CONSUMER INDEBTEDNESS OF PUBLIC SERVANTS IN SOUTH AFRICA: EVIDENCE FROM THE DEPARTMENT OF HEALTH IN THE NORTH WEST PROVINCE

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Abstract

The primary objective of this study was to determine the consumer debt level of public servants in the Department of Health in the North West Province, South Africa. The results of the study indicate that most public servants rely almost entirely on the public service remuneration to survive and for debt repayment. The results of the survey also indicate that 96% of public servants in the Department of Health in the North West Province are over-indebted. The respondents also perceived their income to be insufficient and thus resort to credit to maintain their required standard of living. The results also indicate that 63% of the respondents have a debt-income ratio above 20%. The reason for falling into debt is mostly due to lack of funds and insufficient income. The most common types of consumer debt found among the respondents included store cards (26%), followed by personal debt from banks (18%), while vehicle loan debt (37%) consumed the highest rand value of total debt among respondents. Personal loans from banks (21%) comprised the second highest debt value incurred by the respondents. It could be argued therefore that most public servants are over-indebted and could be trapped in a debt cycle if no additional income is provided or if they do not embark on some kind of personal financial management education.

Keywords: South Africa, Consumer Indebtedness, Public Servants

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1. Introduction

Since the first democratic elections in South Africa in 1994 there has been an increase in the ability of a larger proportion of South Africans to access credit facilities (Núñez and De Wet, 2008). Overall, the growth in credit consumption has exceeded growth in income, leading to an increase in household debt (Hurwitz and Luiz, 2007). Consumer spending has also been largely fuelled by consumer credit, leading to, in some instances high levels of indebtedness (Mlandu, 2007). In the quarterly bulletin released in December 2012, the South African Reserve Bank indicated that household debt has been declining from the all time high of 82% registered in 2008 but was still high - above 76%. The report further indicated that consumer credit accounted for roughly 35% of aggregate household debt in 2009.

Despite the introduction of the National Credit Act of 2006, reports have shown that consumer indebtedness is still very high. The Credit Bureau Monitor report of the National Credit Regulator (NCR, 2010) showed that in the fourth quarter of the year, 47% of the 19 million credit-active consumers in South Africa had impaired credit records. The report further indicated that for every R100.00 a household earns, R78.50 goes towards servicing debts. The South African Reserve Bank Quarterly Bulletin (2010) revealed that household debt has been decreasing since 2008 but was still high at 77.6%. The Reserve Bank Quarterly Bulletin (2010) also indicated that consumer credit accounts for roughly 35% of the aggregate household debt in South Africa.

The consumer National Credit Regulator (2011) has revealed that the total outstanding gross debtors' book of consumer credit for the quarter ending March 2011 was R1.21 trillion and that the number of accounts increased marginally from R35.05 million to R35.24 million during the same period. The report also indicated that credit facilities, which mainly consist of credit cards, store cards and bank overdrafts, have increased from R10.25 billion to R10.43 billion in 2011. This is a clear indication that consumer debt in South Africa is very high. The National Credit Regulator (NCR, 2012) also indicated a rise in credit usage where the number of credit agreements entered into for the quarter ending December 2012 increased by 18.52%.

High consumer debt levels are not unique to South African consumers, but affect consumers all over the world. The financial systems of the 21st century have been growing with speed, sophistication and becoming more complex through the world (Nyamute and Maina, 2011:2). The financial and social environment within which people make financial decisions is constantly changing given the dynamics and ever improving technology. Financial products and services have multiplied along with technological and other means of marketing (Greenspan, 2005). This necessitates the need for a consumer to keep up with these changes so as to manage their assets accordingly.

The global financial crisis has highlighted the extent of household and consumer debt and its effect on all parts of the community in achieving a good standard of living and quality of life (Von Normann and Reinhart-Maack, 2012). Most studies indicate that household debt is high and has been increasing worldwide (Opinion Research Corporation Macro, 2001). The Reserve Bank of Australia noted an upward drift in the maximum permissible debt servicing ratio of 50% of gross income (Griffiths, 2007). In Sweden, the aggregate household indebtedness was reported to be slightly over 70% of GDP (Persson, 2008). According to Bird, Hagstrom and Wild (1999), the growth of credit card debt in the United States (US)has been mostly high among households who live below the World Bank poverty line of $1.00 per day. However, it has also been pointed out that rising indebtedness has had an adverse effect on households by increasing the number of household bankruptcies, which reveals that the number of non-business bankruptcies in the US increased from about 300 000 in 1985 to an all-time high of 1.35 million in 2001, according the data from the US Courts. This increase has far outstripped the growth in population (Dutt, 2003).

Most studies (Akhaabi, 2010; Hurwitz and Luiz, 2007; Mlandu, 2005; Worthington, 2006) have shown that debt has become an integral part of everyday life. Today there are very few goods or services that cannot be bought on credit terms or retailers who do not cater for credit facilities (Finlay, 2009). Towards the end of the 2000s, the American public had a combined personal debt of more than $2.5 trillion, mainly in the form of credit cards, personal loans and hire-purchase agreements (Federal Reserve Board 2008 in Finlay, 2009). The Australians have also reported some uneasiness about the growth in household debt. From December 1992 to December 2002, the ratio of total household debt to income rose from a level that was relatively low at 56% to 125% – a level that is in the upper range for comparable economies (Worthington, 2006). This represents an average annual growth rate of 13.9% over the decade and 14.7% over the past five years. The credit card debt to income ratio in Australia grew by 17.4% over the decade and 20.9% over the past five years

(Worthington, 2006). A study conducted by Duasa (2008) in Malaysia found that almost 70% of government servants spent up to 79% of their income on debt, while 4.5% of government servants spent more than 100% of their income on debt. In Thailand, 84.1% of all civil servants in 2010 were indebted compared to 81.6% in 2006 (The Nation, 2010).

The rationale for investigating consumer indebtedness of public servants in South Africa stems from the fact that the majority of employees are employed in the public sector. Public servants are viewed as generally having more job security than their private counterparts (Public Service Commission, 2007). Due to their high job security, civil servants are usually eligible for taking personal loans, credit cards and other forms of credit and are thus subject to incurring debt (Public Service Commission, 2007). Credit providers often target civil servants because they are viewed as being in a position to service their debts based on their job security. According to the Public Service Commission report (2007) on the indebtedness of public servants in South Africa, public servant debt amounted to R13.3 million during the 2006/2007 financial year. Of this amount R3.3 million (25%) is attributed to employees based in the national departments, while the balance of R10 million (75%) is attributed to micro-lending debt of public servants based in provincial departments. The report further states that during the period 2006/2007 there were 216 857 public servants who made garnishee-related payments (emolument attachment order) through the PERSAL system. This constitutes 20% of the total population of the public service. The high level of consumer debt among public servants prompted the national treasury to tighten lending regulations and abolish garnishee orders (Steyn, 2013).

The main objective of this study is to determine the state of consumer debt of public servants in South Africa with special focus on public servants employed in the Department of Health in the North West Province. The reason for focusing on the North West is that it is the province with the lowest level of indebtedness (39%) as compared to the other provinces in South Africa with the highest level of indebtedness in the Western Cape (97%) (Daniels, 2001). The fourth quarter report of the National Credit Regulator (2011) also categorises North West as the province with the third lowest debt levels after the Northern Cape and Limpopo. Statistics SA (2004) indicated that the North West Province comprises 6.9% of the country's formal employment opportunities, and 7.7% of the country's informal employment opportunities, which might be linked to the low levels of indebtedness. Ardington et al. (2004) and Daniels (2001) found that poor households had low levels of indebtedness, which could perhaps be partly explained by a lack of access to financial instruments in the formal banking sector, corroborated by low levels of collateral among the poor.

The annual report of the North West Department of Health (NWDoH, 2010/11) reported that the estimated cost for the sick leave taken by the employees for the 2010/11 financial year was R 53 867 232.19 and that the average number of sick leave days per employee for the year was eight days. The annual report also indicated that the most prevalent types of misconduct cases in the North West Department of Health were fraud, gross negligence, gross absenteeism, theft and abscondment. The literature explicitly associates these types of misconduct cases with consumer indebtedness (Garman, Leech and Grable, 1996). This negative effect of being indebted is further discussed by Garman et al., (1996) who argue that poor financial behaviour could result in extremely high costs being incurred by employers, which include absenteeism, tardiness, fighting with co-workers and supervisors, job stress and reduced employee productivity. The current study seeks to add knowledge to the existing literature based on studies conducted by Mashigo (2006), the Public Service Commission (2007) and Nyaruwata and Leibbrandt (2009). The remainder of this paper is structured as follows: Firstly, a literature study presents the theoretical foundation of the study related to consumer debt. Secondly, the sample, variables and methodology employed are outlined. Thirdly, the analysis is carried out, and lastly the results of the analysis and the recommendations are outlined.

