



**THE SOUTH AFRICAN NATIONAL LOTTERY:
PARTICIPATION AND ATTITUDES, 2011**

Study conducted by
BUREAU OF MARKET RESEARCH
College of Economic and Management Sciences



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EXECUTIVE SUMMARY

THE SOUTH AFRICAN NATIONAL LOTTERY: COMMUNITY PARTICIPATION AND ATTITUDES

1. INTRODUCTION

The Lotteries Act 57 of 1997 (as amended) was promulgated to promote regulation and coordination of all activities relating to the National Lottery and other ancillary matters. The National Lotteries Board (NLB) was established in October 1998 to act as national regulator. The first National Lottery license was allocated to Uthingo Management in July 1999 and the second to Gidani (Pty) Ltd in 2007. Since the first LOTTO tickets were sold in March 2000, lottery games have entrenched themselves as a popular South African commodity. Both the NLB and Gidani are committed to ensuring responsible participation in the National Lottery. In order to ascertain the impact of the National Lottery, Gidani and the NLB decided to commission a study on the playing patterns of participants. This is a follow-up study on a similar study conducted in 2003.

The research sought to establish:

- community behaviour and participation in lottery games
- the extent of problem gambling
- propensity to spend on lottery games

2. COMMUNITY BEHAVIOUR AND PARTICIPATION

2.1 THE SAMPLE

A national survey was conducted among a sample of 2 500 respondents over the age of 18 years from January to March 2010. The sample comprised 800 households selected randomly for telephone interviews and 1 700 households without in-house Telkom telephones living in townships, informal settlements and rural villages for personal interviews. The results were weighted to portray the structure of the South African population with regard to access to in-house Telkom telephones. Due to

cost considerations, communities without Telkom telephones located in commercial agricultural areas characterised by a dispersed location pattern were excluded from the face-to-face interviews.

2.2 PARTICIPATION IN LOTTERY GAMES

Participation in lottery games during the month preceding the survey was recorded as follows:

- 39.3 % played lottery games
- 60.7 % abstained from participating in any lottery games

Those that participated recorded the following activities:

- 32.3 bought LOTTO tickets
- 26.3 % bought LOTTO Plus tickets
- 16.4 % played PowerBall
- 6.2 % bought Scratch Cards
- 3.3 % participated in SportStake

The propensity of the South African population (18 years and older) to participate in lottery games declined from 2003 to 2010:

- abstaining from lottery games increased from 30.6 % to 60.7 % of the adult population
- LOTTO ticket buyers decreased from 69.1 % to 32.3 %
- Scratch Card players decreased from 12.6 % to 6.2 %

Concomitantly, the sociodemographic profile of lottery players changed as follows from 2003 to 2010:

- average age: 37.2 years to 35.1 years
- unemployed as % of players: 36.9 % to 23.0 %
- persons with primary education as % of players: 17.9 % to 11.7 %
- Africans as % of players: 75.5 % to 76.3 %
- males as % of players: 46.7 % to 48.2 %
- less affluent income (less than R1 000 per month) as % of players: 60.5 % to 34.7 %

The above confirms a substantial decline in the participation of the less affluent in National Lottery games.

2.3 REASONS FOR NONPARTICIPATION IN LOTTERY GAMES

The three in every five (60.7 %) respondents, who did not participate in any lottery games, advanced the following reasons:

- 38.7 % were not interested (33.3 % in 2003)
- 21.9 % do not gamble at all (9.9 % in 2003)
- 18.1 % experienced a lack of money (27.6 % in 2003)
- 10.8 % advanced religious beliefs (18.0 % in 2003)
- 2.3 % had no access to retail outlets (1.0 % in 2003)

‘Not interested’ and ‘do not gamble at all’ became much more prominent in 2010 compared to 2003 while ‘lack of money’ and ‘religious beliefs’ declined as reasons for abstention.

2.4 MOTIVATIONAL FACTORS FOR ENGAGING IN LOTTERY GAMES

Only a small percentage of those not participating in lottery games would be motivated to engage in lottery games should they become aware of the following ways of accessing lottery games:

- 3.6 % through a bank ATM
- 4.3 % through online banking
- 10.4 % through a cellphone
- 16.9 % at till points in supermarkets

2.5 VIEWS ON LOTTERY GAMES

Personal views of respondents on participating in lottery games reveal that:

- 57.3 % find it acceptable
- 19.8 % find it unacceptable
- 22.9 % do not approve of lottery games personally but have no objection to participation by others

2.6 ATTITUDES TOWARDS LOTTERY GAMES

Percentage agreement with the following statements:

- 52.1 % - 'I am aware of the NLB'
- 45.0 % - 'I am aware of Gidani (Pty) Ltd'
- 59.1 % - 'I am aware of good cause monies distributed by the NLDTF'
- 59.7 % - 'On balance, the National Lottery is good for society'
- 49.2 % - 'Most people play the lottery sensibly'
- 17.6 % - 'People should be discouraged from playing lottery games'

2.7 ADEQUACY OF NATIONAL LOTTERY OUTLETS

Respondent reaction on the adequacy of lottery outlets:

- 15.5 % think there are too many outlets
- 32.8 % think there are not enough
- 51.6 % think there are enough outlets

2.8 AWARENESS OF UNDER-AGE PARTICIPATION IN THE LOTTERY

Level of awareness of under-age participation in:

- LOTTO/LOTTO Plus : 11.8 % of respondents
- Scratch Cards : 10.3 % of respondents
- PowerBall : 7.1 % of respondents
- SportStake : 6.7 % of respondents

2.9 BUYING OF LOTTO/LOTTO PLUS TICKETS

The frequency of buying LOTTO/LOTTO Plus tickets is as follows:

- 51.8 % buy LOTTO/LOTTO Plus tickets twice a week (53.4 % in 2003)
- 30.7 % buy LOTTO/LOTTO Plus tickets once a week (30.1 % in 2003)
- 5.2 % buy LOTTO/LOTTO Plus tickets once every two weeks (6.3 % in 2003)
- 7.4 % buy LOTTO/LOTTO Plus tickets once a month (6.0 % in 2003)
- 4.9 % buy LOTTO/LOTTO Plus tickets less often (4.2 % in 2003)

Notwithstanding the substantial decline in the level of participation, the frequency patterns remain unchanged.

2.10 BUYING OF WINA MANJE SCRATCH CARDS

The frequency of buying Scratch Cards shows the following pattern:

- 5.6 % buy Scratch Cards every day (6.9 % in 2003)
- 43.9 % buy Scratch Cards every week (once or more) (35.4 % in 2003)
- 13.8 % buy Scratch Cards once every two weeks (16.0 % in 2003)
- 17.6 % buy Scratch Cards once a month (20.1 % in 2003)
- 19.0 % buy Scratch Cards less often (21.6 % in 2003)

2.11 PARTICIPATING IN SPORTSTAKE

The frequency of participating in SportStake is as follows:

- 24.0 % play twice a week
- 61.1 % play once a week
- 5.6 % play once every two weeks
- 5.6 % play once a month
- 3.6 % play less often

2.12 BUYING OF POWERBALL TICKETS

The frequency of buying PowerBall tickets shows the following pattern:

- 46.2 % buy twice a week
- 33.4 % buy once a week
- 5.8 % buy once every two weeks
- 8.2 % buy once a month
- 19.0 % buy less often

2.13 PROFILE OF LOTTERY PLAYERS

Table 3.22 shows the profile of typical lottery players by type of game. For example, a typical LOTTO/LOTTO Plus player is:

- between 18 and 50 years (82.3 % of players)
- holds full-time work (43.4 % of players)
- has a secondary school qualification (70.5 % of players)
- earns less than R5 000 per month (73.2 % of players)

There is also limited variation by gender (52.1 % female) among LOTTO/LOTTO Plus players.

2.14 ALLOCATION OF WINNINGS

The response to the question: 'If you win money today, on what would you spend it?' reveals that:

- 58.3 % would save it
- 40.9 % would purchase items for basic needs
- 39.9 % would purchase luxury items
- 30.2 % would pay off a debt/bond
- 14.7 % would spend it on entertainment
- 9.8 % would spend it on gambling or buying lottery tickets

Note that respondents were invited to mention more than one item. The above percentages are therefore not indicative of the relative amounts that winners would spend on items. The percentages refer merely to the proportion of respondents who would spend some of their winnings on a particular item. In relation to 2003, more respondents in 2010 advanced 'savings' and the 'purchasing of luxury items'.

2.15 EXPENDITURE ON LOTTERY GAMES

The distribution of monthly expenditure on lottery games shows that:

- 24.0 % spent less than R20 (46.7 % in 2003)
- 37.9 % spent R21 – R50 (32.9 % in 2003)
- 26.5 % spent R51 – R150 (16.2 % in 2003)
- 8.6 % spent R151 – R300 (3.2 % in 2003)
- 1.9 % spent R301 – R500 (0.9 % in 2003)
- 1.1 % spent R500 to R1 000 (0.1 % in 2003)

The percentages show a substantial increase in the percentage of respondents in the higher expenditure brackets. Respondents in the 'less than R20 per month' category

decreased from 46.7 % in 2003 to 24.0 % in 2010 while respondents in the expenditure category exceeding R50 a month increased from 20.4 % of respondents in 2003 to 38.1 % in 2010. (Readers should be reminded that the income brackets in the two survey years remained unaltered while a total inflation rate of 30.5 % was recorded between the 2003 and 2010 surveys.)

2.16 HOUSEHOLD BUDGET BEHAVIOUR

The allocation of household funds to lottery games shows the following budgetary behaviour:

- Only a third (33.2 %) of all respondents made provision in their budgets for playing lottery games (33.3 % in 2003).
- Those that did not budget (66.8 %), confirmed their impulsive buying behaviour. Just more than half (57.2 %) are impulsive buyers on a regular basis and less than half (42.8 %) are impulsive buyers on an occasional basis (corresponding percentages for 2003 were 56.5 % and 43.5 %).

2.17 IMPACT OF BIG JACKPOTS ON LOTTERY EXPENDITURE

Just more than one in every 10 respondents (13.3 %) reported that lottery tickets are procured only if big jackpots are at stake. Nine in every 10 (86.7 %) are more regular buyers and are not particularly motivated to buy LOTTO and PowerBall tickets with big jackpots. Similar figures were reported in 2003, namely 10.7 % and 89.3 % respectively.

One in every five (21.5 %) respondents spent more on LOTTO and PowerBall tickets when big jackpots are at stake. (This percentage amounted to 10.7 % in 2003). The additional spending is not that excessive. No less than 86.8 % reported an additional expenditure of double or just less than double their normal expenditure.

2.18 EXPENDITURE DISPLACEMENT

Forfeiture of expenditure on other household items in favour of buying lottery tickets may range from small pro-rata cuts on expenditure on various items to the substitution of one item with lottery games.

Household budget behaviour often consists of small cuts on discretionary items rather than one large substitution.

The following expenditure displacement effect was reported by respondents in the survey:

- 71.1 % from household necessities
- 19.1 % from savings
- 17.8 % from other entertainment
- 6.5 % from luxury items
- 5.7 % from other items

It is important to mention that, since most respondents mentioned more than one item and did not indicate which percentage of money would be sourced from which item, it was not possible to determine the relative importance of the items. The response to this question therefore provides only the items from which displacement takes place and not the proportion of lottery money sourced from the various items mentioned. Section 4.1 of the executive summary shows that, on average, less than 0.2 % (ie R2 in every R1 000) of household expenditure was allocated to lottery games in 2009, implying a relatively small displacement effect.

2.19 EXPENDITURE: WEDNESDAY/SATURDAY (LOTTO) AND TUESDAY/FRIDAY (POWERBALL)

Just less than half (43.8 %) the LOTTO players reported an equal distribution of LOTTO/ LOTTO Plus expenditure between Wednesday and Saturday. Just less than a third (32.0 %) indicated that they buy LOTTO tickets only on Saturdays.

With regard to PowerBall, 55.4 % of respondents reported an equal distribution while 24.3 % reported the procurement of PowerBall tickets only on Fridays.

