, hence leading to differences in the relationship between attitude and knowledge. Thus, Hypothesis 7b was formulated on the assumption that there is a significant difference between knowledge of financial planning for retirement and retirement planning behavior of the public and private sector workers in Nigeria. Consistent with hypothesis 7b, the result of the Wilcoxon matched pairs signed-rank analysis shows that there is a significant difference between knowledge of financial planning for retirement and attitude toward retirement planning of the public and private sector workers in Nigeria. The result also shows that knowledge of financial planning for retirement has a significant negative relationship with attitude toward retirement planning of the public and private sector workers. This is signifying that knowledge of financial planning had impacted negatively on attitude toward

retirement planning of the public and private sector workers in Nigeria. The negative impact of knowledge on attitude may likely discourage the workers in the two sectors to engage in retirement planning behavior. However, the negative impact of knowledge of financial planning for retirement was high on workers in the private sector compared to those in the public sector. Therefore, the probability of workers in the private sector to engage in retirement planning behavior is relatively low compared to the workers in the public sector.

The result of this study is consistent with the literature reviewed. For instance, the study of Nano & Cani (2013) has suggested that there is a significant difference between financial knowledge and financial attitude of public and private university students. In contrast, the result of this study is not consistent with the findings of Anthony (2011) which has suggested that there is no significant difference between the financial management knowledge and Financial attitude of the public and private medical workers in Malaysia. Atkinson & Messy (2012) and Kirbiš, Vehovec & Galić, (2017) did not find any gender difference between financial knowledge and financial attitude of workers.

5.3.7 Influence of Knowledge of Financial Planning for Retirement on Subjective Norms

The TPB has suggested that general knowledge can predict an individual's behavior through attitude, subjective norms and perceived control (Ajzen et al., 2012). This position is in line with the theoretical justification. As a result, hypothesis 8a was designed to examine the significant positive influence of knowledge of financial

planning for retirement on perceived control over retirement planning of workers in Nigeria. The result obtained from the PLS SEM shows that knowledge of financial planning for retirement has a significant positive impact on the subjective norms of workers in Nigeria signifying that the workers positive knowledge of financial planning for retirement will motivate them to comply with the behavior of their referent group (family, friends or co-workers). This will, in turn, motivate them to engage in retirement planning behavior.

Although there are no direct studies on the relationship between financial knowledge and subjective norm, review of literature indicates results that are similar to this study. For example, Jamal et al. (2015) have discovered that financial knowledge and influence of family and peers played a significant positive role in developing students' savings behavior. Also, Kim, Yun & Lee (2014) have suggested that knowledge was found to have a significant positive influence on subjective norms. Maichum, Parichatnon & Peng (2016) have proposed that environmental knowledge has a significant positive influence on subjective norms among the adult consumers in Thailand. In contrast to the findings of this study, Gutierrez (2015) has argued that self-rated financial knowledge negatively correlates with spousal influence indicating that a decrease in self-rated financial knowledge leads to a decrease in collaboration and financial planning of the spouse. Likewise, Ajzen, et al., (2011) have suggested that alcohol knowledge has significant negative influence on subjective norms.

5.3.7.1 The Differences Between Knowledge of Financial Planning for Retirement and Subjective Norm of the Public and Private Sector Workers in Nigeria

The theory of planned behavior states that knowledge, describes the individual's intentions and behavior. In addition to having the necessary knowledge, individuals must be motivated by another factor to engage in the behavior. When such factor is consistent with this view, it is likely to have a high level of predictive accuracy in the relationship between knowledge and subjective norms (Ajzen et al., 2011). Thus, hypothesis 8b was developed to measure the significant difference between knowledge of financial planning for retirement and subjective norms of the public and private sector workers in Nigeria.

The result obtained from the Wilcoxon matched pairs signed-rank analysis was in support of hypothesis 8b because there is a significant difference between knowledge of financial planning for retirement and subjective norms of the public and private sector workers in Nigeria. Although there is no direct study concerning the difference between financial knowledge and subject norms, Loibl & Hira (2006) suggested that there is a gender difference between financial knowledge and social network in the workplace. Using data from the Health and Retirement Study (HRS), Lusardi and Mitchell (2007; 2008) reported significant gender differences in financial knowledge, with males generally displaying higher levels of financial knowledge than females.

5.3.8 The Influence of Knowledge of Financial Planning for Retirement on Perceived Control Over Retirement Planning

Bandura's self-efficacy theory has suggested that people significantly utilize an implied knowledge embedded in their belief (control Belief/self-efficacy) to regulate their behavior (Bandura,1977; 1986). On the other hand, the TPB postulates that general knowledge can relate positively to behavioral intentions and behavior through attitude, subjective norms and perceived control to influence the behavior in question (Ajzen, et al., 2011). These relationships led to the formation of hypothesis 9a which states that knowledge of financial planning for retirement has a significant positive influence on the perceived control over retirement planning of workers in Nigeria.

The result of the PLS SEM shows that knowledge of financial planning for retirement has a significant negative impact on perceived control over retirement planning of the workers in Nigeria. The result signifies that the workers have less degree of confidence with regards to financial planning for retirement and may not likely have control over retirement planning. Hence, the workers may not like to engage in retirement planning behavior. Review of literature shows that there is a shortage of direct studies related to financial knowledge and perceived behavioral control. The result of this study is consistent with the findings of some related studies. Dwiastanti (2017) suggested that financial knowledge has a significant negative impact on the locus of control and the financial management behavior of students at Kanjuruhan University Malang, Indonesia. The result of this study is similar to the findings of Thomas, Mulyono & Setiaji (2016) that financial education has a significant negative influence on self-efficacy among Indian University students. The result of this study is not consistent

with the findings of Grable (2009) and Perry (2008) which proposed that financial knowledge has a significant positive impact on locus-of-control.