2. Literature review

2.1 Classification of consumer debt

The literature examines household debt portfolios according to the type of credit incurred. The two major components of household sector debt are customarily classified into household credit and mortgage advances (South African Reserve Bank, 2010). Household or consumer credit is, in turn, subdivided into open accounts, personal loans at banks, other personal loans, credit card facilities, instalment sale transactions and lease agreements (Prinsloo, 2002). Nyaruwata and Leibbrandt (2009), on the other hand, categorise consumer debt into personal loans from banks, personal loans from micro-lenders, loan sharks (commonly known as mashonisa in South Africa), study loans from banks, study loans from academic institutions, loans from friends and family members, car finance, credit cards, store cards, and hire purchase (see also Finlay, 2009). Núñez et al. (2008) contend that the most common sources of loans to households in South Africa are formal sources such as the banks. The number of credit accounts however indicates a different picture. The National Credit Regulator examined the number of accounts issued by credit providers. Figure 1 below indicates the number of accounts per classification.
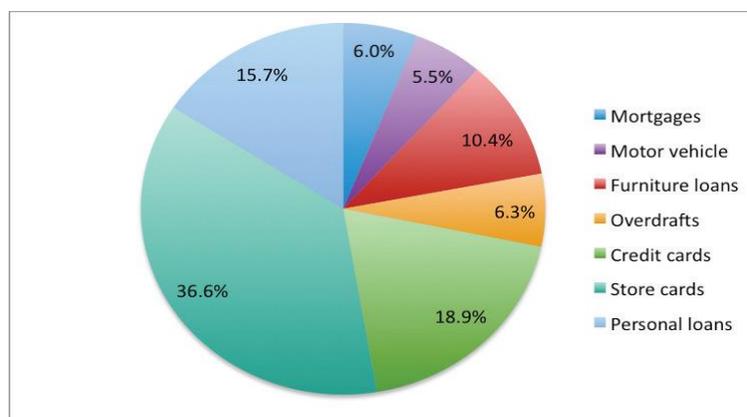
Figure 1. Number of accounts (as a percentage of the total)
Source: National Credit Regulator (2009)

Figure 1 above indicates that the majority of consumers (36.6%) use store cards as a method of payment. Although mortgage (6.0%) and motor vehicle debt (5.5%) are by far the biggest contributors in terms of value to household debt, few consumers have access to those types of credit.

2.2 Measuring consumer debt

There are various methods used to measure consumer debt. These measures are usually calculated as a ratio comparing the amount of consumer debt with the consumer's ability to repay (i.e. household income or

assets). The most commonly used measures of ability to repay are disposable income, which is the after-tax spendable income (Garner, 1996). The measures of consumer debt can be classified into the following three general models of consumer indebtedness (Opinion Research Corporation, 2001)

2.2.1 The administrative model

This method examines all cases where non-payment of debts have been registered officially or declared before a court. Raijas, Lehtinen, and Leskinen (2010) contend that payment default of a consumer's credit

debt is the first public sign for creditors that the debtor has financial difficulties. It is regarded as a very important signal of the consumer's inability to repay a loan. Analysts sometimes look at more direct measures of household financial distress, such as delinquency rates or the number of personal bankruptcies (Greninger, Hampton, Kitt and Achacoso, 1996). The national credit regulator has been using this method to measure the consumer credit default rate.

2.2.2 The subjective model

In this model a consumer is asked a critical question to indicate whether they are coping with the payment of their debts (Raijas et al., 2010). This method was used by the Euro-Barometer survey (Raijas et al., 2010, citing the European Commission (EC), 2008) to measure the level of over-indebtedness across all European Union (EU) member states. Hurwitz and Luiz (2007) and Statistics South Africa (2008) also used the same method to measure consumer indebtedness. The weakness with the subjective model of measuring consumer indebtedness is that consumers might not be aware that they are on the verge of being indebted or already over-indebted and that the researcher has to rely on the response provided.

2.2.3 The objective (or quantitative) model

The objective or quantitative measure of consumer indebtedness is the most commonly used model. This method captures the net indebtedness or the debt service burden of households (e.g. debt-to-assets or debt-to-income ratio) and then establishes threshold levels of the ratios that are regarded as abnormally high, putting consumers in danger of becoming over-indebted. The debt–income ratio can be measured using outstanding debt or current monthly debt service payments (Hyounjin Yi, 2010).

Greninger et al. (1996) used this model to measure non-mortgage debt payments against after-tax income, which indicates a danger point when the ratio is above 20% of total debt payments to after-tax income. Zhao (2003) used the debt repayment to income after-tax ratio to gauge household debt status also using a threshold of 20% to indicate over-indebtedness, while Jacobs and Smit (2010) used debt repayments in excess of the accepted level of 30% of gross monthly income. The Micro Finance Regulatory Council of South Africa (MFRC) identifies clients as over-indebted if they are using a loan to pay off other loans or if they are allocating more than 25% of their gross monthly income or 50% of the net monthly income to loan repayment (Núñez et al., 2008). Other studies such as Nyaruwata and Leibbrandt (2009) have used both the outstanding debt and monthly repayment to measure the level of consumer indebtedness. The current study thus focused on the monthly payment rather than the outstanding debt to determine the consumer debt level among public servants.

2.3 Variables used to measure consumer over-indebtedness

2.3.1 Consumer debt and demographic variables

Various studies have examined the relation between consumer debt and demographic variables. The most common demographic variables used in most studies are age, gender, marital status, educational level and number of family members (Lea, Webley and Walker, 1995). The following demographic variables were used in this study:

2.3.2 Age and consumer debt

Consumer debt is the typical humped shape implied by the simple life-cycle hypothesis: debt increases among younger age groups, peaks at middle age and then tapers off among older age groups (Jiang, 2007). This theory is supported by the Public Service Commission (2007) findings as indicated in Figure 2 below:
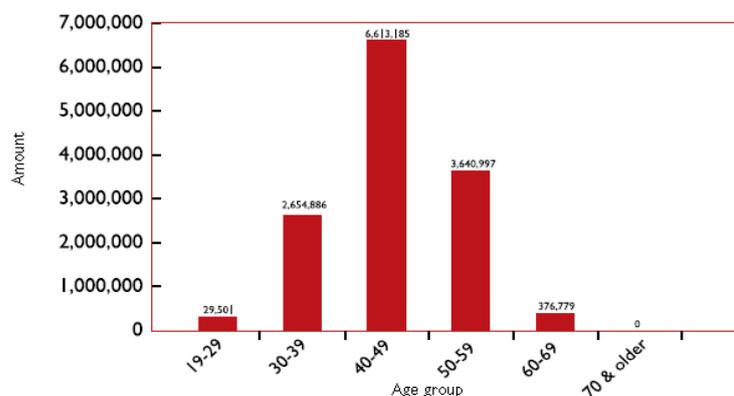
Figure 2. Amounts paid to micro-lenders during the 2006/2007 financial year according to age group
Source: Adapted from Public Service Commission (2007)

Figure 2 show that employees in the age groups 40–49 and 50–59 paid the highest amounts to micro-lenders during the 2006/2007 financial year. This could imply that middle-aged consumers are highly indebted as compared to other groups. This is in spite of the life-cycle hypothesis according to which younger families are more likely to be in debt than older families (Curtis, 1962; Livingstone and Lunt, 1992; Van der Walt and Prinsloo, 1995). This is in line with Jiang's research (2007), who has found as older households do not necessarily have a large income after retirement, they usually rely on their savings/wealth accumulated over time and are therefore less likely to borrow large amounts. Younger borrowers will more likely be short-term borrowers and consumption-oriented, while older consumers would be slightly more inclined to use credit for purposes that may improve income-generation opportunities, such as education, or to buy an asset (Hurwitz and Luiz, 2007).

Interestingly, the study by Parker and Chatterjee (2009) compared consumer susceptibility between consumers in the US and Singapore, and found that for consumers in Singapore, credit susceptibility increases with age while in the US, younger consumers are more prone to credit use. The contrasting findings reported by different studies make it difficult to come to a conclusion, but the life-cycle hypothesis makes sense as some debt incurred by the middle-aged is related to taking care of the children.

2.3.3 Gender

Women tend to be more risk-averse when making financial decisions while men are more likely to handle their finances aggressively (Prince, 1993). In this respect, an interesting result comes from a qualitative study by Thorne (2010) where it was found that married women play the main part in handling financial affairs when the household's debt situation becomes severe, while their husbands tend to be irresponsible or reluctant. However, Thorne's findings were based on 19 interviews only. More caution and a higher sense of responsibility in women when dealing with household finances and debt is reflected by higher debt burdens of men compared to women (Keese, 2012; Lea et al., 1995).

Erasmus and Lebani (2008) indicated that women are likely to own more store cards than men. This confirms the findings of a UK study (Portrait Report, 2004) where it was reported that women will more likely own store cards while men mostly use bank credit cards. Contrary to other studies, Jacobs and Smit (2010) and Ardington et al. (2004) argue that men tend to have higher levels of indebtedness than women. This is supported by Daniels (2001) who contends that male-headed households are at least twice as indebted as female-headed households. The Public Service Commission (2007) indicated that 53%

of public servants who make payments to micro-lenders through the PERSAL system are men, while 47% are women.