2.20 PERCEPTIONS OF WINNING

Several questions enquired on the LOTTO player's perceptions of the National Lottery and their chances of winning. The following emerged:

- Only 57.0 % of players expressed the opinion that all LOTTO numbers (49) have the same chance of being selected in each draw. This percentage stood at 41.7 % for PowerBall, namely that the 65 numbers have exactly the same chance of selection with each draw.
- 29.4 % expressed the opinion that the chances of drawing the numbers 13 39 23 7 11 42 are better than the chances of drawing 1 2 3 4 5 6 (this percentage was 27.0 % in 2003). Only 42.7 % think that the two combinations have an equal chance of being drawn. This clearly confirms a lack of insight into the probability principle.
- 76.2 % of respondents were of the opinion that the chances of winning are enhanced by choosing one's own numbers while 23.8 % felt the quick pick method enhances their chances of winning. (These percentages were 81.9 % and 18.1 % respectively in 2003).
- 33.0 % of lottery ticket buyers expressed the view that their chances of getting four numbers right in the next draw are better if previous draws showed some correct numbers (2003 percentage was 33.0 %). These participants perceived

the lottery as a continuum, with their chances of winning improving if previously selected numbers were correct.

- Although the chances of winning LOTTO or PowerBall are very slim, 53.9 % of LOTTO and 44.7 % of PowerBall ticket buyers perceived their chances of winning as 'average', 'good' or 'very good'. The corresponding figure for LOTTO stood at 61.7 % in 2003.

The above findings confirm a clear lack of insight into aspects such as chances of winning, randomness and the fact that each draw is a discrete event. It also seems that the 2010 perceptions show only a limited deviation from the 2003 perceptions.

2.21 EXPENDITURE/BUYING BEHAVIOUR

Respondents recorded the following in response to the question: 'Do you spend more on lottery tickets now (2010) compared to 2007?'

- 32.7 % yes
- 62.5 % no
- 4.8 % don't know

On the impact of visible assistance of the National Lottery to good causes on the amount spent on lottery games, the following response was recorded:

- 57.5 % will spend more
- 42.5 % not influenced by good cause support

Since the introduction of PowerBall on 16 October 2009:

- 47.2 % of lottery players have bought PowerBall tickets
- 52.8 % have not participated

On the possibility of playing new lottery games should additional playing alternatives be introduced (ie in addition to LOTTO/LOTTO Plus, Scratch Cards, SportStake and PowerBall), respondents responded as follows:

- 55.3 % yes
- 27.5 % no
- 17.2 % don't know

The above 55.3 % confirming the possibility of partaking in new alternative games recorded that:

- 42.9 % will redistribute existing lottery money to new games
- 57.1 % will allocate additional money

The creation of new methods of easing the effort to participate in lottery games has resulted in limited usage of such methods. The following percentages of respondents recorded the usage of such methods:

- 0.4 % use a bank ATM
- 0.8 % play through on-line banking
- 1.9 % use their cellphones
- 34.2 % use till points in supermarkets

Those that use the above methods were requested to provide satisfaction ratings for these methods (where 1 = very dissatisfied and 10 is very satisfied). The following mean (average) satisfaction scores were calculated:

- 4.95 (out of 10) for bank ATMs
- 7.23 (out of 10) for on-line banking
- 7.33 (out of 10) for cellphones
- 8.23 (out of 10) for supermarket till points

2.22 IMPACT OF GAMBLING

Several statements on lottery games with regard to their financial impact as well as the awareness of problem gambling were put to lottery players. The following levels of agreement were recorded:

- 53.4 % indicated that winnings from lottery games helped them financially
- 70.3 % lost more than they won
- 8.3 % borrowed money to play lottery games
- 23.6 % confirmed that they spent more money on lottery games than intended
- 16.2 % were criticised by others about spending too much on lottery games
- 77.3 % were aware of the risks of playing lottery games
- 52.5 % were aware of programmes to assist problem gamblers
- 17.3 % of lottery players also participate in other modes of gambling, specifically casino gambling

2.23 RETAIL OUTLETS

Main source of procuring lottery tickets:

- 73.5 % bought from local supermarket
- 39.8 % bought from small local grocery store
- 33.5 % bought from garage/convenience shop
- 27.6 % bought from post office
- 3.6 % bought elsewhere

Level of satisfaction with services rendered by lottery retail outlets (where 1 = very dissatisfied and 10 = very satisfied):

- 8.45 (out of 10) for attitude of staff
- 8.35 for courtesy of staff
- 8.28 for empathy of staff
- 8.54 for printout of lottery results
- 8.50 for payment of prizes
- 8.63 for availability of pay slips/coupons
- 7.82 for systems always on-line
- 7.91 for the availability of a writing surface

The above confirms a fairly high level of satisfaction with retail outlets. Only the fact that systems are often off-line and the availability of a writing surface scored below 8.0 (out of 10).

2.24 **NLDTF ACTIVITIES AND FUNDING**

The following views were expressed by lottery players on the NLDTF:

- 65.0 % think that players should have a say in who gets NLDTF funding
- 25.8 % confirmed that 'good causes' affect their playing patterns (spend and/or play more)
- 48.8 % would stop playing if money is not fairly distributed
- 42.3 % confirmed their awareness of organisations that have received lottery funding
- 11.1 % confirmed their awareness of organisations in their immediate area that have received lottery funding

The following are the most preferred NLDTF beneficiaries:

- 89.4 % - charities
- 28.5 % - sport and recreation

- 23.57 % - arts, culture and national heritage
- 8.52 % - other

3. PROBLEM GAMBLING

3.1 EXTENT OF PROBLEM GAMBLING

This study applied the 20 Gamblers Anonymous questions to determine the extent of problem gambling. The survey put the 20 questions to all respondents who play lottery games at least twice a week. The results show that:

- 0.1 % of those buying lottery tickets at least twice a week can be classified as problem gamblers. (Only one respondent recording 14 affirmative responses to the Gamblers Anonymous questions was identified in the sample population.)

The result of the survey suggests virtually no addictive or pathological conduct among National Lottery players.

4. EXPENDITURE ON LOTTERY GAMES

4.1 PROPENSITY TO BUY LOTTERY TICKETS

The propensity to buy lottery tickets is defined as the percentage of household expenditure allocated to lottery games. This is calculated at 0.18 % for 2009 compared to the 0.45 % for 2002. This implies that households, on average, spent 18 cents out of every R100 of household expenditure on lottery games in 2010 – less than half compared to 2002. Lottery ticket sales amounted to R3.6 billion in 2001 and R4.1 billion in 2009 at current prices. At constant (2008) prices, sales declined from R5.5 billion in 2001 to R3.8 billion in 2009. Prize money at current prices to the value of R1.8 billion and R1.9 billion was paid out in 2001 and 2009 respectively. The prize money allocated to patrons reverts back to household income and the expenditure stream and is excluded from the calculation of the propensity to play lottery games. Only the household money forfeited in favour of Gidani, the NLDTF and commission to retailers

is regarded as money extracted from the aggregate household income and expenditure stream.

The propensity to buy lottery tickets, ie the percentage of household expenditure spent on lottery tickets minus prize money, shows the following proportions by type of game for 2009:

	Propensity	Share per R100 spent on games
• Lotto	0.10 %	R56
• Lotto Plus	0.03 %	R16
• SportStake	0.01 %	R6
• PowerBall	0.04 %	R22
• Scratch Cards	0.04 %	R22
• Total	0.18 %	R100

4.2 REDISTRIBUTIONAL EFFECTS

Average annual per capita expenditure on the lottery amounted to approximately R140 per person 18 years and older and approximately R356 for those persons who actually bought lottery tickets in 2009. It is assumed that the average amount spent per buyer per draw amounted to approximately R10 (range between R9.89 for LOTTO and R13.90 for PowerBall).

The redistributinal effect of the LOTTO ticket sales of 6 March 2010 to the value of R26.0 million (average expenditure of R10 each by 2.6 million people) is as follows (this example is only used to illustrate the magnitude of redistribution):

- 4.6 % (118 731 players) received prizes
- One person received R13.8 million, 3 received R156 215 each and 101 received R10 440 each

- 88.5 % of the prize winners each received R40
- 95.4 % of players received no prizes

On average, an extremely large number of people (2.6 million) each spent a small amount while the prizes were heavily concentrated in only 105 people (division-1 to division-3 prizes). This suggests an immense household redistributive effect among participants in lottery games.

5. CONCLUSION

The findings of the study confirm a substantial decline in adult participation in lottery games between 2003 and 2010 – from close to 70 % of the adult population in 2003 to just less than 40 % in 2010. Sociodemographic changes of lottery players were also evident. Although the less affluent are still active lottery players, their share in lottery gaming shows a marked decline. The unemployed as percentage of lottery players declined from 36.9 % in 2003 to 23.0 % in 2010 and those earning a monthly income of less than R1 000 per month declined from 60.5 % to 34.7 %. The gender, population group and age composition of 2010 players was similar to that of 2003.

The general decline in lottery participation is also evident from the increased percentage of the adult population who did not gamble at all. Abstainers seem to feel fairly strongly about refraining from gambling, as is evident from the limited motivational appeal reported on alternative means of accessing lottery games. Access to lottery outlets is also well established – a further rollout of facilities would not necessarily extend the number of players.

The general pattern emerging from the findings is a much more stable and mature lottery market with almost no occurrence of problem lottery gambling. Future growth may result from the introduction of new games, with the possibility of allocating additional money to lottery games. This is illustrated by the reaction forthcoming from the launching of PowerBall in October 2009. The support of 'good causes' by lottery money remains an important motivation for supporting the National Lottery.

The decline in the propensity to buy lottery tickets (ie the percentage of household expenditure allocated to lottery tickets) confirms the new lower level of lottery activity among the South African population. The propensity declined from 0.45 % (45c per R100 household expenditure in 2002) to 0.18 % (18c per R100 in 2009). A propensity of approximately 0.20 % (20c per R100) can probably be set as indicative of a lottery market size for the near future. This implies a lottery market growth closely related to the growth in labour remuneration. However, the lottery market may be extended somewhat with the introduction of new games.

CHAPTER 1

INTRODUCTION AND OBJECTIVE OF THE STUDY

1.1 BACKGROUND

Regulated gambling in South Africa was extended in 1994, from horse racing to include several other modes of gambling. The National Government promulgated the Lotteries Act 57 of 1997 to promote regulation and coordination of all the activities relating to the National Lottery and other ancillary matters. The National Lotteries Board (NLB) was established in October 1998 to act as national regulator. The first National Lottery Licence was allocated to Uthingo in July 1999 for a period of seven years. The first LOTTO tickets were sold on 2 March 2000 and those of Scratch Card competitions on 16 October 2000. Gidani (Pty) Ltd was the successful bidder for the second seven year period and started with its operations in September 2007. Gidani, as the National Lottery's operator, works in close collaboration with the NLB to ensure that the most effective service is offered to South African players. Gidani has become firmly established during the past three years and has decided to conduct a socioeconomic investigation on lottery activities among the South African population in line with its licence commitment.

In 2003, a study was commissioned to investigate community attitudes towards and community conduct in relation to the National Lottery. A study entitled *The South African National Lottery: Community attitudes, behaviour and participation* was published in 2003. Since the completion of the above study almost seven years ago, several changes have been experienced in the National Lottery market place. Some of these include the change of operator from Uthingo to Gidani, a more gambling-matured South African population, considerable changes in the personal income distribution in South Africa and structural changes in the household expenditure profile. As a result of the above, and the expressed objective of Gidani to establish the socioeconomic impact of the National Lottery within three years of becoming the lottery operator, the

Bureau of Market Research of Unisa was appointed by Gidani, in close cooperation with the NLB, to conduct a socio-economic analysis of the impact of the National Lottery on the South African population.

1.2 OBJECTIVE OF THE STUDY

The purpose of the study is to establish community attitudes and behaviour towards as well as the participation of the South African population in the National Lottery. The study will also gauge the public's awareness of Gidani as the National Lottery operator as well as the community's perception of 'good causes' supported by the National Lottery. The specific objectives of the study include, inter alia:

- participation in lottery games
- reason for abstaining from lottery participation
- frequency of participation in lottery games
- expenditure on lottery games
- household budget behaviour regarding lottery games
- perception/chances of winning lottery games
- influence of 'good cause' expenditure on lottery games participation
- extent of 'problem gambling' with regard to lottery games

Several of the above issues were also enquired upon in the 2003 National Lottery study. Responses will be used for longitudinal comparisons.