5.3.8.1 The Difference Between Knowledge of Financial Planning for Retirement and Perceived Control Over Retirement Planning of the Public and Private Sector Workers in Nigeria

The theory of planned behavior assumes that knowledge, as a dispositional factor, can predict different behaviors through attitude, subjective norm and perceived behavioral control (Ajzen 1991). This theoretical assumption led to the formation of Hypothesis 9b. this is assumed that there is a significant difference between knowledge of financial planning for retirement and perceived control over retirement planning of the public and private sector workers in Nigeria.

In contrast to Hypothesis 9b, the result obtained from the Wilcoxon matched pairs signed-rank analysis shows that there is no difference between knowledge of financial planning for retirement and perceived control over retirement planning of the public and private sector workers in Nigeria. The result suggests that the workers in the public and private sectors have less degree of confidence with regards to financial planning for retirement. Therefore, the workers in the two sectors may not likely have control over retirement planning and motivation to engage in retirement planning behavior.

The result of the present study is not consistent with the findings of McLaughlin, Walsh & Bryant (2013) that there is a significant difference between knowledge and control beliefs of the health care workers. In contrast to the result of the present study,

Danes & Haberman (2007) suggested that there are gender differences between financial knowledge and self-efficacy.

5.4 Conclusion

This chapter discusses the findings of the study and supported them with the existing literature. The chapter shows that the study was conducted in two stages with each consisting of nine hypotheses. The first stage assessed the determinants of retirement planning behavior of the total workers. The result obtained from the PLS path analysis supported six hypotheses namely: Attitude and Norms to RPB, Personality to attitude and control, Knowledge to attitude and norms. In contrast, three hypotheses were not supported. They are control to RPB, personality to Norms and Knowledge to control. The second stage of the study compared the RPB of the workers (public versus private) using Wilcoxon matched pairs signed-rank analysis for two-related samples. The result shows that six hypotheses were supported suggesting significant differences between the two groups of workers, namely: attitude and control to retirement planning behavior, personality to attitude and control, knowledge to attitude and to norms. However, three hypotheses were not supported signifying no differences between the two groups. They are norms to retirement planning behavior, personality to norms and knowledge to control.

CHAPTER SIX

IMPLICATIONS, LIMITATIONS, SUGGESTIONS FOR FUTURE STUDIES AND CONCLUSION

6.1 Introduction

This chapter discusses the theoretical implication, practical implication and methodological contributions of the study. The chapter explains the limitations of the study. It provides suggestions for future studies and make conclusion.

6.2 The Theoretical Implications

From the theoretical viewpoint, attitude toward behavior, subjective norms and perceived control do influence behavior through intention (Ajzen, 1991). Most of the studies focused on this theoretical proposition (Henkens & Tazelaar, 1997; Van Dam et al., 2009; Feldman & Beehr, 2011; Falko, 2014). The present study has immensely contributed to the knowledge gap by providing a more empirical justification on the direct relationship of the TPB variables. The study combined attitude toward retirement planning, subjective norm and perceived control over retirement planning to serve as direct predictors of retirement planning behavior. On the other hand, personality trait and knowledge of financial planning, mediated by attitude, subjective norms and perceived control, influenced the retirement planning behavior of the workers. Thus, the theory of planned behavior and the possible direct effects of TPB variables stands to make a significant contribution.

Ajzen et al. (2011) have argued that Knowledge, though necessary, but it is not a sufficient condition in the decision-making process. In contrast, empirical studies have assumed that human decisions must be supported with accurate and valid knowledge (Hilgert, Hogarth, & Beverly, 2003; Kim et al., 2005; Howlett, Kees, Kemp, 2008; Lusardi & Mitchell, 2007; Ajzen et al., 2011). The result of this study shows that knowledge can influence human decision through attitude, subjective norms and behavior. For instance, knowledge of financial planning for retirement positively correlates with the attitude towards retirement planning and subjective norms, thereby influencing retirement planning behavior of the workers.

From the theoretical perspective, the present study proposed an empirical link between personality trait and attitude toward retirement planning, subjective norms as well as perceived control. The model provides a comprehensive overview of how personality trait influenced retirement variables. The result of this study has confirmed the theoretical justification which proposed that personality trait, as stable dispositions which measures individual thoughts, emotions and behavior was able to influence attitude toward retirement planning and perceived control over retirement planning and eventually led to retirement planning behavior of the workers.

6.3 The Practical Implications of the Study

The present study has a lot of practical implications to the employers of labour, policymakers, pension managers, and the pre-retirees.

6.3.1 Implication of the Study to the Employers of Labour

The findings of this study are important to the employers of labour because it has suggested that attitude toward retirement planning is an important determinant of retirement planning behavior. Positive attitude towards retirement planning enhanced retirement planning behavior of the workers will in turn, lead to retirement satisfaction. Although, the result of this study has indicated that the private sector workers have a negative attitude toward retirement planning; presumably, the negative attitude will affect the ability of the private workers to engage in retirement planning behavior there by affecting their retirement satisfaction in the future.

Therefore, it becomes necessary for employers of labour to introduce retirement planning initiatives program capable of improving the attitude of the workers. The authorities need to, proactively, involve in training the workers on proper retirement planning. The training should be in the form of a life cycle retirement planning program for all the workers starting from their first day at work. The program should aim at creating awareness on the urgent need for early retirement planning that is capable of changing the opinions of the workers. The authorities should also consider the possibility of introducing a retirement savings safety net to serve as an incentive to any worker who actively engages in early retirement planning.

Additionally, this study is important to employers of labour because the findings suggested that the retirement planning practice of family and friends will serve as essential determinants of positive retirement planning behavior. Review of literature has proposed that friends, family members and co-workers do play a significant role

in determining the individual's future financial goals (Bandura, 1977, 1986; Goodnow, 1997). The influence of social network (co-workers, friends, family), through social interactions can play a significant role in changing the behavior of the workers. Encouraging social interactions through personal conversations or participating in retirement planning among the workers will influence their retirement planning decisions. Therefore, the employers of labour should motivate the workers by educating them through mutual association with people that are willing to plan for retirement through organizational workshops. The workshop should be coordinated by individuals of like-minds sourced from different corporate organizations and ethnic backgrounds. The association will stimulate positive retirement planning behavior among the workers.