2.3.4 Education and consumer debt

Highly educated consumers are likely to have more debt than less educated consumers. This is supported by Curtis (1962) who asserts that advanced education means more familiarity with the advantages of credit, increases in the appetite for material and nonmaterial goods, and improves the chances of being granted a loan. Consumers with higher education levels are more deeply indebted due to income differences driving greater access to credit (Hurwitz and Luiz, 2007). On the other hand, other studies contend that highly educated consumers have low consumer debt. Education has a positive influence on financial literacy, thus the ability to manage debt (Keese, 2012). Consumers with college or university degrees could be more knowledgeable about money management and more cautious about the appropriateness of their debt position (Jiang, 2007).

Educated consumers are better informed about the credit conditions and this could reduce the risk of facing over-indebtedness. In addition, less literate households use higher cost credit lines disproportionately, have higher debt–payments ratios to given levels of debt and have higher arrears (Disney and Gathergood, 2011). On the other hand, the debt and education level relationship may not appear to be strictly linear. That is, the highly educated group may not necessarily have a lower debt burden than the intermediately educated (Jiang, 2007). Contrary to other reports, Livingstone and Lunt (1992) have found no positive relation between personal debt and level of education. Households headed by someone with a post-school qualification or professional degree are in a similar debt burden position as households headed by someone with or without a high school qualification, everything else being constant (Zhao, 2003).

2.3.5 Income and consumer debt

Consumer indebtedness increases as income increases (Daniel, 2001). It is assumed that an increase in income will result in an increase in credit access (Jacobs and Smit, 2010). Higher-income consumers have access to "big ticket" items such as vehicle finance, and so their total outstanding debt forms a higher proportion of their annual income than low-income consumers who emerge as typically indebted to around 10 to 15% of their annual income (Hurwitz and Luis, 2007). Zhao (2003) argues that households with steady and affluent incomes are perceived as less risky borrowers and they are more likely to be granted the full amount of loan while low-income households may not be granted large loans and hence they have less debt. Daniels (2001) argues that the lower levels

of debt among lower-income groups could partly be explained by the lack of access to financial instruments in the formal banking sector.

However, Keese (2012) argues that higher-income households have low debt levels. Debtors are more likely to be in low-income groups than in higher-income groups (Lea et al., 1995). This was confirmed by the Human Sciences Research Council (2003), which indicated that debt levels were rising faster in the lower-income categories than in the higher ones (Jacobs and Smith, 2010). Credit card debt and non-bank debt such as store cards are still the most common forms of debt found among low-income households (Barba and Pivetti, 2009). Lack of access to formal financial services by poor households makes them look for alternative sources of finance and they heavily depend on their local, informal moneylenders who are regarded as responsive to their financial needs (Mashigo, 2006).

The increases in consumer debt provide consumers, especially poor ones, with a safety net which allows them to keep up their spending when their income falls (Bird et al., 1999). In some instances, low-income consumers' borrowing may be the only way of covering essential living expenses when, for example, a washing machine breaks, a child falls ill or the rent needs to be paid (Autio et al., 2009). Furthermore, high-income consumers generally have low emolument (garnishee) attachment orders. This is supported by the University of Pretoria Law Clinic (2008), which found that the percentage of employees attached through emolument orders generally decreases as income increases.

Several studies have found that middle-income consumers are more hard-hit by consumer debt than any other income group. This is supported by Scott and Pressman (2011) who assert that many middle-class households rely on consumer credit, such as credit cards and motor vehicle loans, to maintain their standard of living. Their income cannot meet the desired standard of living and hence they resort to credit. The Public Service Commission report (2007) supports this view and has reported that in 2007 there were more middle-income public servants who paid micro-lenders through the PERSAL system than any other group in the public service. Livingstone and Lunt (1992) could however not establish whether higher income was seen to result in increased borrowing as consumers in debt did not differ in the amount of disposable income from those not in debt. The report released by Statistics SA (2012) on the number of civil summonses for debt outstanding to credit providers reflects no difference in consumers' income level.

3. Research design, data collection and research methodology

The study used a descriptive quantitative survey research method. It quantified the amount of money spend by respondents in servicing debt, which determined the level of debt of the respondents. The population of the study consisted of all the public servants employed by the department of health in the North West province. There were 423 employees registered on the PERSAL system of the provincial health department employees (PERSAL system: October 2011). The employees on the payroll consisted of 31 senior managers, 68 middle managers, 219 technical or professional employees and 105 lower-level employees. The study used a non-probability quota sampling method to ensure that the sample would cover all the categories of employees in the provincial office. The sample size of 212 employees consisted of 15 senior managers, 34 middle managers, 110 professional employees and 53 lower-level employees.

Data was collected through a self-administrated anonymous questionnaire. The questionnaire was submitted to the offices of the sampled population as they were in one specified building. The office number was used to follow up on the submission of the questionnaire. The participants were requested to respond within a specified period and return the completed questionnaire by placing it in a sealed box. This was done to promote honesty in their responses as the researcher was not able to link the completed questionnaire to any individual. By promoting honesty in completing the questionnaire it was hoped that this would increase accuracy and reliability of the data collected. Data on garnishee orders was collected through the PERSAL system.

4. Analysis and interpretation of the results

4.2 Demographic information

Data was analysed by making use of the Statistical Programme for Social Sciences (SPSS), version 14.0.

The demographic profile was based on the descriptive statistics derived from the survey. The majority ofrespon dents who participated in the study were women (93), i.e. 66.9% of the sample, while 46 (33.1%) were men. This is in line with the population of the study which has a gender profile of 284 women and 185 men (PERSAL, 2012). The majority of respondents were between the age of 26 and 30 years and made up 32% of the sample, followed by the age group 31 to 35 years, and 41 to 45 years making up 25% of the sample. Only 6.5% of the participants were 25 years old or younger. The majority (82%) of respondents had at least a tertiary qualification ranging from a diploma (49 participants or 35%), undergraduate degree 3 (22%), post-graduate degree 22 (16%), master's degree 11 (8%) and PhD 2 (1.4%).

4.3 Personal income

The study population comprised the permanently employed public servants working at the provincial

office of the North West department of health. Thus all the respondents had a monthly income in the form of remuneration for the service they provide on behalf of the department of health. Table 1 below indicates the income per salary level. The majority of respondents (39%) were at salary levels 6 to 8, while salary level 13 and above had the smallest percentage

of respondents (6.5%). Level 5 and below had the second-highest percentage (29%) of respondents in the survey. Table 1 also indicates that the majority of the public servants working for the provincial office were at level 6 to 8, while senior managers who were at level 13 and above made out the lowest number of the population (6.5%).

Table 1. Classification of respondents per income

	Frequency	Percentage	Cumulative percentage
Level 5 and below	40	28.8	28.8
Level 6–8	54	38.8	67.6
Level 9–12	36	25.9	93.5
Level 13 and above	9	6.5	100.0
Total	139	100.0	

The study assumed that the monthly income determines consumer spending patterns as shown by Statistics South Africa (2008). The respondents' income variable was divided into five categories as shown in Table 2 below. The majority of respondents (40%) earned an after-tax monthly income of between R5 000 and R10 000, while surprisingly nine respondents (6.5%) earned between R15 000 and R20 000. The reason behind the low number of

respondents in this category was unclear as the majority of employees within the provincial office ranged between salary level 6 and 12, which included employees earning below R20 000. The group of respondents earning between R10 000 and R15 000 was the second highest at 28%. This suggests that the majority of respondents in the study were in the middle-income group of the public service.

Table 2. Classification of respondents per monthly remuneration

After-tax monthly income	Frequency	Per cent	Cumulative percentage
Less than R5 000	17	12.2	12.2
R5 001–R10 000	56	40.3	52.5
R10 001–R15 000	39	28.1	80.6
R15 001–R20 000	9	6.5	87.1
Above R20 000	18	12.9	100.0
Total	139	100.0	

The respondents were not required to disclose their exact income but had to indicate into which category they fell. This was done to promote honesty and increase the response rate as personal income is regarded as a personal matter. In order to determine the after-tax monthly income in the study, a median of each income level category was determined (see Table 3 below). In this case, the median for those earning less than R5 000 was taken as R3 500, which was used to measure income for this variable. The

median income was then multiplied by the number of respondents in each category to determine the total after-tax monthly income for that category. As shown in Table 3, the total after-tax monthly income for respondents falling into the category R5 001 to R10 000 was R420 000. The total monthly income for each category was then added up to determine the grand total for the after-tax monthly income of the respondents, which was R1 574 500. This represented the total income of the respondents.

Table 3. Total after-tax monthly income from public service

After-tax monthly income categories	Frequency	Average income per category	Total after-tax monthly income per category
Below R5 000	17	R3 500.00	R59 500.00
R5 001–R10 000	56	R7 500.00	R420 000.00
R10 001–R15 000	39	R12 500.00	R487 500.00
R15 001–R20 000	9	R17 500.00	R157 500.00
Above R20 000	18	R25 000.00	R450 000.00
Total	139		R1 574 500.00

Table 3 indicates that the highest total for after-tax monthly income was recorded by respondents

earning an income between R10 001 to R15 000. The reason behind this high value was that 28% of

respondents fell into this category. This is in line with the findings of the Public Service Commission (2007), which indicated that public servants on salary levels 6 to 8 pay the highest amount to micro-lenders. The second-highest was the income level above R20 000. This was the highest-income respondent who thus heavily influenced the total income of the category. The respondents earning below R5 000 contributed the least value of after-tax monthly income. In addition to their monthly remuneration from the public service, employees sometimes earned income from sources outside the public service. Ten (7%) out of the 139 respondents indicated that they earned income outside their public service remuneration.