1.3 METHODOLOGY

Due to the wide spectrum of calculations conducted in the study, various methodologies were applied to generate the desired output. The most prominent was a community survey among a sample of the South African population at large.

This was supplemented by an analysis of secondary data to calculate national aggregates such as propensity to play lottery games and expenditure displacement effects. Attention was also given to literature research, especially with a view to verifying the

reliability of the survey findings with similar research conducted in South Africa. The relevant research methodologies applied are addressed in each chapter or section relevant to the specific data analysed in the specific chapter or section of the report.

1.4 **LAYOUT OF THE REPORT**

The first chapter provides background to the study, its objectives and an outline of the report. A detailed description of the methodology of the community survey is provided in chapter 2. Chapter 3 contains a detailed exposition of the findings of the national survey. These data are supplemented with the findings of similar surveys as verification totals as well as data from secondary sources to provide some aggregate totals for South Africa as a whole. Chapter 4 discusses the profile of respondents indulging in lottery participation at least twice a week with a view to establishing tendencies towards compulsive gambling. The propensity to expand on lottery games is calculated in chapter 5. The survey findings are summarised in the executive summary contained at the beginning of the report.

CHAPTER 2

RESEARCH METHODOLOGY: COMMUNITY SURVEY

2.1 INTRODUCTION

In order for Gidani and the NLB to effectively exercise their responsibilities as operator and regulatory authority respectively, a well-founded comprehension of the National Lottery and its impact on the economy and society is imperative. These impacts were determined through primary survey research and quantitative information was collected through a national household survey. The discussion in this chapter provides the basis for the scientific foundation of the study and hence the quality, validity and reliability of the data.

2.2 SCOPE OF THE SURVEY

The scope of the survey extended across all households in South Africa. For purposes of this study the survey was divided into two separate categories. The first was a Telkom telephone survey (800 households) among the South African population at large. Since this survey excluded non-Telkom subscribers, it was subsequently decided to extend the survey with personal face-to-face interviews in areas with the lowest Telkom telephone penetration (1 700 households). The majority of these areas are located in the relatively low-income areas in informal housing settlements as well as villages in traditional rural areas. Due to cost considerations, agricultural communities located in typical rural areas, often characterised by a dispersed locational pattern, were excluded from the personal interviews. However, dispersed rural households in agricultural areas with in-house access to Telkom telephones had the same chance as all other households with Telkom telephones, for inclusion in the telephone subsurvey.

2.3 TELEPHONE SUBSURVEY

The following survey methodology was applied in the telephone subsurvey.

2.3.1 Scope of the telephone survey

The random selection of respondents with in-home access to Telkom telephones ensured the inclusion of inhabitants all over South Africa, irrespective of their location. The telephone survey, therefore, included respondents living in metropolitan, urban and rural areas in proportion to the Telkom telephone distribution in South Africa.

2.3.2 Sample size and sampling

The survey was conducted among 800 households. The 19 South African telephone directories were used as a sample frame to randomly select households to be interviewed. Table 2.1 shows that the allocation of sample elements was proportional to the distribution of residential entries in the directories.

TABLE 2.1

DISTRIBUTION OF SAMPLE ELEMENTS BY TELEPHONE DIRECTORY

Telephone directory	Sample distribution ¹⁾ %	Distribution of sample
Boland & West Coast	5.7	45
Cape Peninsula	13.9	110
Durban and surrounding areas	9.2	75
East London & Border	3.2	25
East Rand	7.5	60
Free State	4.9	40
Johannesburg	11.5	90
KwaZulu-Natal North Coast	2.3	20
KwaZulu-Natal South Coast	1.2	10
Mpumalanga	4.9	40
North West	4.0	30
Limpopo	2.9	25
Northern Cape and Namaqualand	2.2	20
Port Elizabeth and Eastern Cape	5.2	40
Pietermaritzburg and KwaZulu-Natal	4.0	30
Pretoria and surrounding areas	6.9	55
Southern Cape and Karoo	2.8	20
Vaal Triangle	2.3	20
West Rand	5.4	45
Total	100.0	800

1) The sample allocation was based on the distribution of entries by telephone directory.

2.3.3 Questionnaire

A prestructured questionnaire was used for the collection of data. The questionnaire was submitted to the NLB and Gidani for approval. The majority of questions were previously used in the 2003 survey. However, questions were also extended or added to accommodate additional needs expressed by the NLB and Gidani.

2.3.4 Interviews

The telephone interviews were conducted by well-trained interviewers. During training sessions interviewers were trained with regard to aspects such as general background to the study, information on the type of survey, approach towards respondents, asking of questions, recording of answers and probing.

The majority of telephonic contacts were made with households after 17h00 on weekdays or during weekends to ensure randomness in the gender composition and work status of respondents. The time schedule prescribed to fieldworkers was as follows:

- maximum of 25 % of interviews during the day (8h00-17h00)
- maximum of 25 % of interviews after-hours (17h00-21h00)
- at least 50 % during weekends

Confirmation was requested from respondents to ensure that only persons 18 years and older participated in the survey.

2.3.5 Time schedule

The questionnaires were completed from the second half of January to the second week of March 2010. Table 2.2 depicts expenditure and jackpot prizes during this period, suggesting possible higher spending coinciding with higher jackpot prizes for LOTTO on 27 January 2010 and PowerBall on 26 January 2010. Saturday's division-1 prize during the interview period ranged from R1 722 082 to R13 797 494 for LOTTO

and the Friday division-1 prize for PowerBall from R5 328 910 to R91 068 427 (division 1 prizes are only indicated for days when division 1 prizes were won).

TABLE 2.2

**LOTTO AND POWERBALL TICKET SALES AND PRIZE POOL,
26 JANUARY 2010 – 27 FEBRUARY 2010**

Date	Division 1 prize R	Total prize pool R	Total sales R
LOTTO			
Wednesday 27 January 2010	No winner	6 586 760	18 092 193
Saturday 30 January 2010	No winner	9 824 867	27 048 693
Wednesday 3 February 2010	8 588 266	15 824 756	19 854 404
Saturday 6 February 2010	No winner	8 777 905	23 997 435
Wednesday 10 February 2010	No winner	6 185 948	16 926 406
Saturday 13 February 2010	2 591 528	13 299 549	22 187 956
Wednesday 17 February 2010	1 250 220	6 831 488	15 223 387
Saturday 20 February 2010	1 741 422	9 462 562	21 204 536
Wednesday 24 February 2010	No winner	5 516 213	15 049 349
Saturday 27 February 2010	No winner	12 463 088	34 327 044
Wednesday 3 March 2010	No winner	7 362 417	20 204 439
Saturday 6 March 2010	13 797 494	23 353 601	26 035 978
Wednesday 10 March 2010	1 313 271	7 143 968	15 991 129
Saturday 13 March 2010	1 722 081	9 399 730	20 969 025
PowerBall			
Tuesday 26 January 2010	No winner	7 544 103	29 494 920
Friday 29 January 2010	No winner	9 273 053	36 243 011
Tuesday 2 February 2010	No winner	10 131 254	39 430 352
Friday 5 February 2010	No winner	11 313 636	44 110 346
Tuesday 9 February 2010	No winner	11 310 302	43 760 563
Friday 12 February 2010	91 068 427	104 229 507	50 425 136
Tuesday 16 February 2010	5 000 000	9 121 868	16 233 931
Friday 19 February 2010	No winner	5 192 374	20 279 031
Tuesday 23 February 2010	No winner	4 633 993	18 192 979
Friday 26 February 2010	No winner	5 931 275	22 884 386
Tuesday 3 March 2010	15 604 303	20 985 969	21 068 680
Friday 5 March 2010	No winner	4 992 764	19 803 185
Tuesday 9 March 2010	No winner	4 637 893	17 952 669
Friday 12 March 2010	5 328 910	15 376 161	18 540 900

2.4 PERSONAL INTERVIEWS

2.4.1 Introduction

As implied in section 2.2, the telephone survey, utilising telephone directories as sample frames, excluded non-Telkom subscribers from the survey. To ensure the inclusion of respondents without Telkom subscription in the personal interview subsurvey, the following screening question was asked at the beginning of the interview: 'Do you have a Telkom telephone at home?' A negative response to this question ensured continuation with a personal face-to-face interview with the respondent.

2.4.2 Study areas

It was assumed that the majority of households without in-home Telkom telephone access were located in formal township areas, informal settlements in urban areas and villages in rural areas. (The majority of formal houses in urban areas have direct access to Telkom telephones, implying the possibility of their inclusion in the telephone subsurvey.) As mentioned in section 2.2, agricultural communities located in typical rural areas characterised by a dispersed locational pattern, were excluded from the personal interview survey.

2.4.3 Sample size and sampling

The survey was conducted among 1 700 households, living primarily in formal and informal townships and villages. Table 2.3 shows the areas selected in each of the provinces that were visited for personal interviews.

TABLE 2.3

AREAS SELECTED FOR FACE-TO-FACE INTERVIEWS

Province	Selected areas
Eastern Cape	Motherwell, Ibhayi and Bizana
Free State	Mangaung and Boshabelo
Gauteng	Duduza (Nigel), Soweto, Orange Farm, Atteridgeville and Soshanguve
KwaZulu-Natal	Umlazi, Chatsworth, KwaMashu and Ulundi
Limpopo	Seshego, Lebowakgomo and Giyani
Mpumalanga	KwaGuga (Witbank) and Kanyamazane
Northern Cape	Galashewe
North West	Thabane and Mogale
Western Cape	Khayalitsha, Langa and Mitchells Plain

The face-to-face sample included metropolitan areas, urban settlements and villages/nonurban areas. The sample distribution by type of area is as follows:

- Metropolitan areas: 51.8 %
- Other urban areas: 22.9 %
- Villages/nonurban: 25.3 %

The following procedure was prescribed to fieldworkers in selecting houses (sample units) and the specific respondent within each selected house (sample element). The procedure was specifically aimed at adhering to the principle of random probability sampling.

Selection procedure for houses:

- **Residential area with street names and numbers**
Any house with a street number that was divisible by 15 (for instance 15, 30, 45, 150 or 180) in a street (for example, Main Street) could be selected. Only one house could be selected from a specific street in a suburb for purposes

of interviewing. In other words, a second address could not be selected from Main Street.

- **Residential areas with stand numbers**

Any house with a stand number divisible by 25 (for instance 25, 50, 75, 200, 1 650, et cetera) could be selected.

- **Informal dwellings, squatter areas or villages**

If the informal dwellings did not fall into a planned township but numbers were painted on the dwellings, dwellings with numbers divisible by 15 could be selected. If there were no numbers, the interviewer started with any house in the area and then selected every 10th house thereafter for interviewing. The address, as indicated on the questionnaire, had to be clear enough to permit return visits to the informal dwelling for control purposes.

The following procedure was followed in selecting the respondent in each house:

- Submission of the letter of introduction to the head of the household.
- Recording of birthdays of all household members aged 18 years and older, whether they were present during the visit or not. The interview was conducted with the person whose birthday was the closest to the day of the first visit to the household.
- If the selected person was not available immediately or during subsequent visits, the household member second on the birthday list was interviewed.
- If the residents of the house refused to participate, any of the houses directly neighbouring the initially selected house was approached.

The following could have influenced the findings of the face-to-face subsurvey to some extent:

- During the sample element selection process within the household, household members tended to nominate a member who participates in lottery games to

act as respondent. Nonticket buyers often refused to be selected as respondents on the grounds that the subject matter of the interview relates more to the experience and knowledge of lottery ticket buyers. This behaviour may have resulted in a degree of overestimating the participation rate. However, the prescribed 'birthday' approach described above largely eliminated this possible bias towards LOTTO participants in the sample.