6.3.2 Implications of the Study for Policymakers

The study will be important to the policymakers especially those units charged with the responsibility of designing and providing retirement education programs to both the young and middle-aged groups. The results of this study provide for individual differences in factors such as attitude, norms, control personality trait, and knowledge. Hence those who develop retirement planning programs ought to make provisions for individual difference in the future. The results of this study convincingly suggested that policymakers would be well advised to consider using psychological factors to realize the maximum impact on retirement planning behavior among the workers. For instance, the intervention program could be tailored to accommodate the needs of younger workers.

The study will be important to the policymakers because the findings recognized family members as sources of financial behaviors. Spouses decide on behalf of the entire members of the family and serve as a primary decision-making unit of the workers. Decisions by spouses with regards to retirement planning significantly influence their retirement planning behavior. Therefore, the policymakers through the social workers, should closely monitor the retirement decision-making process of every household. The social workers should understand the bi-directional relationship of the family units rather than the individual workers. By implementing that strategy, they will be able to explore more on the actual retirement decision-making processes of the couples and offer pieces of advice appropriately.

6.3.3 Implications of the Study to the Pension Managers

One of the salient practical implications of this study has to do with the workers ability to have control over all factors that may deter them from engaging in retirement planning. These factors ranged from the availability of resources such as income, level of skills or experience and information (Akpan, 2017). Though, the outcome of this study indicates that Nigerian workers generally lacked control over their resources due to the factors mentioned above, the decision regarding retirement savings, or how much to invest, is a complicated issue which requires professional guidance. Such essential element is lacking among Nigerian workers. Therefore, to enhance the quality of retirement planning decisions, workers are advised to seek professional advice from pension managers. The latter should encourage the workers to form a mini-financial planning model or corporative retirement savings scheme among themselves in order to monitor their expenditure in the present and in the future. Such

plans will convince the workers that they may likely be underfunded in retirement if they are not in control of their present pattern of expenditures.

From a practical perspective, knowledge of financial planning for retirement and personality trait indirectly influence retirement planning behavior. Precisely, the two factors that affect the long-term retirement planning behavior of workers by shaping their attitude. Therefore, pension managers ought to design a retirement planning programs or workshops and embark on strong advocacy aimed at improving the knowledge of the workers. This is imperative because the result of this study has explicitly shown the significance of knowledge in pre-retirement planning. knowledge acquired by individuals can shape their attitude toward retirement planning and encourage them to comply with the behavior of their referent groups. Hence, it is suggested that knowledge of financial planning for retirement acquired through short-term training will motivate individuals to engage in retirement planning behavior.

6.4 The Methodological Contributions of the Study to Knowledge

The methodological contributions of this study can be observed from the assessment of retirement planning behavior using psychological factors. The factors comprise of attitude toward retirement planning adopted from Griffin et al. (2012); subjective norm and perceived control over retirement planning taken from Ajzen (2013); personality traits selected from Gosling et al. (2003); and knowledge of financial planning for retirement adopted from Jacobs-Lawson & Hershey (2005). All the variables were sourced from different fields of studies, thereby using them as psychological determinants of retirement planning behavior.

Secondly, the most notable methodological contribution of this study is the use of the PLS path modeling to assess the TPB variable. This study has succeeded in evaluating the measurement model using convergent validity and the discriminant validity of each TPB variable. The convergent validity was calculated using the value of AVE of each of the variable. The study has succeeded in examining the construct reliability, average variance explained (AVE) and composite reliability of each of the variables in the model. Likewise, the discriminant validity was measured by comparing the relationships between the latent variables and the square roots of AVE. Results obtained from the cross-loadings matrix were estimated to justify the strength of the discriminant validity in the measurement model. On the other side, the study has achieved a lot in assessing the significance level and the relevance of each variable using the structural model. Correspondingly, a simple bootstrapping routine, with 5000 subsamples, was used for the structural model estimation and determination of the significance level of the latent variables. Thus, the present study has achieved by using one of the robust methods (PLS-SEM path modeling) to evaluate the constructs of each latent variable. this is shown in the conceptual framework as conducted by Diamantopoulos & Siguaw, (2006), Gudergan, et al., (2008) and recommended by Sarstedt et al., (2014).

6.5 Limitations of the Study and Suggestion for Future Study

Despite the theoretical, methodological and practical contributions, the present study has some limitations that needed to be pointed out. Firstly, the study adopts a cross-sectional approach which requires the collection of data from different groups within a sh period, the study was only able to give a snapshot of the factors influencing

retirement planning behavior of the workers. Therefore, the situation may likely provide differing results if another time frame is chosen to capture the phenomenon of the same scope. In the future, a longitudinal study can be conducted to eliminate the method bias and to investigate the relationships between the constructs of attitude, subjective norms, perceived control, personality and knowledge.

Secondly, it is a matter of concern to mention that because the data collection procedures were self-reported, there could be error from the common variance. Though the present study provides support for sizable numbers of its hypothesis, it is a clear indication that the issue of common variance does not affect the significance levels of the relationships in this study.

Thirdly, the current study on the determinants of retirement planning behavior has, undoubtedly not been thoroughly exhausted. Future researchers ought to consider more psychological predictors like implicit attitude, injunctive norms, descriptive norms, and stereotypes, to provide a more comprehensive discussion of retirement planning decisions of workers.