The highest after-tax monthly income from other sources was R15 000 while the lowest was R400. A total amount of R45 900 was earned by the respondents from sources other than the public service. The majority of the respondents (50%) mentioned business as their source of income, while the sources of income for the other respondents ranged from maintenance, spouse support to investment. Two respondents did not indicate their sources of income. Four of the five respondents earned an income above R20 000 from the public service while no respondents earning less than R5 000 had an income from outside the public service.

4.4 Information on consumer debt

It should be noted that data was collected in November 2012. This therefore implies that the last month of payment which was used in this study was October 2012. October 2012 was therefore used interchangeably with monthly debt payment as the questionnaire indicates "last month debt payment". This was done in order to relate the analysis of the study with what the questionnaire reflected.

The respondents were asked whether they paid debt obligations every month and five (4%) respondents indicated that they did not pay monthly instalments to service debt, while 134 (96%) respondents indicated that they serviced debt monthly. This suggests that the majority of respondents were in debt (96%). The South African Reserve Bank (2002) defines debt as an obligation or liability arising from borrowing money or taking goods or services "on credit", i.e. against an obligation to pay later.

Although five respondents (4%) indicated that they were debt-free, an analysis of monthly payments indicated that eight respondents (6%) did not disclose their monthly debt repayment. This suggests that three respondents (2%) did not pay their debt obligations monthly as per arrangement, and therefore they did not have the means to meet their monthly obligations. Only female respondents were among the eight who indicated not paying monthly debt obligations. Five of the eight were earning between R10 001 and R15 000,

while three were earning between R5 001 and R10 000.

Similarly, ten respondents (7%) did not disclose their outstanding debt during the period of the survey. This could mean that they either chose not to disclose or they were completing their debt repayment instalment. The analysis therefore indicated that there were two additional respondents in addition to five who indicated that they were debt-free and four who did not disclose the monthly debt repayment, totalling ten respondents. The non-disclosure of some respondents was taken into consideration during the data analysis.

With 134 respondents (96%) indicating to be indebted, the analysis focused on the reasons why respondents incurred debt, and diverse reasons were disclosed. Of the 134 respondents, only 86 (62%) provided reasons for incurring debt, while 48 (34%) did not disclose their reasons. The question was not applicable to five respondents who indicated from the onset that they did not have debt. Reasons with similarities were grouped together and interpreted accordingly. Figure 3 reveals that the majority of respondents (24%) took on debt because they did not have sufficient funds. Sufficient funds in this case meant money at their disposal to use when buying necessities. This was followed by insufficient income (16%), which described the monthly income the respondents receive for their services or employment. Vehicle loans was the third reason (11%) why respondents incurred debt. Home loans (5%), municipal services (5%) and education (5%) were the least reasons why respondents incurred debt. Some of the reasons given by respondent for incurring debt were: to build a credit record, pay for funeral arrangements, benefit in shops, no savings, family responsibilities and monthly expenditure. These reasons were grouped as "other" because they were mentioned once by different respondents.

The results contradicted the findings by Hurwitz and Luiz (2007) and Núñez et al. (2008) who have argued that the reasons for borrowing among the urban working class in South Africa are mainly for house renovations and funeral arrangements. In the current study, these reasons were only mentioned once by the respondents.

In examining the common types of debt which the respondents were exposed to, store cards were the most common types of consumer debt among respondents. In other words, in measuring the proportion of each type of debt from 12 types reflected in the questionnaire, store cards were the most common types of consumer debt at 26%. This was followed by personal loans from the bank in the case of 18% of the respondents. Loans from family members and from mashonisa (1%) made up the least consumer debts that were reported by the respondents. This is illustrated in Figure 4 below. The category "other" as a type of debt in Figure 4 reported 7% and covered debt that was not categorised, like municipal

services and stokvel. The study supported the findings of the National Credit Regulator (2009), which found that the most common type of debt is store cards (35%) followed, by credit cards (18%).
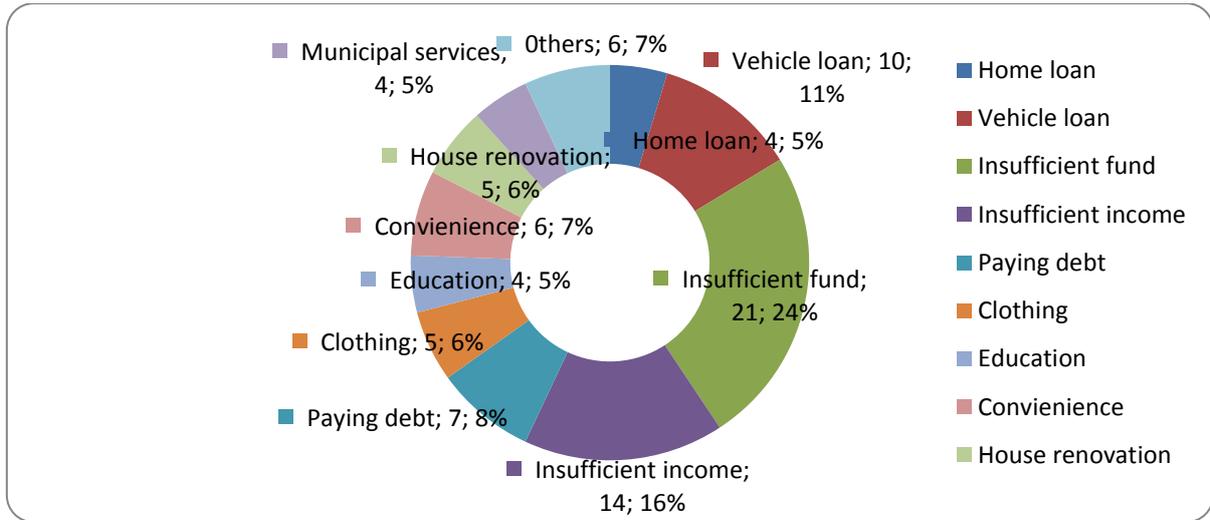
Figure 3. Reasons for incurring debt
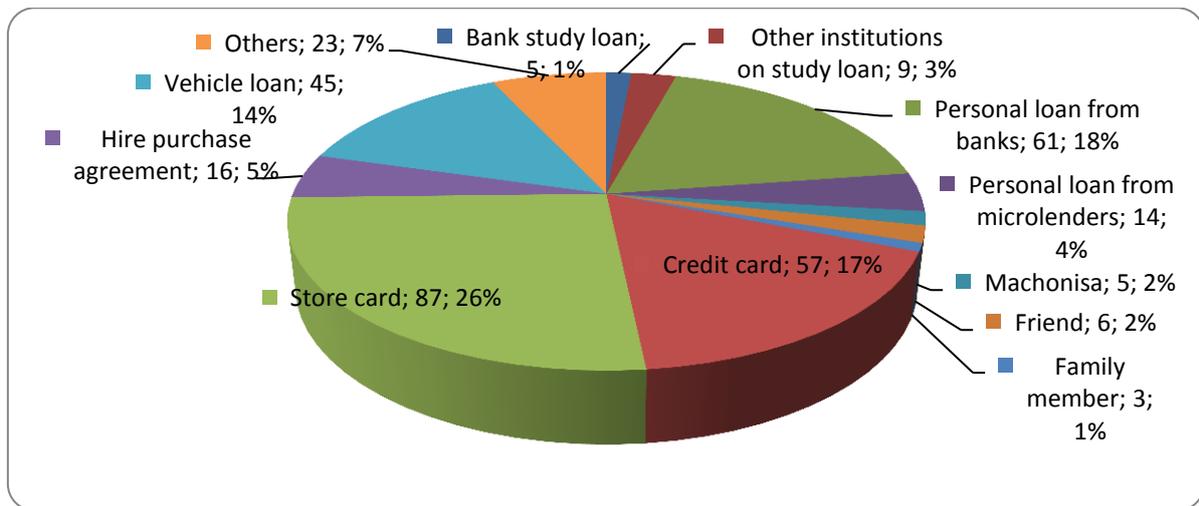
Figure 4. Percentage of types of consumer debt incurred

Figure 4 also shows that vehicle loan debt is the fourth most common type of debt (14%) that was reported by the respondents. Figure 5 below, which indicates the value of monthly consumer debt payment by the respondents, shows that 37% of this value is attributed to vehicle loan debt payment. According to Nyaruwata and Leibbrandt (2009), the monthly payments made by respondents are particularly useful when attempting to determine the propensity of households to default on their debt as the level of debt becomes unsustainable when monthly payments consume a substantive proportion of household monthly income.