- Household members also tended to nominate the household head or those with the highest qualification to be interviewed. To the extent that this occurred, the gender, work status, income and educational profile of the sample population could have been affected.
- Some fieldworkers reported that interviews were conducted during the day due to security risks at night. This applied particularly to female fieldworkers. A large percentage of face-to-face interviews was conducted in informal areas, which frequently have no street lighting. This may have created some bias towards females and unemployed respondents usually at home during the day. This problem was largely countered by instructing fieldworks to conduct as many interviews as possible during weekends. This naturally caused some delay in the completion of the survey.

2.4.4 Questionnaire

The questionnaire was exactly the same as that used in the telephone survey.

2.4.5 Interviewing

Interviewers were trained, ensuring comprehension of all questions by interviewers. The questionnaires for the study were completed from the latter half of January to the first half of March 2010.

2.4.6 Checkbacks

Checkbacks to ensure the reliability of survey findings proved an extremely cumbersome procedure as the absence of Telkom telephone access was the qualifying condition in the face-to-face subsurvey. Respondents supplying cellphone numbers or work telephone numbers were contacted telephonically. Personal checkbacks were conducted in some areas. Where possible, field supervisors were also requested to do checkbacks. The editing and data cleaning processes were particularly rigorous. Questionnaires of respondents were edited simultaneously to detect any standard response. If any suspicion arose, further checkbacks were initiated.

2.5 WEIGHTING

The composition of the total sample shows a small bias towards households with in-home Telkom telephones. The All Media and Products Survey (AMPS) shows that just more than 20 % of the approximately 11 million households in South Africa have access to in-house Telkom telephones while households with Telkom telephones constituted 32.0 % of the total sample. Consequently, weights were applied in the dataset to ensure pro-rata representation. The weights applied were as follows:

- 0.64 for personal interviews
- 0.36 for telephone interviews

The allocation of the above weights to the samples ensured that the total sample largely reflected the same distribution as the population at large with regard to in-home access to Telkom telephones, which also served as a proxy for household income levels. Survey results confirm that household income among Telkom telephone owners was substantially higher than among non-Telkom telephone owners.

2.6.1 PARTICIPATION

Generally, respondents were not negative about any of the questions. However, the question on personal and household income levels was experienced as sensitive and 14.4 % of respondents did not want to divulge their income levels, especially in the telephone (high income) subsurvey.

2.7 ACCESS TO RETAIL OUTLETS

Although access to retail outlets selling lottery tickets was never a deliberate criteria for selecting sample elements, a small percentage (2.3 %) of respondents advanced lack of access to retail outlets as the main reason for abstaining from participating in lottery games.

2.8 VALIDITY OF THE RESULTS

Properly conducted sample surveys yield useful estimates but not exact values. Errors may arise from sampling, nonresponse, reporting and processing. The nature and scope of these errors are discussed below.

2.8.1 Sample error

Sample error arises because only a small portion of the population is interviewed. As the data collected in these subsurveys are based on representative samples drawn through a probability method, the size of the sample errors can be calculated. However, despite the existence of statistical techniques for calculating the extent of sample errors, it is hardly practical to compute the sample error of every average calculated in the study. Sample errors are computed from the standard deviation of sampling means. The function of the sample error is to provide an interval within which the sample mean may have deviated from the true population mean as a result of random sampling variations. This interval is termed the confidence region.

The following formula is used to calculate the sample error for proportionate data:

$$\sigma_{\bar{p}} = \sqrt{\frac{p(100-p)}{n}}$$

where p = percentage of respondents who possess the characteristics of interest

n = number of observations

Table 2.4 shows the interval estimates of the total population at a 95 % level of confidence for the participation of the population in lottery games.

TABLE 2.4
INTERVAL ESTIMATES FOR PARTICIPATION IN LOTTERY GAMES, 2010

Modes	% participation	Interval estimates	
		Low (%)	High (%)
LOTTO	32.3	30.5	34.2
LOTTO Plus	26.3	24.6	28.0
Scratch Cards	6.2	5.3	7.2
SportStake	3.3	2.6	4.0
PowerBall	16.4	14.9	17.8
None of the above	60.7	58.8	62.6

It is clear from the table that the survey findings show a LOTTO participation rate of 32.3 %. Based on a 95 % level of confidence, a percentage as low as 30.5 % and as high as 34.2 % are probabilities for LOTTO participation of the South African population. It can therefore be stated that the percentage of the population who procure lottery tickets will not deviate more than 3.7 % from the 32.3 % resulting from the survey at a 95 % confidence level. The percentage buying LOTTO tickets will, therefore, not be less than 30.5 % (ie 32.3 % - 1.8 %) or more than 34.2 % (ie 32.3 % + 1.9 %). For those that abstained from lottery games the interval estimates may vary between a low of 58.8 % and a high of 62.6 %. The above example serves as an indication of the confidence region for participation in lottery games. The same calculation can be effected for

other survey findings as well. The conclusion emanating from the above calculation is that the confidence level for the survey is high due to relatively small interval levels.

2.8.2 Interviewer errors

Three types of error can be caused by an interviewer's behaviour, namely errors in asking questions, errors in recording answers and errors due to cheating. Although interviewers were well trained it is possible that these types of mistakes may have a negative influence on the survey results. Checkbacks revealed cheating by a few interviewers whose work had to be redone.

2.8.3 Reporting errors

It is virtually impossible to eliminate reporting errors completely. Every possible precaution was taken in the construction of the questionnaire and the training and supervision of the interviewers to minimise these errors. The fact remains, however, that respondents tend to overstate status items such as level of training and income level. The opposite occurs for commitments such as possible financial responsibilities and other aspects perceived by respondents to be negative behaviour such as smoking, alcohol consumption and gambling, especially addictive gambling.

2.8.4 Processing errors

Errors of calculation are not uncommon in the processing of data. Measures taken in this study to keep such errors to a minimum include sequence tests, which show up duplication of data on computer databases, and minimum- and maximum-value tests, which identify impossible and improbable values. Extensive crosschecking was also conducted to verify data stability where possible.

2.8.5 Nonresponse

As indicated previously, two procedures were applied in cases of nonresponse. Telephone interviewers were supplied with a selection of pages of telephone

directories. Interviewers were instructed to select the first household in the second column of each selected page. If this call failed to result in a successful interview, the rest of the household entries on the page could be regarded as substitutes. In the case of personal interviews, a specific procedure was prescribed. Whenever there were problems such as refusals, nobody at the dwelling or respondents refusing to continue with the interviews, the households were substituted with the next dwelling. Generally, participation in the survey was very good. Substitution in the telephone survey was mainly caused by contact failures, notwithstanding the usage of the most recent telephone directories. Substitution in the personal interview subsurvey was almost non-existent and where this occurred, it was caused by factors such as nobody at the dwelling or refusal to participate.

2.9 **LONGITUDINAL COMPARISONS**

Where applicable, the 2003 survey findings are incorporated in the analysis. This will allow detection of changes in the lottery gambling behaviour of the population between 2003 and 2010. The approach followed in the report is to first provide a detailed description of the 2010 survey findings, followed by identification of any behavioural or trend changes evident since 2003.

CHAPTER 3

SURVEY FINDINGS

3.1 INTRODUCTION

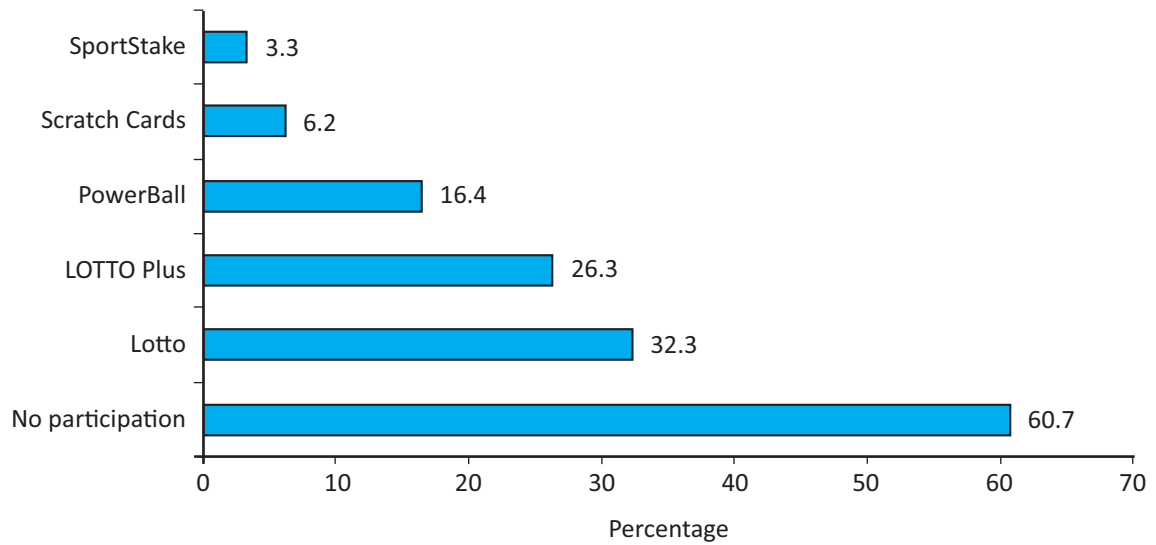
This chapter discusses the findings of the community survey. Community behaviour and attitudes are crosstabulated by sociodemographic variable to portray the profile of the South African population (18 years and older) regarding their participation in lottery games. Where possible, longitudinal trends through 2003 and 2010 comparisons are provided at the end of each section. Sections 3.2 to 3.8 analyse the responses of the whole sample population while sections 3.9 to 3.26 analyse the responses of only those who confirmed their participation in lottery games. The analysis continuously alerts the reader to the specific sample/subsample population under discussion.

3.2 PARTICIPATION IN LOTTERY GAMES

The response to the question ‘Have you participated in any of the following National Lottery activities during the **past month?**’ is shown in figure 3.1. Just less than a third (32.3 %) of respondents confirmed that LOTTO tickets were bought during the one month preceding the survey. This is followed by a participation rate of 26.3 % for LOTTO Plus and 16.4 % for PowerBall. Buying Wina Manje Scratch Cards was far less popular as only 6.2 % of the respondents confirmed their buying of Scratch Cards. The lowest propensity was recorded for SportStake at 3.3 % of the population 18 years and older. Three in every five (60.7 %) of the sample population indicated that they did not participate in any lottery games during the month prior to the survey. This confirms that almost two in every five (39.7 %) of all South African adults (18 years) participated at least once in lottery games during the month preceding their interview.

FIGURE 3.1

PARTICIPATION IN LOTTERY GAMES DURING THE MONTH PRECEDING THE SURVEY, 2010



The rest of section 3.2 disaggregates participation in lottery games by sociodemographic variable.

3.2.1 Participation by age group

Table 3.1 shows the participation of the population in lottery games by age group. The table confirms that the propensity to play LOTTO is the lowest among people older than 60 years and younger than 30 years (22.1 % and 29.7 %) respectively. Participation levels are the highest in the age groups 31 to 40 years (36.4 %) and 41 to 50 years (37.6 %). The same pattern is evident with regard to the other lottery games as well – lowest participation rate in the oldest and youngest age categories with somewhat higher rates among the middle-age groups. Percentage for those not participating in lottery games at all ranged from 72.5 % among the 60 years and older group to just more than 50.0 % of the 31-to-50 year age group.

TABLE 3.1**PARTICIPATION IN LOTTERY GAMES BY AGE GROUP, 2010**

Lottery games	18-30 years %	31-40 years %	41-50 years %	51-60 years %	Older than 60 %	Total %
LOTTO	29.7	36.4	37.6	32.2	22.1	32.4
LOTTO Plus	21.5	30.9	34.8	24.2	17.9	26.3
Scratch Cards	6.3	8.0	7.2	4.7	1.8	6.2
SportStake	3.9	4.6	3.2	1.9	0.0	3.3
PowerBall	12.9	19.0	20.4	15.3	15.1	16.4
None of the above	63.9	55.9	52.9	63.9	72.5	60.7

3.2.2 Participation by employment status

Table 3.2 shows participation levels of respondents by employment status. The general pattern across all lottery games emerging from the survey findings is relatively low propensities to play lottery games among retirees/nonworkers and the unemployed and much higher participation levels among workers (both full time and part time). In the case of LOTTO, for example, participation rates of retirees/nonworkers and the unemployed stood at 21.4 % and 26.8 % respectively compared to the 39.8% and 36.5 % of full-time and part-time workers respectively.