6.6 Conclusion

The purpose of this study was to compare the retirement planning behavior of public and private sector workers in Nigerian using the TPB. The study was divided into two stages, with each consisting of nine hypotheses. The first stage assessed the determinants of RPB of the total workers. The second stage compared the RPB of the public and private sector workers. Previous studies have proved that the TPB can be a

useful model in evaluating retirement planning of the workers. An effort has been made to show how psychological factors could influence individual decision making and validates the extension of the TPB. Thus, the extended TPB used in this study consists of two sections: the main TPB variables (attitude, subjective norms and perceived control) and the background variables (personality traits and knowledge). Hence, the present study has addressed the theoretical gap in the literature by incorporating the variables to serve as determinants of RPB.

Theoretically, the present study has succeeded in showing how the dispositional factors, through the application of the aggregation principle, influenced the attitude towards retirement planning, subjective norm and perceived control over retirement planning which eventually leads to retirement planning behavior. The study has contributed a lot to the retirement planning literature. It will assist immensely in exploring the direct effects of attitude towards retirement planning, subjective norm and perceived control over retirement planning on retirement planning behavior. Findings of this study have provided a theoretical, methodological and practical implications for the policy makers, pension managers and the workers. Despite these contributions, the present study has, to some extent, some limitations which will pave the way for future studies.

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APPENDICES
Appendix A
Research Questionnaire



University Utara Malaysia
School of Economics, Finance and Banking
Survey Questionnaire



**THE DETERMINANT OF RETIREMENT PLANNING BEHAVIOR: A
COMPARATIVE STUDY OF PUBLIC AND PRIVATE SECTOR WORKERS IN
NIGERIA**

Dear esteemed respondent,

I am a Ph.D. finance and Banking Research Student currently conducting a study on the above subject matter. I wish to inform you that you have been selected to be a respondent in this research. The attached questionnaire is designed with the objective of identifying the determinant of retirement planning behavior among the Nigerian workers. The selection of this topic become necessary because the determinant of retirement planning behavior among workers has not been extensively studied. Thus, it becomes necessary to fill the existing gap, especially in a country like Nigeria. The findings of this study will be useful in assisting Nigerian government to develop policies that will improve our retirement systems. Your candid views are very important in providing a clear representation of how people plan for their retirement. Please note that your answers to the statements in the questionnaire will be treated strictly, with a high level of confidentiality. And it will purely be used for academics' purpose.

Thank you,

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HOW TO FILL THE QUESTIONNAIRE

1. The questionnaire is made up of Seven Likert scales. You will be expected to indicate your level of agreement or disagreement with the statement by circling any option that best represents your view.
2. It is important to note that there is no right or wrong answer to any of the options. However, your candid views will be highly appreciated. In the event, you find some of the statements difficult to decide, select any option that will suit your best interest.
3. The questionnaire is classified into five distinct sections. You are required to complete all the sections. The filling of the questionnaire will approximately take you 20-30 minutes to complete.
4. Only one option should be circle per a given statement.

SECTION 1: DEMOGRAPHY OF THE RESPONDENT						
1	Gender	Male	Female			
2	Marital Status	Single	Married	Divorced	Widow	
3	Age	26-35	36-45	46-55	55 & above	
4	Religion	Islam	Christianity	Other Religion		
5	Ethnic groups	Hausa	Igbo	Yoruba	Other Ethnic groups	
6	Number of Children	None	1-3	4-6	7-9	10 & Above
7	Academic Qualifications	SSCE /GCE	NCE / OND/	B Sc /BED/ BA/HND	MSc/MA/ MBF/MBA /MPA	PhD /Prof
8	Salary Grade	01-06	07-12	13-17		
9	Employer	Public Sector	Private Sector			
10	Ownership of Retirement Savings Account	Yes	No			

Grading and filling style

The questions in the entire questionnaire used a 7 places rating scales; you are to circle the number that best describes your opinion. For example, if you were asked to rate "My living standard " on such a scale, the 7 places should be interpreted as follows:

My living standard is:

good: 1 : 2 : 3 : 4 : 5 : 6 : 7 : bad
 extremely quite slightly neither slightly quite Extremely

If you think your living standard is extremely good, then you would circle the number 1, as follows:

My living standard is:

good: 1 : 2 : 3 : 4 : 5 : 6 : 7 : bad

If you think your living standard is quite bad, then you would circle the number 6, as follows.

My living standard is:

good: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : 7 ____ : bad

If you think your living standard is extremely bad, then you would circle the number 7, as follows.

Another Example is

My salary package is extremely good:

Strongly Agree: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : ____ 7 ____ : Strongly Disagree

Strongly Agree Somewhat Neither Somewhat Disagree Strongly

If you think your salary package is extremely good, then you can circle the *number 1 or 2*. If you think your salary package is not extremely good, you can circle either 6 or 7 as the case may be.

SECTION 2: MEASURES RETIREMENT PLANNING BEHAVIOR OF THE WORKERS

The questions in this section used a 7 places rating scales; you are to circle the number that best describes your opinion. For example, if you were asked to rate "My salary package is extremely good" on such a scale, the 7 places should be interpreted as follows:

Retirement Planning Behavior

11. I frequently read articles/brochures on investment or financial planning

Strongly Agree: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : ____ 7 ____ : Strongly disagree

12. I organized my financial records.

Strongly Agree: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : ____ 7 ____ : Strongly disagree

13. I conducted a thorough assessment of my financial net worth.

Strongly Agree: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : ____ 7 ____ : Strongly disagree

14. I Identified specific spending plans for my future.

Strongly Agree: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : ____ 7 ____ : Strongly disagree

15. I discussed financial retirement plans with my Pension managers

Strongly Agree: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : ____ 7 ____ : Strongly disagree

SECTION 3: MEASURES ATTITUDE, SUBJECTIVE NORMS AND PERCEIVED CONTROL OVER RETIREMENT PLANNING OF THE WORKERS

Attitude Towards Retirement Planning

16. Retirement planning is:

Interesting: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : ____ 7 ____ : Boring

17. Retirement planning is:

A productive use of time: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : ____ 7 ____ : A waste of time