Twelve variables were used to measure consumer indebtedness. These are shown in Table 4 which explains Figure 4 more closely by indicating the number of respondents per variable on debt payment in the last month. From the table it can also be seen that most of the respondents paid their store cards first and then their credit cards as part of their monthly debt service. Vehicle loan payment value was the highest, as shown by the mean at R2 344 and the maximum amount paid monthly as R14 000. Payment to family members is shown as the lowest rand mean value paid to service debt at R294. The table also indicates that the standard deviation of vehicle loan payments to the mean is the highest among all debt payment variables at R2 344, while study loan payment from other financial institutions recorded the lowest deviation from the mean at R255. The wide variation of individual respondents' monthly debt payment might have influenced the higher standard deviation on vehicle payment.

Table 4. Descriptive debt payment variables

	N	Mean	Standard deviation	Minimum	Maximum
Payment amount to bank on study loan	5	820.20	325.369	250	1 051
Payment amount to other institutions on study loan	9	637.33	255.092	300	1 000
Payment on personal loan from banks	61	1 767.66	1 256.124	150	7 000
Payment on personal loan from micro-lenders	14	1 965.36	1 479.253	200	6 000
Payment to mashonisa	5	970.00	452.217	400	1 500
Payment to a friend	6	625.00	534.556	50	1 300
Payment to a family member	5	320.00	294.958	0	600
Payment on credit card	57	878.07	934.589	50	4 996
Payment on store card	87	553.08	326.096	100	1 600
Payment on hire purchase agreement	16	801.94	434.436	200	1 500
Payment on vehicle loan	45	4 106.71	2 344.235	1 615	14 000
Payment on others	23	2 243.04	1 764.342	160	5 200

For store card payment, even though it is the most popular debt among respondents, the standard deviation shows that debt payment was similar from one consumer to another. Store cards are popular among low-income earners for buying household necessities such as clothes (Lee and Kwon, 2002). Of the respondents, 64% with a monthly income below R5 000 had a store card debt monthly payment as compared to 33% of respondents with a monthly income above R20 000. For income category R5 001 to R10 000, 71% respondents had a store card compared to 66% for income category R15 001 to R20 000. This clearly supports the literature on higher usage of store cards by lower-income consumers.
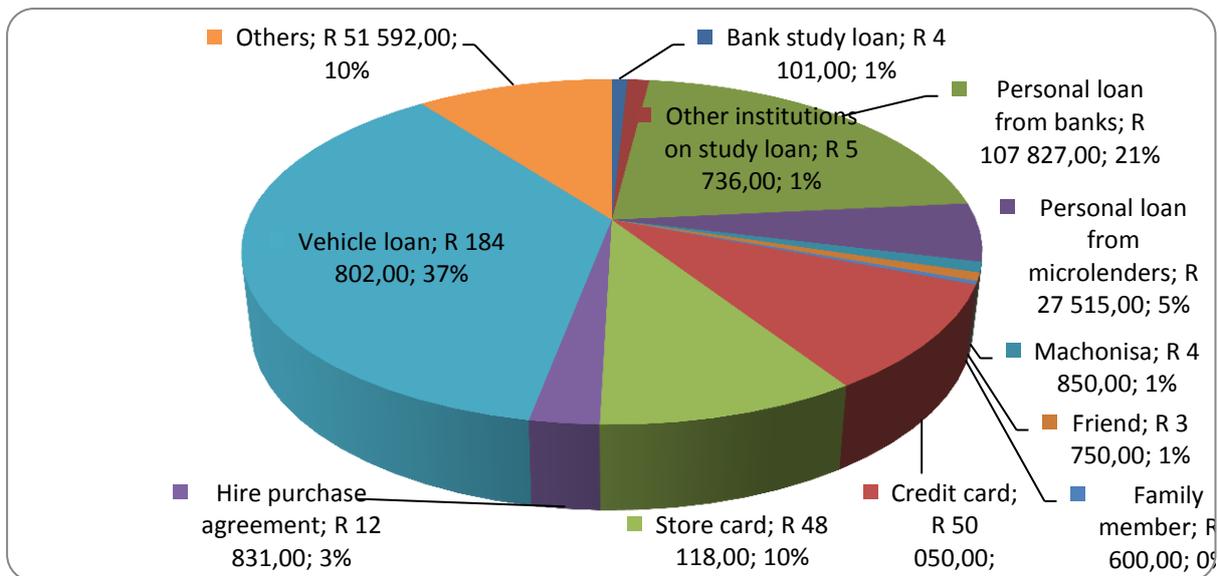
Figure 5. Value of monthly debt payment

The total value of vehicle monthly debt payment was R184 802.00 (37%) involving 45 (32%) of the 139 respondents. This was derived from the sum of all vehicle loan monthly instalments disclosed by 32% of the respondents. None of the respondents earning less than R5 000 per month was paying debt in terms of vehicle loans. Personal loan from bank was the second highest value (21%) paid monthly to service debt at R107 827.00. Personal loan was also the second most common type of debt incurred by the respondents. Credit card repayment at R50 050.00 and store card repayment at R48 118.00 each represented 10% of the value of the respondents' monthly debt payment. When comparing the findings of the current study with those of the National Credit Regulator

(2011), it was found that the motor vehicle financing was the second highest amount paid by consumers on a monthly basis after their mortgage bond repayment. These findings were similar to those in this study except that the study did not include mortgage bond payment.

The total amount paid by the respondents on variable study loans to banks and other financial institutions other than banks was R4 101 and R5 736 respectively. The two variables represent 1% each of the total last month payment by the respondents. Only five respondents made payments to their own bank for study loans while nine made payments to their own study loan from institutions other than banks. The lowest payment was made to family members at R1

600. While in Hurwitz and Luiz's (2007) study almost a third of the sample was indebted beyond 100% of the debt–income ratio, the current study indicates that only six respondents were indebted beyond 100%. These respondents were within the income range R15 001 to R20 000 (one respondent) and five respondents at income level below R5 000. Twenty respondents were indebted beyond 50%. The majority of these respondents were in the low-income categories. This analysis sought to examine the extent of over-indebtedness among the respondents and the burden they carry on a monthly basis which, if not managed well, could lead to stress and other health complications which ultimately may lead a drop in productivity (Keese and Schmitz 2010). Even though some respondents were severely indebted, 52 (37%) respondents were either not indebted or had a debt–income ratio below 20%. This suggests that 37% of the respondents had acceptable levels of debt (including eight debt-free respondents). When the debt level increases beyond 15%, it requires some attention (Greninger et al., 1996). Only six (11%) of the 52 respondents were indebted beyond 15%.

The number of debt commitments a consumer has also indicates their indebtedness. D'Alessio and Iezzi (2012) suggest that if a consumer has four or more credit commitments, it indicates over-indebtedness. The current study showed that 22% of the respondents had four or more monthly debt commitments. Of those who showed an indication of over-indebted, the majority (35%) earned between

R5 001 and R10 000, while very few (6%) earned between R15 001 and R20 000. The number of respondents in the income category R15 001 to R20 000 participating in the current survey were also fewer than in most categories. This seems to suggest that lower-income respondents are more likely to be over-indebted than high-income respondents. As was indicated earlier, eight (5%) of the respondents did not have any debt commitments.

The outstanding value of the consumer debt is the total value the respondents reported to be remaining or owed on their total debt. The total outstanding amount of consumer debt that the respondents in the study indicated amounted to R12 792 683. This was the sum of all the individual respondents' total outstanding debt value reported in the questionnaire. The total outstanding debt on vehicle loans was R6 617 772, which represented 52% of the outstanding debt followed by other debt at R2 725 245 (21%) and personal loans at R1 870 109 (15%). The outstanding debt on loans from a mashonisa (micro-money lender), friend or family members was the lowest at R1 930 000, R155 000 and R600 000 respectively. This trend is similar to the one indicated in Figure 5 above where the last monthly debt repayment to a mashonisa, friend or family member was also the lowest. Figure 6 below indicates the outstanding value of consumer debt as indicated by the respondents.
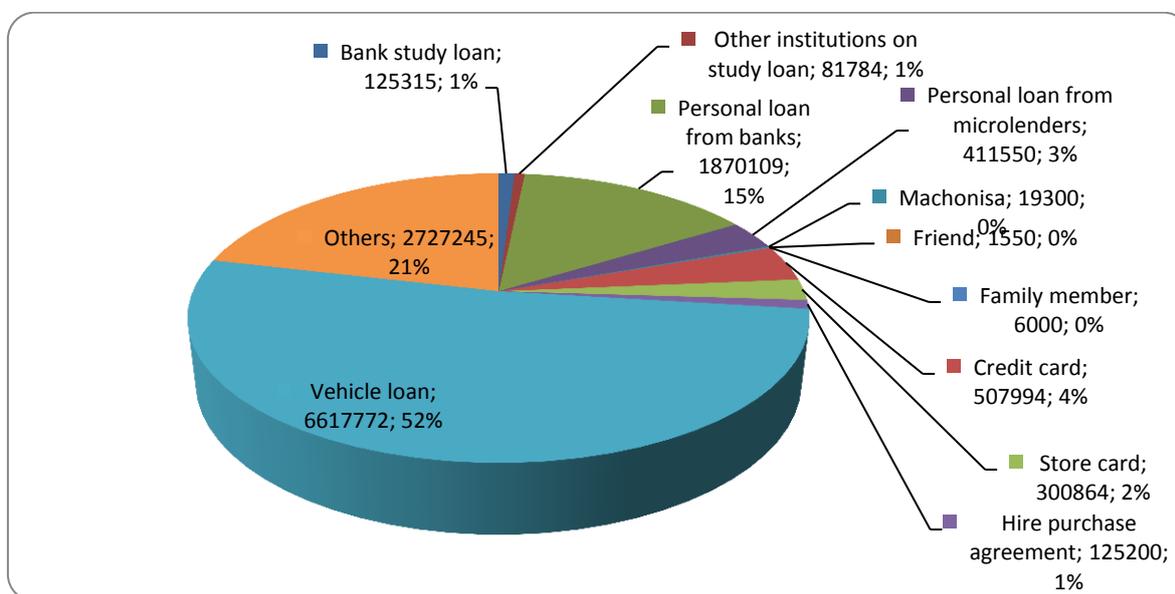
Figure 6. Outstanding value of consumer debt