This pattern is also clearly evident among those not playing any lottery games during the month preceding the survey. Nonparticipation stood at 73.6 % of retirees/nonworkers and 67.2 % of unemployed while just more than half the workers (part- and full time) confirmed their nonparticipation.

TABLE 3.2

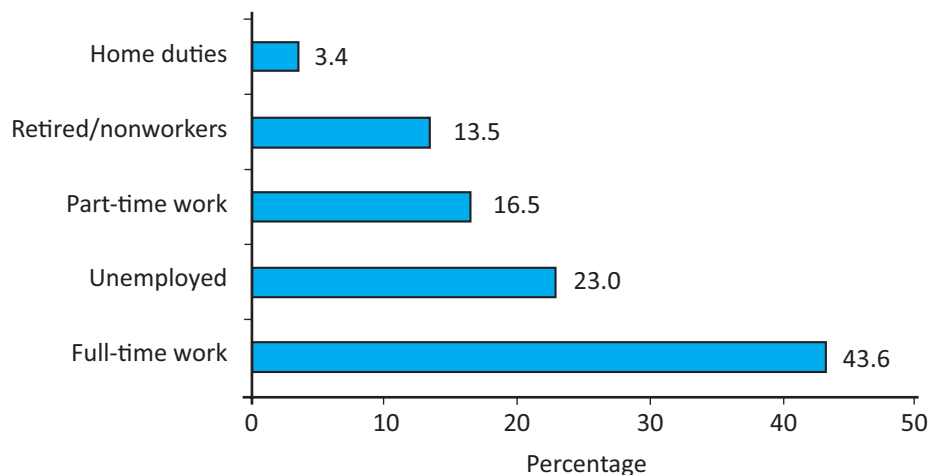
PARTICIPATION IN LOTTERY GAMES BY EMPLOYMENT STATUS, 2010

Lottery games	Full-time work %	Part-time work %	Unemployed (Looking for work) %	Retired/nonworker %	Total %
LOTTO	39.8	36.5	26.8	21.4	32.4
LOTTO Plus	33.3	29.2	21.1	17.0	26.3
Scratch Cards	8.0	8.1	5.4	2.4	6.2
SportStake	4.1	6.0	2.1	1.3	3.3
PowerBall	21.8	16.2	11.5	13.2	16.4
None of the above	52.0	55.2	67.2	73.6	60.7

Figure 3.2 depicts the employment status of all respondents participating in lottery games during the 30 days prior to the survey. More than two in every five (43.6 %) lottery players were involved in full-time work. Together with part-time workers (16.5 %), three in every five players were active in the labour market. Just less than a quarter (23.0 %) of lottery players were unemployed. This figure is substantially lower than the 36.8 % unemployed participating in lottery games (LOTTO and Scratch Cards) in 2003.

FIGURE 3.2

DISTRIBUTION OF PARTICIPANTS IN LOTTERY GAMES BY EMPLOYMENT STATUS, 2010



3.2.3 Participation by educational level

The general pattern is that the propensity to play lottery games is the lowest among those without formal schooling. Almost eight in every 10 respondents (82.4 %) with no formal schooling abstained from lottery games. This percentage dropped to 57.1 % among those with secondary schooling. The patterns by type of lottery game show the following tendency:

- LOTTO, LOTTO Plus and Scratch Cards are the most popular among those with secondary schooling followed by primary school leavers.
- SportStake is proportionally the most popular among those with secondary and tertiary qualifications – in fact those with no formal schooling did not participate in SportStake at all.
- PowerBall shows more or less the same popularity across all educational categories.

TABLE 3.3

PARTICIPATION IN LOTTERY GAMES BY EDUCATIONAL LEVEL, 2010

Lottery games	No formal schooling %	Primary (Grade 1-7) %	Secondary (Grade 8-12) %	Tertiary (Post matric) %	Total %
LOTTO	17.6	30.3	34.7	27.4	32.3
LOTTO Plus	14.2	24.9	29.6	18.0	26.3
Scratch Cards	0.0	4.5	7.6	3.5	6.2
SportStake	0.0	1.8	3.6	3.3	3.3
PowerBall	15.7	14.1	17.2	15.1	16.4
None of the above	82.4	65.3	57.1	67.5	60.7

3.2.4 Participation by population group

Participation levels of especially the Indian/Asian and Coloured population groups were substantially higher than the other two groups. Table 3.4 shows that only 41.1 % of Indian/Asian and 54.6 % of Coloured respondents did not play any lottery games

during the one month preceding the survey. The percentage of Africans that did not play stood at 61.9 % and that of Whites at 70.9 %. The following is also evident from the table:

- Participation in Wina Manje Scratch Cards and SportStake is virtually negligible among Whites.
- Indian/Asian participation shows relatively high levels in all lottery games, especially Scratch Cards and SportStake.

TABLE 3.4

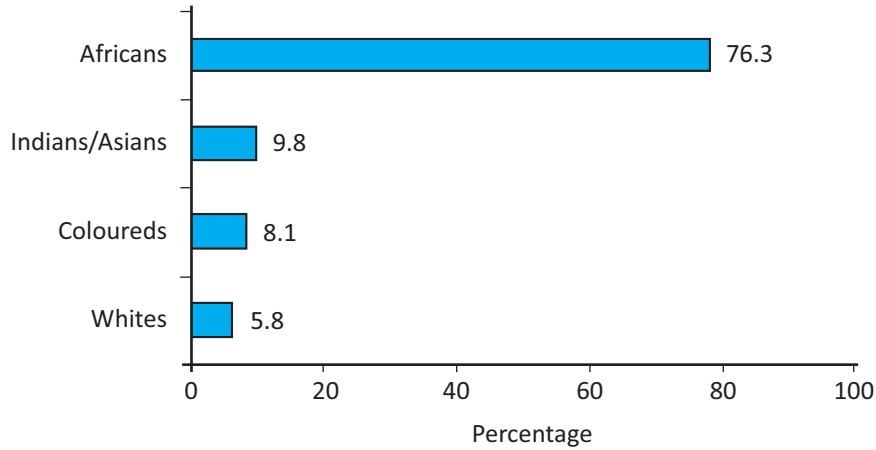
PARTICIPATION IN LOTTERY GAMES BY POPULATION GROUP, 2010

Lottery games	African %	Indian/Asian %	Coloured %	Whites %	Total %
LOTTO	30.4	58.2	40.5	22.6	32.3
LOTTO Plus	25.2	52.3	30.4	12.3	26.3
Scratch Cards	6.4	11.5	5.6	0.3	6.2
SportStake	3.4	8.6	0.0	0.3	3.3
PowerBall	14.5	31.3	18.3	21.3	16.4
None of the above	61.9	41.1	54.6	70.9	60.7

Although the participation rates of Indians/Asians and Coloureds were fairly high, their shares in total lottery participation are fairly small due to their relatively small shares in the total population. Figure 3.3 shows the composition of lottery players by population group (ie not the participation levels within a particular population group but the share of all participants). Of all the lottery participants, three in every four (76.3 %) were Africans, followed by Indians/Asians (9.8 %), Coloureds (8.1 %) and Whites (only 5.8 %).

FIGURE 3.3

SHARE IN LOTTERY GAMES BY POPULATION GROUP, 2010



The above dominance of Africans in lottery games implies that all the patterns and tendencies detected in the survey findings are largely dictated by those of the African population group.

3.2.5 Participation by gender

Males show a considerably higher propensity to play lottery games than females. Only half (49.8 %) the males abstained from lottery games in the month preceding the survey. The percentage for females amounted to 67.3 % (table 3.5). The smallest differential by gender is for Scratch Cards and the largest is for SportStake.

TABLE 3.5

PARTICIPATION IN LOTTERY GAMES BY GENDER, 2010

Lottery games	Male %	Female %	Total %
LOTTO	41.0	27.1	32.3
LOTTO Plus	33.2	22.2	26.3
Scratch Cards	6.7	5.9	6.2
SportStake	6.6	1.3	3.3
PowerBall	21.4	13.3	16.4
None of the above	49.8	67.3	60.7

3.2.6 Participation by personal income category

Table 3.6 crosstabulates participation in lottery games according to monthly personal income. The table confirms a largely positive correlation between level of personal income and propensity to play lottery games – generally it seems that participation levels increase with higher income levels. Of those earning less than R500 a month, 67.2 % did not participate in lottery games in the month prior to the survey. This percentage amounted to 42.6 % for those earning in excess of R20 000 per month. This correlation is clearly evident in the buying of LOTTO tickets – participation rates increased from 25.8 % among those earning less than R500 per month to 50.6 % among those earning an income above R20 000 per month. Participation in Wina Manje Scratch Cards shows a relatively low propensity among the lowest income categories, a gradual increase among middle-income categories and then a decline again to even 0 % among the most affluent.

TABLE 3.6

PROPENSITY TO PARTICIPATE IN LOTTERY GAMES BY MONTHLY PERSONAL INCOME CATEGORY, 2010

Lottery games	Less than R500 %	Between R501-R1 000 %	Between R1 001-R2 000 %	Between R2 001-R5 000 %	Between R5 001-R10 000 %	Between R10 001-R20 000 %	More than R20 000 %	Do not want to disclose %	Total %
LOTTO	25.8	33.1	31.5	45.7	42.2	25.7	50.6	24.8	32.4
LOTTO Plus	20.5	22.8	28.6	38.8	34.5	24.5	30.1	19.0	26.3
Scratch Cards	4.6	5.8	7.5	9.7	6.7	4.3	0.0	5.6	6.3
SportStake	2.8	3.8	2.5	4.6	6.4	0.0	4.0	2.3	3.3
PowerBall	11.8	13.8	17.2	22.3	24.7	16.2	39.8	13.1	16.4
None of the above	67.2	61.7	60.4	46.3	52.3	64.8	42.6	68.7	60.6

The above-mentioned positive correlation between personal income levels and lottery participation clearly differs from the 2003 survey findings. In 2003 a negative correlation was detected, implying a fairly high propensity to play lottery games among the less affluent group. This tendency confirms that the large decline in participation rates is primarily among the less affluent income groups.

3.2.7 Longitudinal patterns

The propensity of the South African population (18 years and older) to participate in lottery games from 2003 to 2010 is shown in table 3.7. Participation in lottery games has declined substantially since the introduction of the National Lottery. Those that abstained from lottery games increased from 30.6 % in 2003 to 60.7 % in 2010. This implies that the percentage of the population participating in lottery games in 2010 is less than half of what it was in 2003. Participation in LOTTO, for example, decreased from 69.1 % in 2003 to 32.3 % in 2010. The same holds true for Scratch Cards, with participation declining from 12.6 % in 2003 to 6.2 % of the adult population in 2010. The relatively low level of 29.2 % in 2009 relative to the 2010 figures may largely be ascribed to the global recession stretching from the second half of 2008 to late in 2009 when the first signs of economic recovery started to appear.

TABLE 3.7

PLAYING LOTTERY GAMES: LONGITUDINAL COMPARISONS, 2003-2010

Lottery games	2003 Uthingo/NLB study %	2005 NGB study %	2009 NGB study %	2010 Gidani/NLB study %
LOTTO	69.1	45.8	29.2	32.3
LOTTO Plus	-	-	-	26.3
PowerBall	-	-	-	16.4
Scratch Cards	12.6	7.8	6.4	6.2
SportStake	-	-	-	3.3
None of the above	30.6	-	-	60.7

Sources: Ligthelm 2003; Ligthelm, Mango & Jonkheid 2005; Ligthelm & Jonkheid 2009

Table 3.8 shows some of the changes in the demographic profile of lottery players occurring from 2003 to 2010. The average age of lottery players remained fairly constant – an average of 37.2 years in 2003 and 38.1 years in 2010. The stability is also evident with regard to the African population group as percentage of all lottery players

(75.5 % in 2003 and 76.3 % in 2010) and the gender divide (males amounted to 46.7 % in 2003 and 48.2 % in 2010).