18. Retirement planning is:

Helpful: ____ 1 ____ : ____ 2 ____ : ____ 3 ____ : ____ 4 ____ : ____ 5 ____ : ____ 6 ____ : ____ 7 ____ : Not helpful

19. Retirement planning is:

Worthwhile: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Useless

20. Retirement planning is:

Easy: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Difficult

Subjective norms

21. Most people who are important to me plan for retirement at least every month.

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

22. The people in my life whose opinions I value plan for retirement at least every month.

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

23. Many people like me plan for retirement at least every month.

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

Perceived control over retirement planning

24. If I encountered unanticipated events that placed demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis.

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

25. If I felt ill, tired, or listless, it would make it more difficult for me to plan for retirement on a regular basis.

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

26. If I had family obligations that placed unanticipated demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis.

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

27. If work or employment placed unanticipated demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis.

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

28. If other activities placed heavy demands on my resources, it would make it more difficult for me to plan for retirement on a regular basis

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

29. If I failed to plan for retirement in time, it would make it more difficult for me to continue planning on a regular basis.

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

SECTION 4: MEASURES BACKGROUND FACTORS

Personality Traits

30. I see myself as someone who is Extraverted and enthusiastic.

Strongly Agree: __1__ : __2__ : __3__ : __4__ : __5__ : __6__ : __7__ : Strongly disagree

31. I see myself as someone who is dependable and self-disciplined.

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

32. I see myself as someone who is Sympathetic and warm.

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

33. I see myself as someone who is Open to new experiences and complex.

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

34. I see myself as someone who is Calm and emotionally stable.

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

Knowledge of Financial planning for retirement

35. I am very knowledgeable about financial planning for retirement.

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

36. I know more than most people about retirement planning.

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

37. I am very confident in my ability to do retirement planning

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

38. When I need information on financial services, I know exactly where to go

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

39. I am knowledgeable on how Contributory pension scheme (CPS) works.

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

40. I am knowledgeable about how retirement saving account (RSA) work.

Strongly Agree: ___1___: ___2___: ___3___: ___4___: ___5___: ___6___: ___7___: Strongly disagree

Appendix B

Missing Values Output

	Result Variable	N of Replaced Missing Values	Result Variables Case Number of Non-Missing Values		N of Valid Cases	Creating Function
			First	Last		
1	RPB01_1	0	1	407	407	SMEAN(RPB01)
2	RPB02_1	0	1	407	407	SMEAN(RPB02)
3	RPB03_1	0	1	407	407	SMEAN(RPB03)
4	RPB04_1	0	1	407	407	SMEAN(RPB04)
5	RPB05_1	0	1	407	407	SMEAN(RPB05)
6	RPI01_1	0	1	407	407	SMEAN(RPI01)
7	RPI02_1	0	1	407	407	SMEAN(RPI02)
8	RPI03_1	0	1	407	407	SMEAN(RPI03)
9	ATRP01_1	1	1	407	407	SMEAN(ATRP01)
10	ATRP02_1	0	1	407	407	SMEAN(ATRP02)
11	ATRP03_1	0	1	407	407	SMEAN(ATRP03)
12	ATRP04_1	0	1	407	407	SMEAN(ATRP04)
13	ATRP05_1	0	1	407	407	SMEAN(ATRP05)
14	SN01_1	0	1	407	407	SMEAN(SN01)
15	SN02_1	0	1	407	407	SMEAN(SN02)
16	SN03_1	0	1	407	407	SMEAN(SN03)
17	PCRP01_1	0	1	407	407	SMEAN(PCRP01)
18	PCRP02_1	0	1	407	407	SMEAN(PCRP02)
19	PCRP03_1	0	1	407	407	SMEAN(PCRP03)
20	PCRP04_1	0	1	407	407	SMEAN(PCRP04)
21	PCRP05_1	0	1	407	407	SMEAN(PCRP05)
22	PCRP06_1	0	1	407	407	SMEAN(PCRP06)
23	PT01_1	0	1	407	407	SMEAN(PT01)
24	PT02_1	0	1	407	407	SMEAN(PT02)
25	PT03_1	0	1	407	407	SMEAN(PT03)
26	PT04_1	0	1	407	407	SMEAN(PT04)
27	PT05_1	1	1	407	407	SMEAN(PT05)
28	PT06_1	0	1	407	407	SMEAN(PT06)
29	PT07_1	0	1	407	407	SMEAN(PT07)
30	PT08_1	0	1	407	407	SMEAN(PT08)
31	PT09_1	0	1	407	407	SMEAN(PT09)
32	PT10_1	0	1	407	407	SMEAN(PT10)
33	KFPR01_1	0	1	407	407	SMEAN(KFPR01)
34	KFPR02_1	0	1	407	407	SMEAN(KFPR02)
35	KFPR03_1	0	1	407	407	SMEAN(KFPR03)
36	KFPR04_1	0	1	407	407	SMEAN(KFPR04)
37	KFPR05_1	0	1	407	407	SMEAN(KFPR05)
38	KFPR06_1	0	1	407	407	SMEAN(KFPR06)

Appendix C

The Output of the Measurement Model (Full Model)

Column1	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	R Square
Attitude Towards Retirement Planning	0.814	0.817	0.89	0.729	0.09
Knowledge of Financial Planning for Retirement	0.836	0.838	0.88	0.549	
Perceived Control Over Retirement Planning	0.885	0.909	0.915	0.684	0.043
Personality Trait	0.524	0.582	0.801	0.671	
Retirement Planning Behavior	0.844	0.849	0.896	0.682	0.218
Subjective Norm	0.853	0.858	0.911	0.772	0.121