The analysis reported in Figures 4, 5 and 6 indicates that debt on personal loans featured prominently among the top three variables in all three figures. This indicates the influence of personal loan debt on the total consumer debt of the respondents. The analysis is also true for vehicle financing debt

although it is not that popular; the value of the debt took up the biggest proportion of total consumer debt reported by the respondents. As indicated earlier, the income used in the analysis was the average after-tax monthly income, which was derived from the median of the range indicated on the questionnaire of monthly

after-tax income. The respondents were categorised into income groups as shown in Table 4 and Table 5 below. All the debt payments made in October 2012 were added per income group to get the total sum of all the debt instalments paid during the month. The highest total amount was recorded for the respondents with an income above R20 000, while the lowest was for the income group earning less than R5 000. The figures in the table correspond with the income the respondents indicated.

Table 5. Descriptive data on consumer debt

Variables	Total last month payment on consumer debt	Mean last month consumer debt payment	Median	Std deviation	Average total monthly after-tax salary
Less than R5 000	R40 332	R2 372	R2 100	R1 508	R59 500
R5 001–R10 000	R129 683	R2 446	R2 008	R2 044	R420 000
R10 001–R15 000	R119 985	R3 528	R3 500	R2 349	R487 500
R15 001–R20 000	R69 451	R7 716	R4 601	R7 406	R157 500
Above R20 000	R143 319	R7 962	R8 150	R3 836	R450 000
Total	**R502 770**				**R1 574 500**

Interestingly, as shown in Table 5, the mean of the debt payment shows different results from the total debt payment. The income group earning more than R20 000 reflected the highest monthly debt payment at R143 319 when using the total last monthly payment and the highest mean debt payment. The income group earning R5 001 to R10 000 reflected the second highest total debt payment but the second lowest mean debt payment. This could be attributed to taking out low value debt per individual while respondents earning above R20 000 took out high value debt such as vehicle loans. The income group earning R15 001 to R20 000 reflected the highest standard deviation at R7 406 as compared to the lowest income group earning less than R5 000 at R1 508. This shows that the debt payment for the income group earning R15 001 to R20 000 varies widely from one consumer to another.

The number of respondents and the type of debt incurred in each income group affected the disjuncture between the total and mean debt payments reported, i.e. two of the eight debt-free respondents earned between R5 001 and R10 000 and only ten (18%) of the 56 respondents in this income group reported paying vehicle loan instalments. Deeper analysis of debt payment per income category indicated that for income less than R5 000, more payments were made on personal loans from banks at R14 756, while there were no debt payments on vehicle loans and study loans from other payments. Credit card payment had the highest mean and, as shown by the standard deviation, there was a wider variation of credit card payment than any other debt variables in this income group.

The income group earning R5 000 to R10 000 also indicated similar trends with the income group earning less than R5 000 having the highest total debt payment, namely personal debt from the bank at R39 274. In this income group, total payment on vehicle loan was however the second highest at R27 418, while payment on bank study loans was the lowest total debt payment at R900. Payments by individual respondents varied more in the variable payment to other loans than any other debt variable.

When focusing on the income group earning R10 001 to R15 000, payment to vehicle loan dominated all other variables at a total payment of R51 534 followed by personal loans from a bank at R25 297. No debt payments were recorded for mashonisa and family members. Debt payments for vehicle loans varied greatly from one consumer to another at R1 944 - more than any other variable used in the study. Similar trends were found for the income group R15 001 to R20 000, where debt payment in terms of vehicle loans was the highest at R32 150, followed by personal loans from the bank at R11 400. None of the respondents in the income category above R20 000 indicated paying debt in terms of the following variables: study loan from the bank, study loan from other financial institutions, friend, mashonisa, family member and hire purchase agreement. In this category, total debt payment to vehicle loans was the highest at R73 700 followed by debt to others at R31 900. Mean payment of vehicle loans was the highest at R5 254, also with the highest standard deviation of R1 640.

As indicated in Figure 4, the four most common types of debt paid by the respondents included store cards, personal loans from banks, credit card repayments and vehicle loans. The same variables contributed the highest value of payment as shown in Figure 4. It is against the above background that Table 6 reports on an attempt to isolate the four variables in order to analyse them in more detail. The table indicates that the higher the income, the higher the debt payment on vehicle loans. This is shown by the mean, median and the total debt payments. The mean store card payment for all variables was the lowest and ranged from R408 for the income group earning R15 001 – R20 000 to R587 for those earning between R10 001 and R15 000 being the highest. Interestingly, consumers earning less than R5 000 had a mean credit card debt of R2 382, which was higher than that for consumers earning above R20 000, namely R1 030. It should, however, be noted that only

three respondents earning less than R5 000 paid credit card debt while 12 consumers earning above R20 000 paid this type of debt.

Table 6. Four most common consumer debt variables

	Sum	Mean	Std deviation	Median
Less than R5 000				
Payment on personal loan from bank	R14 756	1 475	473	1 331
Payment on credit card	R7 146	2 382	2 303	1 500
Payment on store card	R5 430	452	278	400
Payment on vehicle loan				
R5 001–R10 000				
Payment on personal loan from bank	R39 274	1 510	827	1 450
Payment on credit card	R13 648	758	786	500
Payment on store card	R22 788	584	320	500
Payment on vehicle loan	R27 418	2 741	924	2 500
R10 001–R15 000				
Payment on personal loan from bank	R25 297	1 806	1 543	1 085
Payment on credit card	R11 186	588	651	480
Payment on store card	R14 100	587	407	475
Payment on vehicle loan	R51 534	3 435	1 944	3 000
R15 001–R20 000				
Payment on personal loan from bank	R11 400	3 800	2 884	3 000
Payment on credit card	R5 700	1 140	1 059	700
Payment on store card	R2 450	408	201	350
Payment on vehicle loan	R32 150	5 358	4 304	4 050
Above R20 000				
Payment on personal loan from bank	R17 100	2 137	1 300	1 550
Payment on credit card	R12 370	1 030	761	850
Payment on store card	R3 350	558	91	500
Payment on vehicle loan	R73 700	5 264	1 640	5 000

Tables 6 and 8 indicate debt payment by gender. The study shows that the men are more indebted than women and they also pay bigger amounts to service their debt obligations than women. This is despite the fact that only 33% of the respondents were men. This was confirmed by the sum total of debt repayment and outstanding debt that was proportionally higher than that of their female counterparts. Similarly, the study supported the findings of various other studies such as those by Jacobs and Smit (2010), Ardington et al. (2004), Daniels (2001) and the Public Service Commission (2007) where it was found that men tend to have a higher level of indebtedness than women. Table 7 below indicates the monthly debt payment per gender.

Table 7. Monthly debt payment per gender

Gender	Sum	Mean	Median	Standard deviation
Male	R266 926	5 802	5 004	4 429
Female	R235 844	2 774	2 224	2 563
Total	R502 770	3 837	3 000	3 625

The outstanding debt obligation in Table 7 shows a similar trend as that in Table 6 in terms of the total sum, the mean, median and the standard deviation per gender. The data suggests that men are more indebted than women. Male respondents' individual payments also varied widely from one respondent to another. The results in Table 8 below reaffirm that men are more indebted than women.

Table 8. Outstanding debt obligation per gender

Gender	Sum	Mean	Median	Standard deviation
Male	R7 776 848	169 061	122 957	171 176
Female	R5 015 835	59 009	18 000	96 190
Total	R12 792 683	97 654	43 797	13 748

4.5 After-tax monthly income to last month debt payment ratio (Debt-income ratio)

As shown in Table 3, the mean total after-tax monthly salaries was determined by adding the range of the salary income variables and using its median, i.e. the income used for income level R5 001 to R10 000, which was R7 500. In determining the debt–income ratio of the two categories, total monthly debt payment and total average after-tax monthly salary indicated by the respondents were used. Their calculations are highlighted as income reflected in Table 3 and Figure 5 for debt payment. The debt–income ratio was calculated as indicated in Table 9 below. The respondents earning an income less than R5 000 were shown to have a debt–income ratio of 68%, which is the highest among all four income groups. The reasons could be low total after-tax monthly income among the four income groups (see Table 3). The results in Table 8 suggest that the respondents earning less than R5 000 were highly indebted.