However, the figures also show substantial changes with regard to the share of the unemployed (declined from 36.9 % in 2003 to 23.0 % in 2010), educational level (primary school and less qualifieds decreased from 17.9 % in 2003 to 11.7 % in 2010) and particularly the level of income (players earning less than R1 000 per month declined from 60.5 % in 2003 to 34.7 % in 2010). The above suggests that the most marked decline in the propensity to play lottery games is largely among the ranks of the less affluent (ie the unemployed, low qualifieds and those at the lower end of the income scale).

TABLE 3.8

CHANGE IN THE SOCIODEMOGRAPHIC PROFILE OF LOTTERY PLAYERS, 2003 TO 2010

Demographic variable	Measurement	2003	2010
Average age	years	37.2	38.1
Unemployed as % of total players	%	36.9	23.0
Primary education as % of players	%	17.9	11.7
Africans as % of players	%	75.5	76.3
Males as % of players	%	46.7	48.2
Players earning less than R1 000 per month as % of players	%	60.5	34.7

3.3 REASONS FOR NONPARTICIPATION IN LOTTERY GAMES

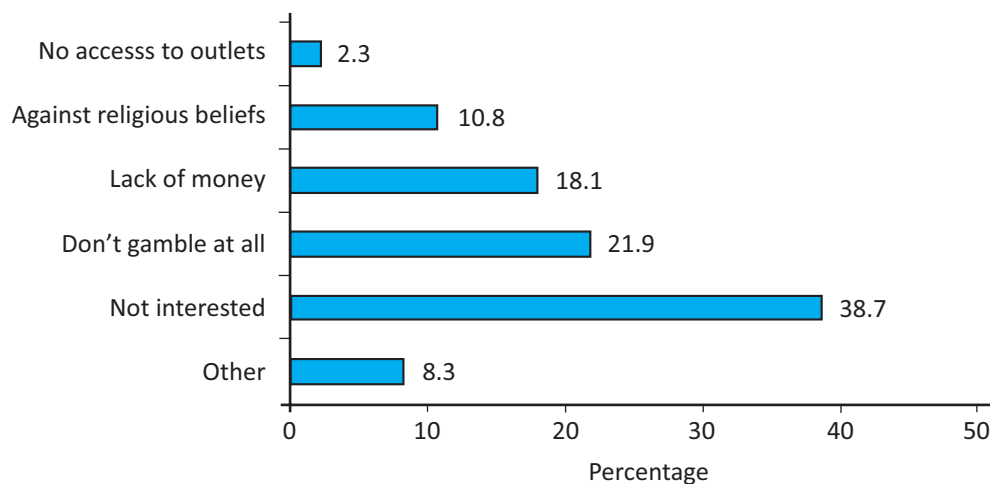
The three in every five (60.7 %) respondents who indicated that they had not participated in any lottery games during the month preceding the interview, were asked to indicate the main reason for their nonparticipation. Figure 3.4 shows that the following reasons, in order of importance, explain their nonparticipation:

- Not interested 38.7 %
- Don't gamble at all 21.9 %
- Lack of money 18.1 %
- Against religious beliefs 10.8 %

It is interesting to note that only 2.3 % of the respondents mentioned a lack of access to retail facilities selling lottery tickets as their main reason for abstaining from playing lottery games.

FIGURE 3.4

REASONS ADVANCED BY RESPONDENTS FOR NOT PARTICIPATING IN LOTTERY GAMES, 2010



The rest of this section disaggregates the reasons for nonparticipation in lottery games by various sociodemographic variables.

3.3.1 Nonparticipation by age group

Table 3.9 shows the reasons advanced for nonparticipation in lottery games by age group. With some minor deviations the reasons for abstaining are largely similar across age groups. The following is evident from table 3.9:

- The percentage of respondents that advanced religious beliefs as reason for nonparticipation increased in the higher age categories.
- Lack of money as a reason for abstaining from participation is more prominent in the middle age groups.
- ‘Don’t gamble at all’ is more prominent among the younger age groups.

TABLE 3.9**REASONS FOR NONPARTICIPATION IN LOTTERY GAMES BY AGE GROUP, 2010**

Reasons for nonparticipation	18-30 years %	31-40 years %	41-50 years %	51-60 years %	Older than 60 %	Total %
Lack of money	15.4	18.4	19.4	27.0	15.0	18.1
Against religious beliefs	6.5	11.8	14.8	14.1	12.7	10.8
Don’t gamble at all	26.5	21.7	20.1	13.9	18.9	21.9
No access to outlets selling LOTTO tickets/Scratch Cards	1.7	2.6	2.8	2.7	2.3	2.3
Not interested	44.7	37.3	30.5	34.7	38.1	38.6
Other	5.1	8.3	12.4	7.6	13.0	8.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

3.3.2 Nonparticipation by employment status

Table 3.10 shows the reasons advanced for nonparticipation in lottery games by employment status. In the case of all employment groups, ‘not interested in gambling’ and ‘don’t gamble at all’ played dominant roles. ‘Lack of money’ was of particular importance among the unemployed. ‘Against religious beliefs’ was more prominent in the case of full-time workers and retired/nonworkers compared to the other employment groups.

TABLE 3.10

REASONS FOR NONPARTICIPATION IN LOTTERY GAMES BY EMPLOYMENT STATUS, 2010

Reasons for nonparticipation	Full-time work %	Part-time work %	Unemployed (Looking for work) %	Retired/nonworker %	Other %	Total %
Lack of money	10.0	18.9	26.0	18.0	15.2	18.1
Against religious beliefs	14.5	8.9	6.8	11.7	19.5	10.8
Don't gamble at all	21.6	26.5	20.9	20.6	23.2	21.8
No access to outlets selling LOTTO tickets/Scratch Cards	1.2	4.4	2.4	2.4	0.0	2.3
Not interested	42.6	36.2	37.2	37.8	29.0	38.7
Other	10.2	5.1	6.8	9.4	13.0	8.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

3.3.3 Nonparticipation by educational level

Table 3.11 confirms a positive correlation between level of education and abstaining from gambling. This implies that the higher the level of education, the higher the percentage of respondents not interested in gambling. The 'not interested' category increased from 23.8 % among those with no formal education to 47.5 % among the tertiary qualifieds.

On the other hand, as may be expected, there is a negative correlation between educational level and the availability of money for participating in lottery games. Lack of money as a reason for nonparticipation is advanced by 42.3 % of those without any schooling while only 8.0 % of the respondents with post-matric qualifications mentioned this reason. This reflects a lack of adequate disposable income among those with no or only primary education.

TABLE 3.11

REASONS FOR NONPARTICIPATION IN LOTTERY GAMES BY EDUCATIONAL LEVEL, 2010

Reasons for nonparticipation	No formal schooling %	Primary (Grade 1-7) %	Secondary (Grade 8-12) %	Tertiary (Post matric) %	Total %
Lack of money	42.3	29.4	18.8	8.0	18.1
Against religious beliefs	4.2	12.2	10.4	11.4	10.8
Don't gamble at all	14.9	15.3	24.0	20.8	21.9
No access to outlets selling LOTTO tickets/Scratch Cards	4.2	2.3	1.9	2.9	2.3
Not interested	23.8	29.8	37.7	47.5	38.7
Other	10.7	11.0	7.3	9.3	8.3
Total	100.0	100.0	100.0	100.0	100.0

3.3.4 Nonparticipation by population group

The reasons advanced for abstaining from participation in lottery games differ substantially across population groups. The following is evident from table 3.12:

- Lack of money is mentioned by 20.1 % of the African population while it is a minor reason in the case of Whites (5.3 %).
- Against religious beliefs is very prominent among nongambling Indians/Asians (35.6 %) and Coloureds (33.2 %) but plays a less important role among Whites and especially Africans (7.2 %).
- Not interested in participating in lottery games is advanced as the most important reason by White respondents (47.8 %) and Africans (38.8 %).

TABLE 3.12**REASONS FOR NONPARTICIPATION IN LOTTERY GAMES BY POPULATION GROUP, 2010**

Reasons for nonparticipation	African %	Indian/Asian %	Coloured %	White %	Total
Lack of money	20.1	11.9	14.3	5.3	18.1
Against religious beliefs	7.2	35.6	33.2	14.5	10.8
Don't gamble at all	22.5	11.9	18.6	23.7	21.9
No access to outlets selling LOTTO tickets/Scratch Cards	2.6	1.0	1.2	1.0	2.3
Not interested	38.8	32.7	28.8	47.8	38.7
Other	8.8	6.9	3.9	7.7	8.3
Total	100.0	100.0	100.0	100.0	100.0

3.3.5 Nonparticipation by gender

A lack of money as reason for nonparticipation in lottery games is slightly more important for males (20.8 %) than for females (16.9 %). About one fifth of both genders reported that they don't gamble at all. A large percentage of both genders indicated that they are not interested in lottery games at all (males 37.1 % and females 39.5 %).

TABLE 3.13**REASONS FOR NONPARTICIPATION IN LOTTERY GAMES BY GENDER, 2010**

Reasons for nonparticipation	Male %	Female %	Total %
Lack of money	20.8	16.9	18.1
Against religious beliefs	13.7	9.4	10.7
Don't gamble at all	21.4	22.1	21.9
No access to outlets selling LOTTO tickets/Scratch Cards	1.3	2.7	2.3
Not interested	37.1	39.5	38.7
Other	5.8	9.5	8.3
Total	100.0	100.0	100.0

3.3.6 Nonparticipation by personal income category

Nonparticipation in lottery games by income category (table 3.14) confirms that a large percentage of respondents with high incomes advanced religious beliefs for their

abstention from gambling (6.9 % in the less than R500 per month income category and almost 20.0 % in both the R5 001-R10 000 and R10 001-R20 000 categories). The table also confirms a positive correlation between income level and a lack of interest in playing lottery games. While 39.3 % in the less than R500 income category indicated that they are not interested, more than half (52.0 %) in the R20 000 plus income category advanced this reason for abstention. As could be expected, a lack of money correlated negatively with income as reason for abstaining from playing lottery games.

TABLE 3.14

REASONS FOR NONPARTICIPATION IN LOTTERY GAMES BY MONTHLY PERSONAL INCOME CATEGORY, 2010

Reasons for nonparticipation	Less than R500 %	Between R501-R1 000 %	Between R1 001-R2 000 %	Between R2 001-R5 000 %	Between R5 001-R10 000 %	Between R10 001-R20 000 %	More than R20 000 %	Do not want to disclose %	Total %
Lack of money	22.9	23.6	17.0	15.4	8.7	3.7	5.3	16.1	18.1
Against religious beliefs	6.9	9.7	6.9	9.6	19.1	21.2	10.7	18.2	10.9
Don't gamble at all	21.5	19.6	29.4	21.4	26.7	15.3	10.7	16.8	21.9
No access to outlets selling LOTTO tickets/Scratch Cards	2.8	3.5	2.2	1.9	3.0	1.2	5.3	0.0	2.2
Not interested	39.3	33.9	33.3	41.4	36.0	42.1	52.0	43.1	38.6
Other	6.6	9.6	11.3	10.3	6.6	16.5	16.0	5.8	8.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

3.3.7 Longitudinal comparisons

Table 3.15 compares the reasons for not participating in lottery games in 2003 and 2010. The table suggests a change of motivation for nonparticipation during the past seven years. The following changes are evident:

- Lack of money (27.6 % in 2003 and 18.1 % in 2010) was recorded by substantially fewer respondents in 2010. This may be due to household income growth and/or a smaller share of the less affluent participating in lottery games (see

below). As discussed in section 3.2.7, the less marked decline in the levels of participation of the less affluent largely explains this phenomenon.

- 'Against religious beliefs' as motivational factor for nonparticipation declined from 18.0 % in 2003 to 10.8 % in 2010.
- 'Don't gamble at all' more than doubled as reason from 9.9 % in 2003 to 21.9 % in 2010 while 'not interested' increased from 33.3 % to 38.7 %. Both these reasons confirmed a substantial decline in the percentage of the adult South African population participating in lottery games.