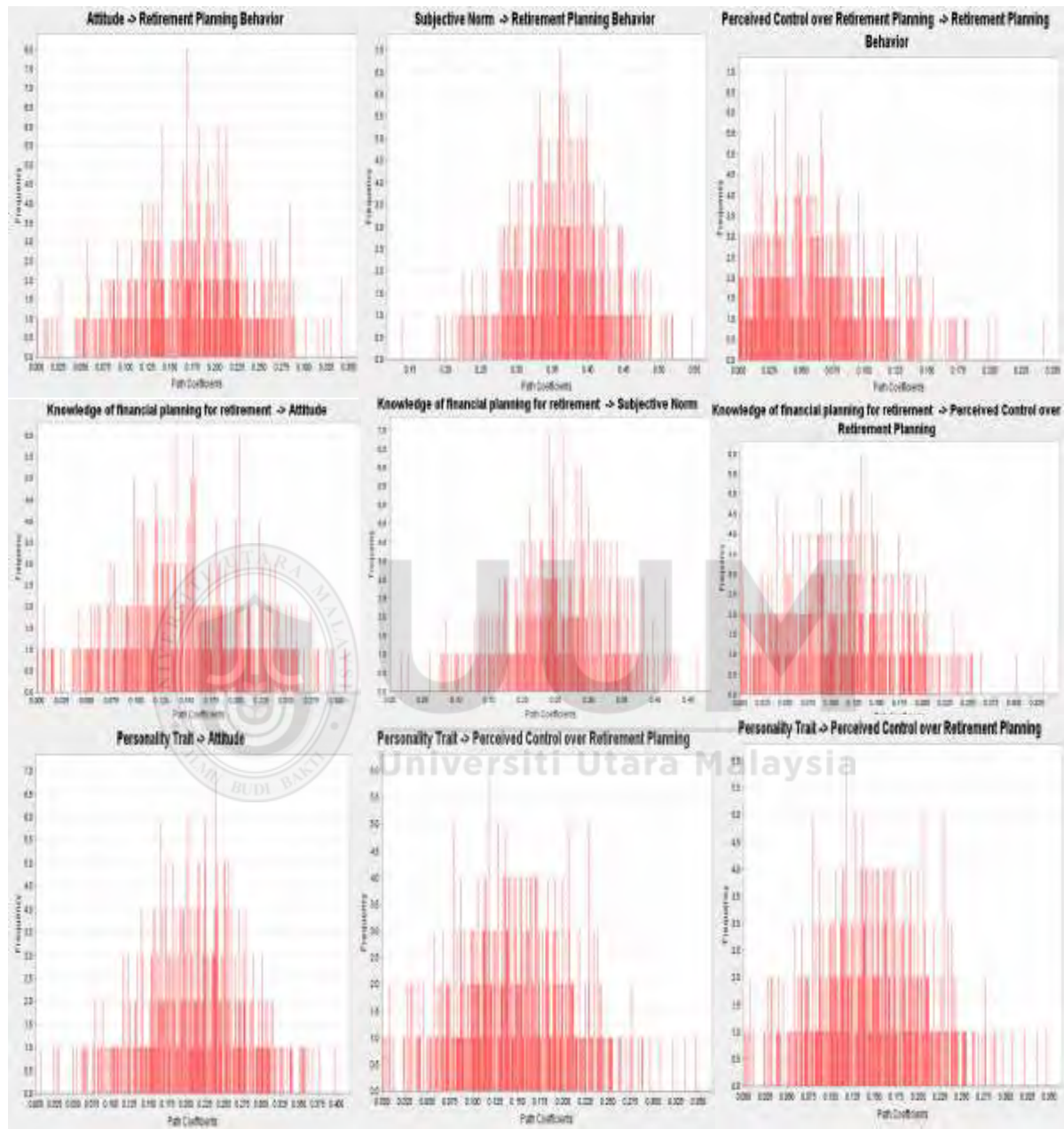
Appendix D

The Blindfolded Output of the Full Model

Construct Crossvalidated Communality				Construct Crossvalidated Redundancy			
	SSO	SSE	Q ² (=1-SSE/SSO)		SSO	SSE	Q ² (=1-SSE/SSO)
Attitude Towards	822.000	459.880	0.441	Attitude	822.000	772.538	0.060
Knowledge of fin	1,370.000	839.437	0.387	Knowledge of fi	1,370.000	1,370.000	
Perceived Control	1,370.000	649.559	0.526	Perceived Contr	1,370.000	1,336.477	0.024
Personality Trait	548.000	501.855	0.084	Personality Trait	548.000	548.000	
Retirement Planni	1,096.000	626.974	0.428	Retirement Plan	1,096.000	958.213	0.126
Subjective Norm	822.000	408.384	0.503	Subjective Norm	822.000	774.402	0.058
Indicator Crossvalidated Communality				Indicator Crossvalidated Redundancy			
Total	SSO	SSE	Q ² (=1-SSE/SSO)	Total	SSO	SSE	Q ² (=1-SSE/SSO)
ATRP02	274.000	171.152	0.375	ATRP02	274.000	255.259	0.068
ATRP03	274.000	139.548	0.491	ATRP03	274.000	259.635	0.052
ATRP04	274.000	149.180	0.456	ATRP04	274.000	257.645	0.060
KFPR01	274.000	179.981	0.343	KFPR01	274.000	274.000	
KFPR03	274.000	193.577	0.294	KFPR03	274.000	274.000	
KFPR04	274.000	149.165	0.456	KFPR04	274.000	274.000	
KFPR05	274.000	148.805	0.457	KFPR05	274.000	274.000	
KFPR06	274.000	167.909	0.387	KFPR06	274.000	274.000	
PCRP01	274.000	149.667	0.454	PCRP01	274.000	269.079	0.018
PCRP02	274.000	139.251	0.492	PCRP02	274.000	269.596	0.016
PCRP03	274.000	108.505	0.604	PCRP03	274.000	265.048	0.033
PCRP04	274.000	141.987	0.482	PCRP04	274.000	263.796	0.037
PCRP05	274.000	110.150	0.598	PCRP05	274.000	268.958	0.018
PT04	274.000	252.934	0.077	PT04	274.000	274.000	
PT05	274.000	248.921	0.092	PT05	274.000	274.000	
RPB01	274.000	156.634	0.428	RPB01	274.000	247.101	0.098
RPB02	274.000	134.781	0.508	RPB02	274.000	230.307	0.159
RPB03	274.000	167.792	0.388	RPB03	274.000	242.527	0.115
RPB04	274.000	167.768	0.388	RPB04	274.000	238.278	0.130
SN01	274.000	130.290	0.524	SN01	274.000	260.209	0.050
SN02	274.000	116.386	0.575	SN02	274.000	261.377	0.046
SN03	274.000	161.708	0.410	SN03	274.000	252.816	0.077