The respondents earning between R15 001 to R20 000 had the second highest debt–income ratio at 44%. The respondents with income between R10 001 and R15 000 had the lowest debt ratio at 25%. This could be due to the highest total monthly after-tax income attributed to this income group. Five of the debt-free respondents also fell into this group.

Table 9. Debt–income ratio per salary level

Variables	Total last month payment on consumer debt	Average total after-tax monthly salary	Total last month debt/total after-tax monthly salary income (debt–income ratio)
Less than R5 000	R40 332	R59 500	68%
R5 001–R10 000	R129 683	R420 000	31%
R10 001–R15 000	R119 985	R487 500	25%
R15 001–R20 000	R69 451	R157 500	44%
Above R20 000	R143 319	R450 000	32%
Total	R502 770	R1 574 500	32%

The debt-income ratio is also reflected clearly in Figure 7 below where the graph reflects a decrease in debt ratio as the income increases. Although there is an increase in the monthly income group of R15 001 to R20 000, the overall trend suggests a decline as income increases. The possible high debt ratio at the lower level was highlighted by Mashigo (2006), who indicated that the debt spiral is mostly prevalent among poor households.

Even though statisticians prefer mean debt payment to total debt payment when calculating the debt–income ratio, some researchers, such as Daniel (2001), have also used the total debt–income ratio to analyse the level of consumer indebtedness. Figure 8 below indicates that there were no major differences between mean debt–income ratio and the total debt–income ratio and thus the study conservatively used total debt to income ratio in the analysis. The highest debt–income ratio was found for the respondents earning below R5 000 per month for both the mean and total debt, while the income group R10 001 to R15 000 was the lowest in both the mean and total payment method of calculation. It should therefore not matter which method is used between mean debt and total debt to calculate the debt–income ratio.
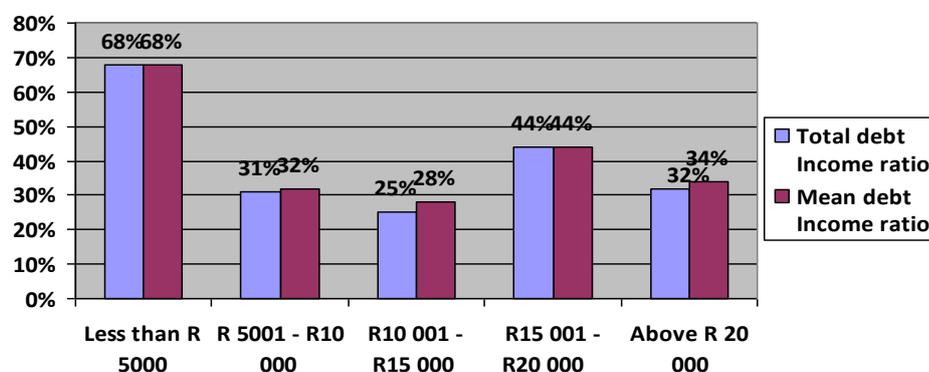
Figure 7. Comparing total debt–income ratio and mean income ratio

As shown in Table 8, the aggregate total debt–income ratio of all the income categories was at 32%. This is slightly less than the non-mortgage debt of 37% indicated by the South African Reserve Bank (2012). The figures are above the 25% threshold indicated by the Bureau of Market Research (2009), which defines over-indebtedness in consumers who spend more than 25% of their gross monthly income on unsecured repayments and above 20% non-

mortgage debt payments to after-tax income. This debt–income ratio is supported by Greninger et al. (1996) who applied the non-mortgage debt payments to after-tax income, which indicates the danger point of over-indebtedness when the ratio is above 20% of total debt payments on after-tax income. The debt in the study concerned only consumer debt and thus excluded mortgage debt. The 20% non-mortgage debt payment on after-tax income was therefore applicable.
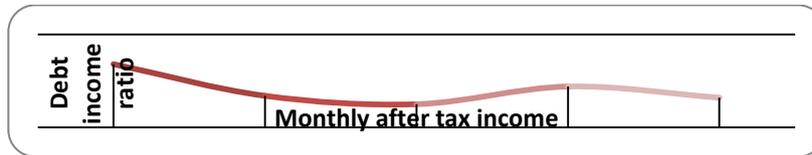
Figure 8. Proportion of indebted respondent by monthly after-tax income

4.6 Personal expenditure

The monthly personal expenditure was measured using 17 variables. All 139 respondents indicated monthly expenditure on two or more variables in the questionnaire. A total expenditure amount of R802 571 on all variables was reported by the respondents. Expenses on food items were the highest at R190 000 00 per month, which was equivalent to 24% of the total monthly expenditure. This was followed

by housing at 17%. Housing debt included renting and other payment such as renovations and home payments. The lowest expenditure was on tobacco at R281 000. This represents expenses by only five of the 139 respondents on this variable. Interestingly, the total expenditure on reading material was the second lowest at R626 500. Figure 9 below indicates the percentage of total monthly expenditure by variables.
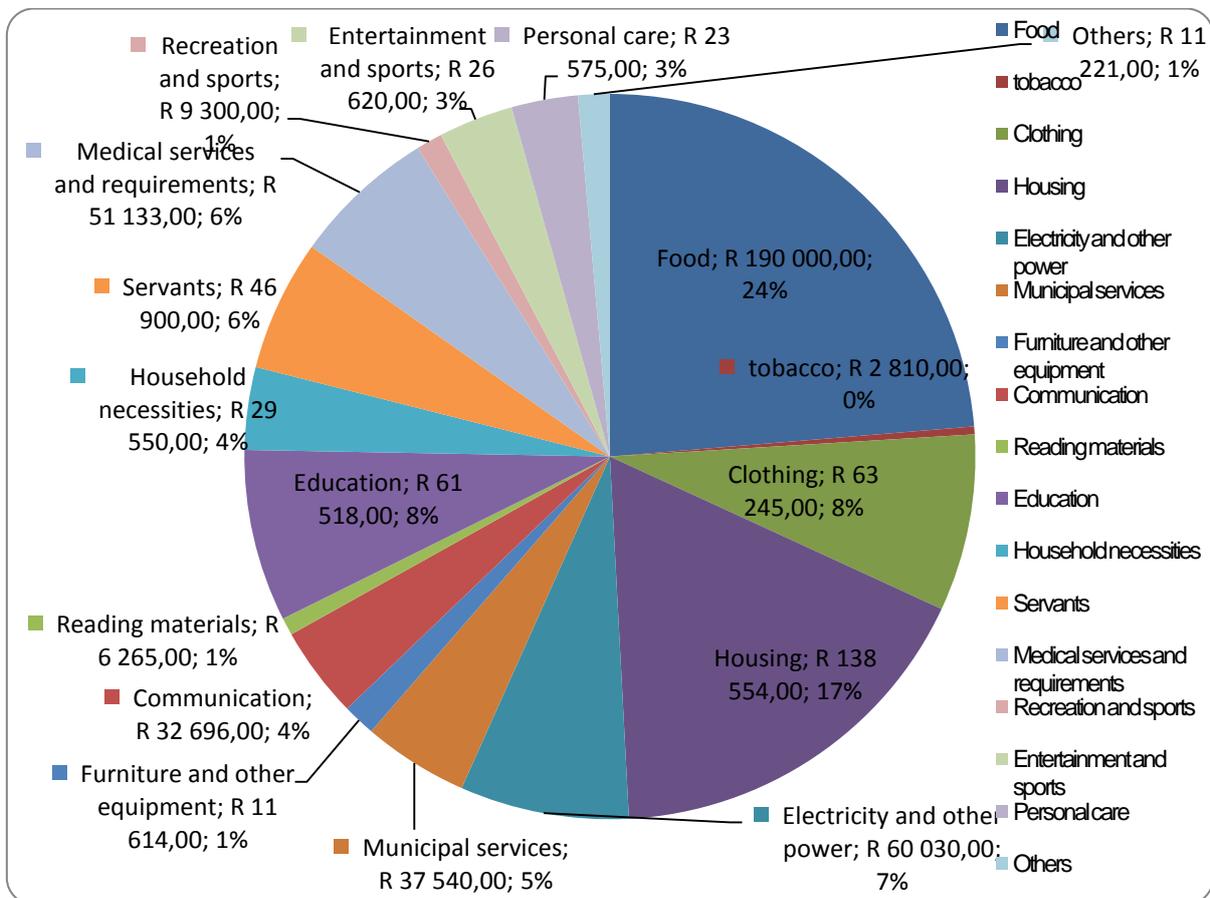
Figure 9. Rand value of monthly personal expenditure