TABLE 3.15

COMPARISON OF REASONS FOR NOT PARTICIPATING IN LOTTERY GAMES, 2003 AND 2010

Reasons for abstaining	2003 %	2010 %
Not interested	33.3	38.7
Lack of money	27.6	18.1
Against religious beliefs	18.0	10.8
Don't gamble at all	9.9	21.9
No access to outlets	1.0	2.3

3.4 MOTIVATIONAL FACTORS FOR ENGAGING IN LOTTERY GAMES

The 60.7 % of respondents that did not participate in lottery games in the month preceding their interview were asked if the following means of accessing lottery games would motivate them to participate:

- online banking
- playing lottery games through a cellphone
- using a bank ATM to play lottery games
- playing lottery games at till points in supermarkets

Table 3.16 reveals that alternative means of accessing lottery games provide fairly

limited incentive. Only 3.6 % and 4.3 % respectively confirmed the possibility of their participation should they become aware of participation via ATMs and on-line banking. However, somewhat higher motivational incentive was attached to cellphone (10.4 %) and till point (16.9 %) access in supermarkets.

TABLE 3.16

RESPONSE TO THE QUESTION: 'WOULD THE FOLLOWING MEANS OF ACCESSING LOTTERY GAMES MOTIVATE YOU TO PARTICIPATE?'

Means of accessing lottery games	Yes %	No %	Total %
Through online banking	4.3	95.7	100.0
Through a cellphone	10.4	89.6	100.0
Through a bank ATM	3.6	96.4	100.0
At till points in supermarkets	16.9	83.1	100.0

Although fairly limited support was expressed for alternative means of accessing lottery games, the following provides some insight into the characteristics of the respondents expressing interest in the alternative means.

Those that responded positively on online banking as an alternative means of accessing lottery games, show the following characteristics:

- between 18-30 years (youngest age category)
- part-time and full-time workers
- with tertiary educational qualifications
- White population group
- no gender differentiation
- highest income categories

Those that responded positively to playing lottery games through a cellphone, show the following characteristics:

- youngest age group (18-30 years)
- part-time and full-time workers
- with tertiary qualifications
- Indian/Asian, Coloured and White population groups
- no gender differentiation
- highest income category

Those that responded positively to playing lottery games through a bank ATM show the following characteristics:

- age groups between 18-60 years
- part-time and full-time workers
- with tertiary qualifications
- White population group
- males
- middle and higher income categories

Those that responded positively to playing lottery games at till points in supermarkets show the following characteristics:

- all age groups
- retired/nonworkers and the unemployed
- with no formal schooling
- African and White population group
- no gender differentiation
- lowest and middle income categories

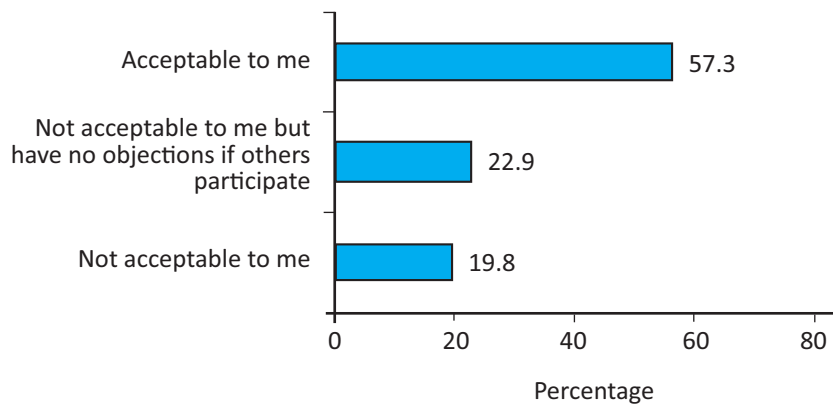
3.5 PERSONAL VIEWS ON LOTTERY GAMES

A question was addressed to all respondents enquiring on their personal views on participating in lottery games. The following three choices were put to respondents:

- acceptable to me
- not acceptable to me but have no objections to others participating
- not acceptable to me

Figure 3.5 shows that 57.3 % of the respondents confirm that participating in lottery games is acceptable to them. Just less than one in every five (19.8 %) respondents find lottery games unacceptable while the rest do not participate in lottery games but have no objections if others participate (22.9 %).

FIGURE 3.5
PERSONAL VIEWS ON PARTICIPATING IN LOTTERY GAMES, 2010



The respondents (19.8 %) that indicated that participation in lottery games is not acceptable to them portray the following characteristics:

- fairly equally spread across all age groups
- part-time workers and retired/nonworkers (albeit a somewhat lower level of acceptance)
- fairly equally spread across all educational levels
- Africans and Whites (albeit a somewhat lower level of acceptance)
- No marked differentiation between gender groups
- Fairly equally spread across all income groups

The percentage of respondents expressing approval of lottery games in 2010 (57.3 %) is almost 10.0 % higher than the 48.7 % who indicated that gambling is acceptable to them during an NGB survey in 2009 (NGB 2009:33).

3.6 **ATTITUDES TOWARDS LOTTERY GAMES**

All respondents were asked to present their views (opinions) on six statements exploring their knowledge of lottery institutions and their attitudes towards lottery games. Respondents were presented with three alternatives, namely 'agree', 'disagree' or 'don't know'. The results are depicted in table 3.17.

Awareness of the existence of the NLB and Gidani among the adult South African population seems to be average. Just more than half (52.1 %) the respondents were aware of the NLB and 45.0 % of Gidani. Almost three in every five (59.1 %) confirmed their awareness of 'good cause' money distributed from the money generated by the National Lottery (National Lottery Distribution Trust Fund – NLDTF). Almost the same percentage of respondents (59.7 %) expressed their agreement that the National Lottery is good for South African society.

Almost half (49.2 %) the respondents confirmed the view that most people play the lottery sensibly and a small minority (17.6 %) felt that people should be discouraged from playing lottery games. This reaction confirms strong support for freedom of

choice – even in view of the fact that almost a third (30.6 %) of respondents disagreed with the view that most people play the lottery sensibly.

TABLE 3.17

PERSONAL VIEWS ON THE NATIONAL LOTTERY, 2010

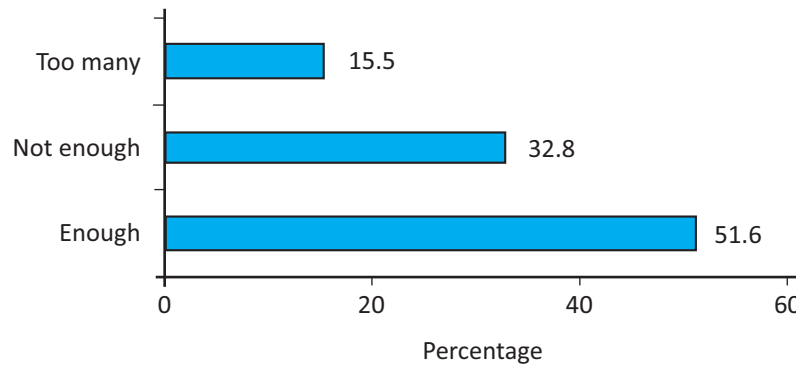
Statements	Agree %	Disagree %	Don't know %	Total %
I am aware of the National Lotteries Board (NLB)	52.1	39.1	8.8	100.0
I am aware of Gidani as the National Lottery Operator	45.0	44.5	10.5	100.0
I am aware of the 'good cause' monies distributed by the NLDTF	59.1	31.5	9.4	100.0
On balance, the National Lottery is good for society	59.7	26.7	13.6	100.0
Most people play the lottery sensibly	49.2	30.6	20.2	100.0
People should be discouraged from playing lottery games	17.6	70.7	11.6	100.0

3.7 NATIONAL LOTTERY OUTLETS

All respondents were requested to express their opinion on the adequacy of national lottery outlets. Figure 3.6 shows that just more than half (51.6 %) the respondents were of the opinion that there are enough National Lottery outlets. 15.5 % expressed the view that there are too many outlets while just less than a third (32.8 %) thought that there are not enough outlets. The finding that almost a third of the respondents expressed the view that there are not enough outlets should be viewed against the fact that only 2.3 % of nonparticipants advanced a lack of access to gambling facilities as a reason for abstaining from playing lottery games. It would therefore appear that the respondents who indicated that there are not enough outlets referred more to a need for more convenient/easier access rather than an outright lack of access to National Lottery outlets.

FIGURE 3.6

ADEQUACY OF NATIONAL LOTTERY OUTLETS, 2010

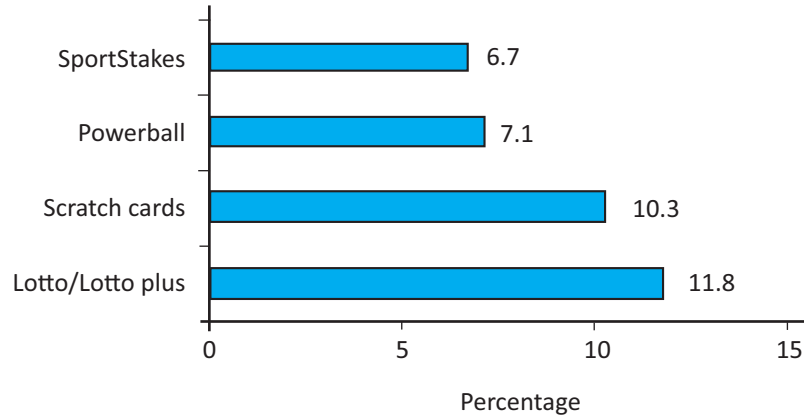


The demographic characteristics of the 32.8 % respondents who reported inadequate gambling outlets are the following:

- the younger age groups (18-30 and 31-40 years)
- part-time workers and the unemployed
- respondents with primary and secondary school qualifications
- the African population group
- the less affluent income categories (below an income of R5 000 per month)

3.8 UNDER-AGE PARTICIPATION IN LOTTERY GAMES

The involvement of persons below the age of 18 years in lottery games is a matter of concern. This aspect is prominently addressed in Gidani's promotions and advertisements. The questionnaire enquired on the awareness among all respondents of under-age participation in lottery games. Figure 3.7 confirms a relatively low awareness of this phenomenon. Almost one in every 10 respondents confirmed their awareness of under-age participation in LOTTO/LOTTO Plus (11.8 %) and the buying of Scratch Cards (10.3 %). Awareness of under-age involvement in PowerBall and SportStake is somewhat lower at 7.1 % and 6.7 % respectively.

FIGURE 3.7**LEVEL OF AWARENESS OF UNDER-AGE PARTICIPATION IN LOTTERY GAMES**

By sociodemographic variables, awareness of under-age gambling was particularly prevalent among respondents in the following categories:

- Age group : 18-30 years
- Work status : Unemployed and full-time workers
- Level of education : Secondary school qualifieds
- Population group : African population
- Gender : Female
- Income : Lowest income category

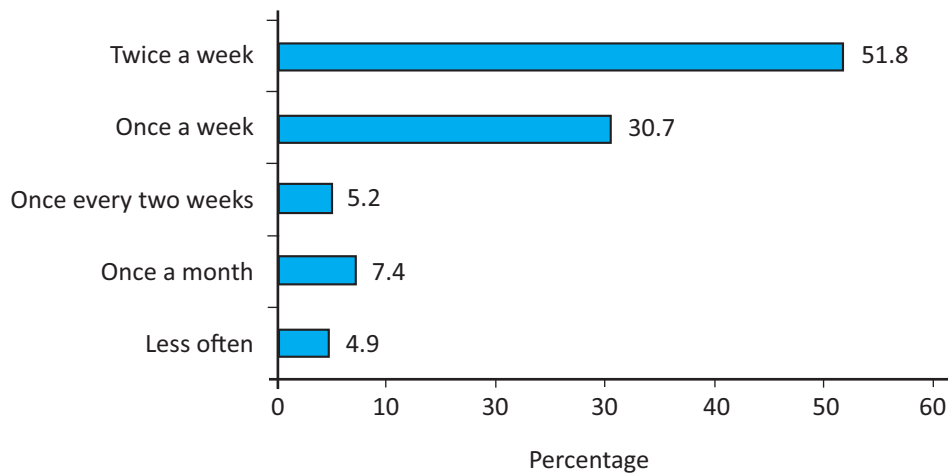
3.9 BUYING OF LOTTO AND LOTTO PLUS TICKETS

Respondents who confirmed their participation in LOTTO and LOTTO Plus during the month preceding the survey were requested to indicate how often they buy LOTTO/ LOTTO Plus tickets. Percentages in this section are therefore calculated on the number of respondents who buy LOTTO/LOTTO Plus tickets and not the total population interviewed. Figure 3.8 reveals that just more than half (51.8 %) buy LOTTO/LOTTO Plus tickets twice a week. This is followed by a further 30.7 % that buy LOTTO/LOTTO

Plus tickets once a week. This implies that 82.5 % buy LOTTO tickets at least once a week. The less frequent buyers are in the minority: 5.2 % buy once every two weeks, 7.4 % once a month and 4.9 % less often.