Appendix E

Path Coefficient Chart of the Full Model



Appendix F

The Output of the Measurement Model (Public-Sector Model)

Column1	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	Column2
Attitude Towards Retirement Planning	0.783	0.783	0.874	0.698	0.114
Knowledge of Financial Planning for Retirement	0.824	0.83	0.871	0.531	
Perceived Control Over Retirement Planning	0.881	0.949	0.912	0.676	0.033
Personality Trait	0.506	0.506	0.802	0.67	
Retirement Planning Behavior	0.801	0.808	0.87	0.627	0.219
Subjective Norm	0.871	0.888	0.92	0.793	0.133

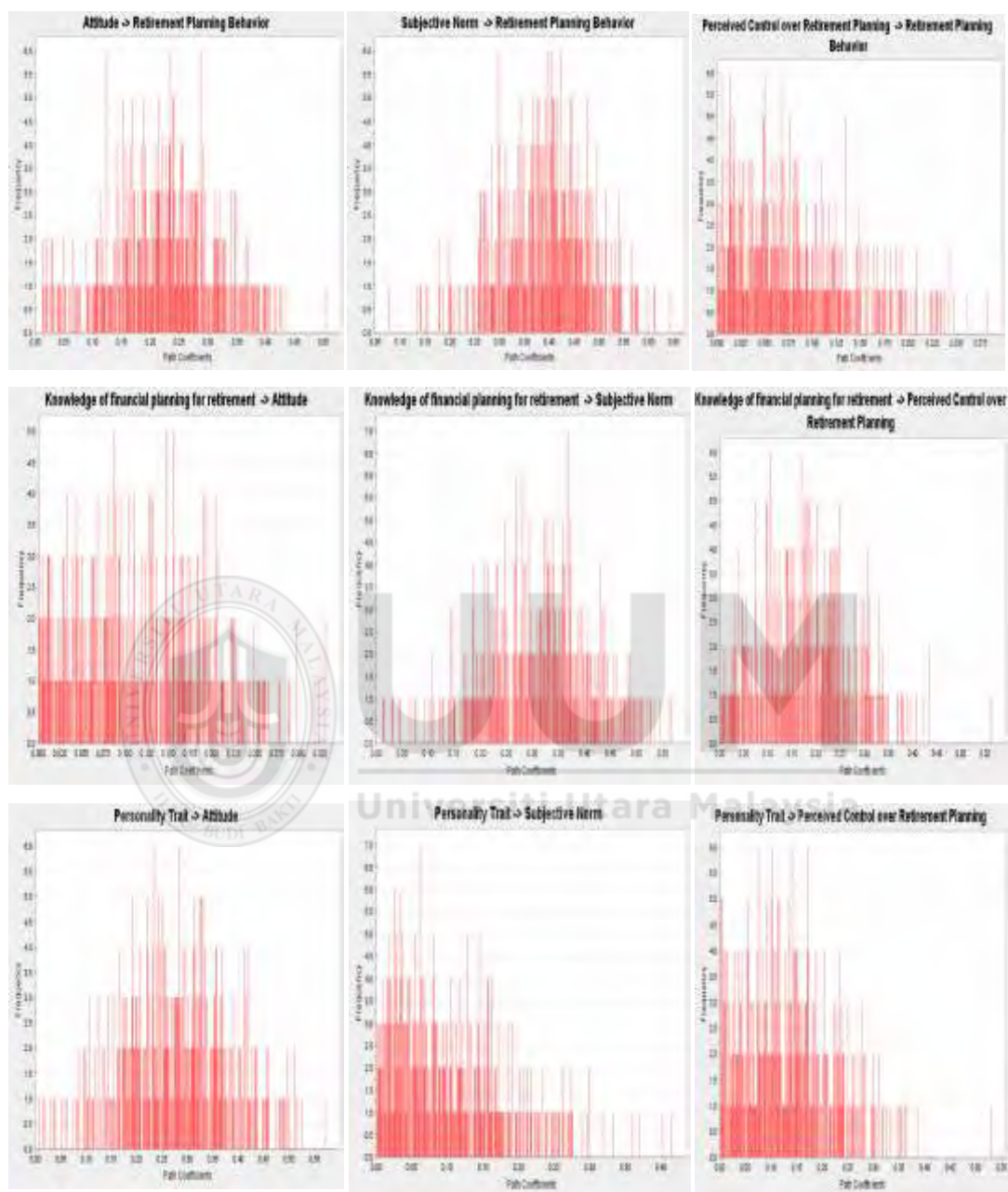
Appendix G

The Blindfolded Output of the Public-Sector Model

Construct Crossvalidated Communality				Construct Crossvalidated Redundancy			
	SSO	SSE	Q ² (=1-SSE/SSO)		SSO	SSE	Q ² (=1-SSE/SSO)
Attitude	408.000	253.525	0.379	Attitude	408.000	384.141	0.058
Knowledge of Financial Planning for Retirement	680.000	434.536	0.361	Knowledge of Financial Planning for Retirement	680.000	680.000	
Perceived Control Over Retirement Planning	680.000	328.155	0.517	Perceived Control Over Retirement Planning	680.000	683.826	0.024
Personality Trait	272.000	255.779	0.060	Personality Trait	272.000	272.000	
Retirement Planning Behavior	544.000	360.944	0.337	Retirement Planning Behavior	544.000	480.832	0.116
Subjective Norm	408.000	184.715	0.547	Subjective Norm	408.000	374.491	0.082
Indicator Crossvalidated Communality				Indicator Crossvalidated Redundancy			
	SSO	SSE	Q ² (=1-SSE/SSO)		SSO	SSE	Q ² (=1-SSE/SSO)
ATRP02	136.000	94.440	0.308	ATRP02	136.000	127.703	0.061
ATRP03	136.000	72.690	0.466	ATRP03	136.000	128.608	0.054
ATRP04	136.000	86.395	0.365	ATRP04	136.000	127.829	0.060
KFPR01	136.000	96.295	0.292	KFPR01	136.000	136.000	
KFPR03	136.000	94.989	0.302	KFPR03	136.000	136.000	
KFPR04	136.000	77.964	0.427	KFPR04	136.000	136.000	
KFPR05	136.000	77.248	0.432	KFPR05	136.000	136.000	
KFPR06	136.000	88.039	0.353	KFPR06	136.000	136.000	
PCRP01	136.000	72.720	0.465	PCRP01	136.000	134.232	0.013
PCRP02	136.000	80.847	0.406	PCRP02	136.000	134.823	0.010
PCRP03	136.000	55.678	0.581	PCRP03	136.000	130.227	0.042
PCRP04	136.000	65.461	0.519	PCRP04	136.000	132.612	0.025
PCRP05	136.000	53.450	0.607	PCRP05	136.000	132.232	0.028
PT04	136.000	128.234	0.057	PT04	136.000	136.000	
PT05	136.000	127.545	0.062	PT05	136.000	136.000	
RPB01	136.000	93.098	0.315	RPB01	136.000	128.130	0.058
RPB02	136.000	82.034	0.397	RPB02	136.000	118.809	0.141
RPB03	136.000	96.822	0.290	RPB03	136.000	118.821	0.128
RPB04	136.000	89.290	0.343	RPB04	136.000	117.273	0.138
SN01	136.000	61.012	0.551	SN01	136.000	125.992	0.074
SN02	136.000	48.718	0.642	SN02	136.000	124.811	0.082