The total monthly expenditure reported in the study was 37% higher than the total debt paid in the previous month. This is shown by the values in Figure 10 below. The figure also indicates that 51% of the income was spent on monthly expenditure. As shown in Table 5, 32% of the income was spent on servicing consumer debt. This thus implies that respondents spent 83% of their income every month on servicing monthly expenses and debt obligations. According to Nyaruwata (2009), one of the over-indebtedness indicators is found where a consumer has a total combined debt servicing and basic expenditure ratio of 70% or more of their disposable income. The remaining amount (30%) is probably spent on mortgage debt, savings, insurance, funeral covers and other commitments.
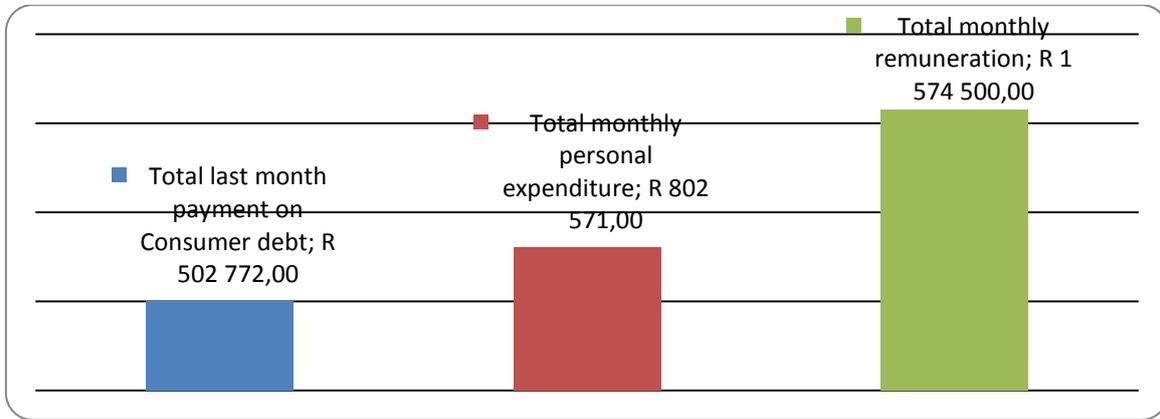
Figure 10. Total monthly debt payment to personal expenditure

4.7 Garnishee order

Secondary data on garnishee orders was collected from the PERSAL system as reflected for November 2012. Raw data was exported from the system and analysed to try to reach the objective of the study. The aim was to determine the number of department of health employees working at the provincial office who had either garnishee or emolument orders – i.e. those having court orders to pay a debt obligation.

The data from the PERSAL system indicated that 62 employees working at the provincial office of the department of health had monthly deductions from their salaries to pay their debt. This was out of a total of 469 permanently employed employees. Thus 13% of the permanently employed staff at the provincial health department in North West Province have been served with judgement orders to pay their debt and thus may be over-indebted. This finding is similar to the Consumer Credit Market report of the NCR (2012), which indicated that 13.9% of consumers had judgements or administrative orders against them. The report indicates a lesser degree of cases of judgement orders than those reflected by the literature. According to the University of Pretoria Law Clinic (2008), there is an increase in the number of impaired credit records in South Africa as 37.7% of consumers have impaired credit records. The Public Service Commission (2007) has reported that 20% of public servants have garnishee orders served against them. Even though the survey report indicates a smaller number of respondents with garnishee orders, it is still a matter of concern.
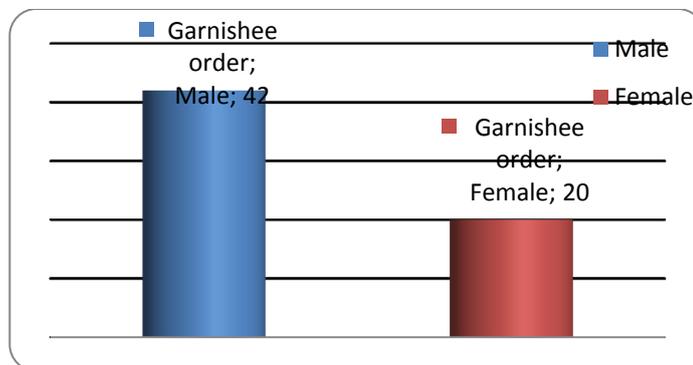
Figure 11. Number of employees with garnishee orders per gender

Looking at garnishee order per salary level, the study found that more respondents at salary levels 6 to 8 have garnishee orders issued to them. This is in line with the report from the Public Service Commission

(2007), which highlighted that public servants on salary levels 6 to 8 account for a large number of payments towards garnishee debt. This is supported by the fact that 118 employees (25%) on the provincial office's payroll fall into this salary level range. The number of employees above level 13 was found to be the lowest with regard to garnishee

orders, at less than 1%, which is also consistent with the findings of the Public Service Commission (2007). This could indicate that respondents at this salary level have enough monthly income to cover their monthly debt obligations without persuasion by court order. Figure 12 below indicates the number of garnishee orders per salary level.
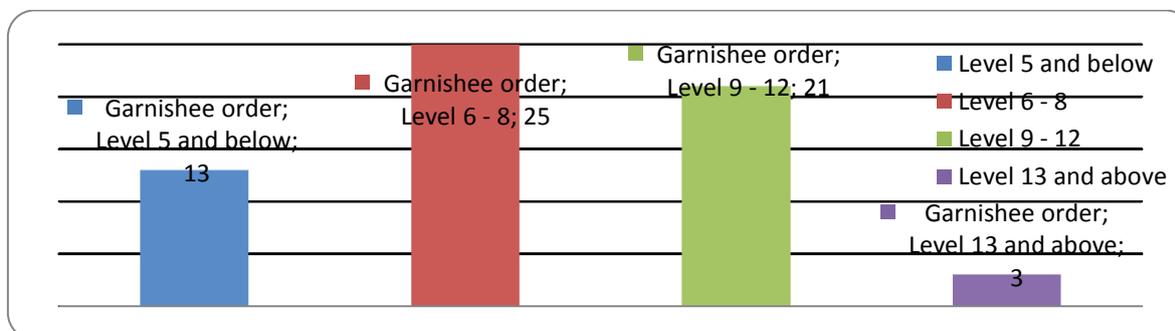
Figure 12. Number of garnishee orders per salary level

5. Conclusion and recommendations

The primary objective of this study was to determine the consumer debt level of public servants in the Department of Health in the North West Province, South Africa. The results of the study indicate that most public servants rely almost entirely on the public service remuneration to survive and for debt repayment. The results of the survey also indicate that 96% of public servants in the Department of Health in the North West Province are over-indebted. The respondents also perceived their income to be insufficient and thus resort to credit to maintain their required standard of living. The results also indicate that 63% of the respondents have a debt-income ratio above 20%. The reason for falling into debt is mostly due to lack of funds and insufficient income. The most common types of consumer debt found among the respondents included store cards (26%), followed by personal debt from banks (18%), while vehicle loan debt (37%) consumed the highest rand value of total debt among respondents. Personal loans from banks (21%) comprised the second highest debt value incurred by the respondents. It could be argued therefore that most public servants are over-indebted and could be trapped in a debt cycle if no additional income is provided or if they do not embark on some kind of personal financial management education.

According to the results, it was found that 13% of the public servants have been served with garnishee orders. Most of the affected public servants in this regard belonged to the middle income category. The report seems to suggest that public servants at the department of health are less affected by garnishee orders compared to what the Public Service Commission (2007) report found which indicated that 20% of public servants had been served with a garnishee order.

The survey also found that most of the respondents (96%) were indebted and that consumer debt ranged from 25% for respondents earning income between R10 001 and R15 000 and 68% for respondents earning less than R5 000. The majority of respondents (24%) used debt to supplement the lack of funds at their disposal while shopping and to increase their funds. It appears that consumers are unable to buy their daily necessities by paying cash and thus resort to instalments which cause them to incur debt. Most respondents (26%) had a store card as a source of debt and the bulk of their monthly debt went towards paying (47%) for vehicle financing. The study also indicated that 32% of income was spent on servicing debt.

The monthly expenditure plays an important role in determining whether consumers will be able to pay their debt obligation. The study found that 51% of the monthly income was spent on monthly expenditures such as personal necessities, e.g. food, clothing, communication, and other described in Figure 4.9. This could make it difficult for consumers to cover other necessities such as mortgage bonds, insurance, health care, savings and investment which were not covered by the study.

With all their expenses, it sometimes becomes difficult for people to meet their debt obligations. This may prompt legal action by creditors to ensure that they get what is due to them. The consumer then ends up with a garnishee order or emolument order against them for debt they cannot service. Consumers are thus forced to settle their debts, which may in turn result in another debt being incurred to cover the monthly shortage. It is therefore crucial that consumers be aware of their debt status and when to stop incurring more debt. Financial education and awareness of organisations that support consumers in debt are important to manage financial problems.

6. Managerial implication and recommendations

Employees who are indebted affect the organisation's performance, employees' health and wellbeing and other employees (Garman, 1996; Keese and Schmitz, 2010; Barnard, Peters and Muller, 2010:2). The results of this study indicate that there is a large number of public servants who are over-indebted.

In light of the above findings, the following recommendations are made:

• The department of health through its wellness programme directorate needs to institute systems to identify over-indebted employees and assist them in managing the problem. All employees who are on the employees wellness assistance programme have to be assessed for over-indebtedness. Such assessment forms are available at the National Credit Regulator (NCR).

• The department of health should also initiate a personal financial wellness programmes that can be offered to its employees in an effort to assist employees to manage their income more efficiently.

• All employees with deductions of more than 30% from their disposable income directly from the PERSAL system should be regarded as high-risk employees and should be specially monitored by the human resource unit and employees wellness programme.

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