SN03	136.000	74.984	0.449	SN03	136.000	123.687	0.091

Appendix H

Path Coefficient Chart of the Public-Sector Model



Appendix I

The Output of the Measurement Model (Private-Sector Model)

Column1	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	R Square
Attitude Towards Retirement Planning	0.835	0.836	0.901	0.751	0.102
Knowledge of Financial Planning for Retirement	0.851	0.862	0.89	0.574	
Perceived Control Over Retirement Planning	0.889	0.939	0.916	0.687	0.06
Personality Trait	0.538	0.79	0.789	0.659	
Retirement Planning Behavior	0.884	0.889	0.92	0.743	0.236
Subjective Norm	0.833	0.834	0.9	0.751	0.112

Appendix J

The Blindfolded Output of the Private-Sector Model

Construct Crossvalidated Commnality				Construct Crossvalidated Redundancy			
	SSO	SSE	Q² (=1-SSE/SSO)		SSO	SSE	Q² (=1-SSE/SSO)
Attitude	414.000	214.890	0.481	Attitude	414.000	385.227	0.070
Knowledge of financial Planning	690.000	409.125	0.407	Knowledge of financial Planning	690.000	690.000	
Perceived Control	690.000	333.965	0.516	Perceived Control	690.000	675.372	0.021
Personality Trait	276.000	243.739	0.117	Personality Trait	276.000	276.000	
Retirement Planning	552.000	267.774	0.515	Retirement Planning	552.000	480.044	0.130
Subjective Norm	414.000	227.380	0.451	Subjective Norm	414.000	400.430	0.033
Indicator Crossvalidated Commnality				Indicator Crossvalidated Redundancy			
	SSO	SSE	Q² (=1-SSE/SSO)		SSO	SSE	Q² (=1-SSE/SSO)
ATRP02	138.000	79.424	0.424	ATRP02	138.000	126.611	0.083
ATRP03	138.000	69.356	0.497	ATRP03	138.000	129.276	0.063
ATRP04	138.000	66.110	0.521	ATRP04	138.000	129.340	0.063
KFPR01	138.000	85.907	0.377	KFPR01	138.000	138.000	
KFPR03	138.000	101.145	0.267	KFPR03	138.000	138.000	
KFPR04	138.000	70.743	0.487	KFPR04	138.000	138.000	
KFPR05	138.000	71.885	0.479	KFPR05	138.000	138.000	
KFPR06	138.000	79.445	0.424	KFPR06	138.000	138.000	
PCRP01	138.000	78.513	0.431	PCRP01	138.000	134.714	0.024
PCRP02	138.000	63.385	0.541	PCRP02	138.000	136.655	0.010
PCRP03	138.000	54.885	0.602	PCRP03	138.000	135.365	0.019
PCRP04	138.000	74.956	0.457	PCRP04	138.000	132.207	0.042
PCRP05	138.000	62.227	0.549	PCRP05	138.000	136.430	0.011
PT04	138.000	123.053	0.108	PT04	138.000	138.000	
PT05	138.000	120.686	0.125	PT05	138.000	138.000	
RPB01	138.000	65.159	0.528	RPB01	138.000	122.376	0.113
RPB02	138.000	51.855	0.624	RPB02	138.000	115.473	0.163
RPB03	138.000	71.429	0.482	RPB03	138.000	123.631	0.103
RPB04	138.000	79.331	0.425	RPB04	138.000	118.364	0.142
SN01	138.000	71.416	0.482	SN01	138.000	133.273	0.034
SN02	138.000	66.312	0.505	SN02	138.000	136.003	0.014
SN03	138.000	87.652	0.365	SN03	138.000	131.154	0.050

Appendix K

Path Coefficient Chart of the Private-Sector Model