FIGURE 3.8

FREQUENCY OF BUYING LOTTO AND LOTTO PLUS TICKETS, 2010



A comparison of the above figures with the results of the 2003 survey suggests a fairly similar pattern notwithstanding the substantial decline in LOTTO buying propensity rates (69.1 % in 2003 and 32.3 % in 2010). Table 3.18 compares the buying frequencies reflected during the two National Lottery surveys. Respondents who bought tickets twice a week declined slightly from 53.4 % in 2003 to 51.8 % in 2010. Those who bought tickets at least once a week (ie the twice and once a week combined) declined marginally from 83.5 % in 2003 to 82.5 % in 2010. This finding suggests a similar demand pattern over time, but at a substantially lower number of LOTTO/LOTTO Plus customers. (Changes in expenditure over time are analysed later in the report.)

TABLE 3.18

FREQUENCY OF BUYING LOTTO/LOTTO PLUS TICKETS: COMPARING 2003 WITH 2010

Frequency	2003 %	2010 %
Twice a week	53.4	51.8
Once a week	30.1	30.7
Once every two weeks	6.3	5.2
Once a month	6.0	7.4
Less often	4.2	4.9
Total	100.0	100.0

3.9.1 Buying of LOTTO/LOTTO Plus tickets by age group

The frequency of buying LOTTO/LOTTO Plus tickets is reflected by age group in table 3.19. The buying patterns across age groups are fairly similar with a slightly lower frequency rate among the youngest and highest age groups. The largest percentage (close to or more than half the respondents) buy tickets twice a week, followed by more or less a third of the population that buy tickets once a week.

TABLE 3.19

FREQUENCY OF BUYING LOTTO/LOTTO PLUS TICKETS BY AGE GROUP, 2010

Frequency	18-30 years %	31-40 years %	41-50 years %	51-60 years %	Older than 60 %	Total %
Twice a week	41.1	53.9	61.2	58.8	48.1	51.8
Once a week	35.6	32.7	25.0	24.4	31.3	30.8
Once every two weeks	6.0	5.6	4.0	4.8	3.8	5.1
Once a month	9.1	6.1	6.0	6.5	12.0	7.4
Less often	8.2	1.7	3.9	5.5	4.8	4.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

3.9.2 Buying of LOTTO/LOTTO Plus tickets by employment status

Table 3.20 reflects no substantial differences in the buying of LOTTO/LOTTO Plus tickets by employment status. The following minor behavioural differences are evident. Respondents involved in full-time work reported a slightly higher percentage with

regard to twice-a-week buying while retired/non-workers showed a somewhat higher frequency with regard to once-a-week buying.

TABLE 3.20

FREQUENCY OF BUYING LOTTO/LOTTO PLUS TICKETS BY EMPLOYMENT STATUS, 2010

Frequency	Full-time work %	Part-time work %	Unemployed (looking for work) %	Retired/nonworker %	Other %	Total %
Twice a week	54.7	48.9	51.4	41.5	68.8	51.8
Once a week	28.6	32.2	34.0	32.2	22.8	30.7
Once every two weeks	4.8	8.2	3.9	6.8	0.0	5.2
Once a month	8.0	5.1	6.4	11.6	3.3	7.4
Less often	3.9	5.6	4.3	7.9	5.1	4.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

3.9.3 Buying of LOTTO/LOTTO Plus tickets by educational level

Although participation in LOTTO/LOTTO Plus is highest among people with secondary and tertiary school qualifications (section 3.2.3), the buying frequency (buying of tickets twice a week) is particularly high among respondents with no formal schooling (88.9 %). Only 40.8 % of respondents with tertiary qualifications buy tickets twice a week. On the other hand, almost a third of those with secondary (29.9 %) and tertiary (37.1 %) qualifications buy tickets once a week compared to none of those with no formal schooling.

TABLE 3.21

FREQUENCY OF BUYING LOTTO/LOTTO PLUS TICKETS BY EDUCATIONAL LEVEL, 2010

Frequency	No formal schooling %	Primary (Grade 1-7) %	Secondary (Grade 8-12) %	Tertiary (Post matric) %	Total %
Twice a week	88.9	55.7	53.5	40.8	51.8
Once a week	0.0	27.7	29.9	37.1	30.7
Once every two weeks	0.0	6.1	5.1	5.2	5.2
Once a month	0.0	6.1	7.0	10.4	7.4
Less often	11.1	4.4	4.5	6.5	4.9
Total	100.0	100.0	100.0	100.0	100.0

3.9.4 Buying of LOTTO/LOTTO Plus tickets by population group

Major differences are evident in the frequency of procuring LOTTO tickets across population groups, which is particularly high in the case of Africans, Indians/Asians and Coloureds, where 53.8 %, 50.0 % and 51.6 % buy LOTTO tickets at least twice a week (table 3.22). The percentage for Whites drops to 25.7 %. The once-every-week and less often frequencies are particularly prominent among Whites relative to other population groups.

TABLE 3.22

FREQUENCY OF BUYING LOTTO/LOTTO PLUS TICKETS BY POPULATION GROUP, 2010

Frequency	African %	Indian/Asian %	Coloured %	White %	Total %
Twice a week	53.8	50.0	51.6	25.7	51.8
Once a week	32.0	17.8	27.4	42.9	30.7
Once every two weeks	4.9	9.7	3.1	4.3	5.2
Once a month	4.6	18.2	13.9	17.1	7.4
Less often	4.7	4.3	3.9	10.0	4.9
Total	100.0	100.0	100.0	100.0	100.0

3.9.5 Buying of LOTTO/LOTTO Plus tickets by gender

The frequency of buying LOTTO tickets is virtually equal among males and females (table 3.23). The twice-a-week frequency is slightly higher for males (55.6 %) compared to females (48.2 %) while the once-a-week frequency is higher for females (34.2 %) than for males (27.0 %). Once-every-two-weeks purchasing is also slightly higher for males while more females than males buy LOTTO/LOTTO Plus tickets once a month.

TABLE 3.23

FREQUENCY OF BUYING LOTTO/LOTTO PLUS TICKETS BY GENDER, 2010

Frequency	Male %	Female %	Total %
Twice a week	55.6	48.2	51.7
Once a week	27.0	34.2	30.7
Once every two weeks	6.0	4.5	5.2
Once a month	6.7	8.1	7.4
Less often	4.7	5.0	4.9
Total	100.0	100.0	100.0

3.9.6 Buying of LOTTO/LOTTO Plus tickets by personal income category

Participation in LOTTO/LOTTO Plus by income group suggests a more active participation by the middle income groups (table 3.24). Twice-a-week buyers are the most prominent in the R2 001-R5 000 (60.2 %) and R5 001-R10 000 (59.2 %) income categories. This drops to 46.5 % in the less than R500 per month category and 40.6 % and 44.1 % in the income categories exceeding a monthly income of R10 000 per month.

TABLE 3.24

FREQUENCY OF BUYING LOTTO/LOTTO PLUS TICKETS BY PERSONAL INCOME CATEGORY, 2010

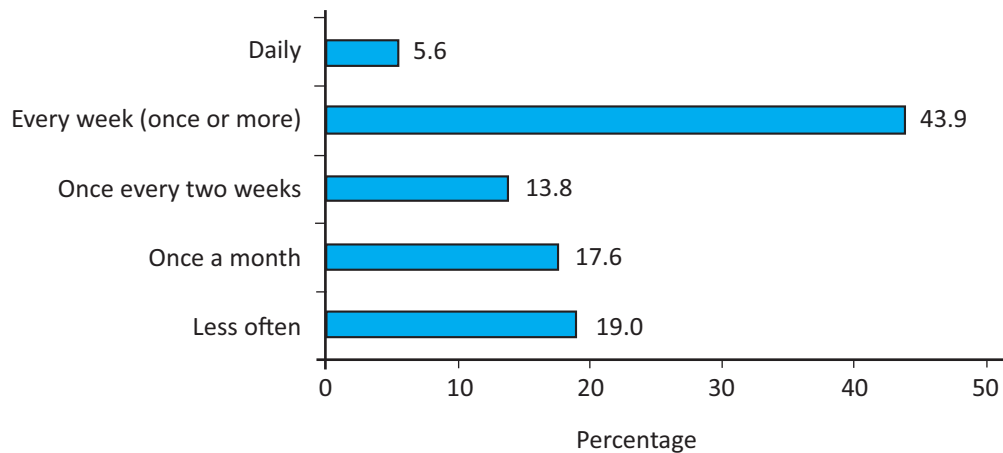
Frequency	Less than R500 %	Between R501-R1 000 %	Between R1 001-R2 000 %	Between R2 001-R5 000 %	Between R5 001-R10 000 %	Between R10 001-R20 000 %	More than R20 000 %	Do not want to disclose %	Total %
Twice a week	46.5	54.2	45.5	60.2	59.2	40.6	44.1	51.4	52.0
Once a week	36.7	27.2	35.7	27.1	22.9	33.5	12.9	29.8	30.5
Once every two weeks	3.6	6.6	8.0	3.4	5.2	.0	4.3	8.0	5.2
Once a month	6.7	3.1	8.7	7.3	7.5	18.7	25.8	6.5	7.5
Less often	6.6	9.0	2.0	2.0	5.2	7.1	12.9	4.2	4.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

3.10 BUYING OF WINA MANJE SCRATCH CARDS

Respondents buying Scratch Cards during the month preceding the interview represent 6.2 % of the sample population. They were requested to indicate how often they buy the cards. Figure 3.9 reflects that just more than two in every five (43.9 %) buy Scratch Cards every week (once or more). A further 13.8 % of the respondents reported a frequency of once every two weeks and 17.6 % once a month. One in every 20 (5.6 %) buy Scratch Cards on a daily basis.

FIGURE 3.9

FREQUENCY OF BUYING SCRATCH CARDS, 2010



A comparison of the above 2010 frequencies with the results of the 2003 National Lottery survey suggests a fairly similar pattern. The percentage buying Scratch Cards every week increased slightly from 35.4 % in 2003 to 43.9 % in 2010 while marginal declines were reported by those that bought cards on a daily basis (from 6.9 % to 5.6 %), once every two weeks (16.0 % to 13.8 %) and once a month (20.1 % to 17.6 %).

TABLE 3.25

FREQUENCY OF BUYING SCRATCH CARDS: COMPARING 2003 WITH 2010

Frequency	2003 %	2010 %
Daily	6.9	5.6
Every week (once or more)	35.4	43.9
Once every two weeks	16.0	13.8
Once a month	20.1	17.6
Less often	21.6	19.0
Total	100.0	100.0

The question on the frequency of buying Scratch Cards was only put to respondents who buy Scratch Cards. The responses are therefore fairly limited (156 respondents), implying that disaggregation of the data in terms of sociodemographic categories will result in an even smaller number of observations per cell. It was therefore decided to only present broad indications of the demographic profile of those buying Scratch Cards.

- High frequency buyers (at least once a week) were strongly represented in the lower age categories (18-40 years). Lower buying frequencies were more prominent in higher age categories: 41-50-year-olds generally bought cards every two weeks, 51-60-year-olds once a month and those older than 60 years less often.
- With regard to employment status, the following categories reported relatively high buying frequencies: retired/nonworkers and full-time workers. The unemployed and retired/nonworkers recorded the lowest frequencies.

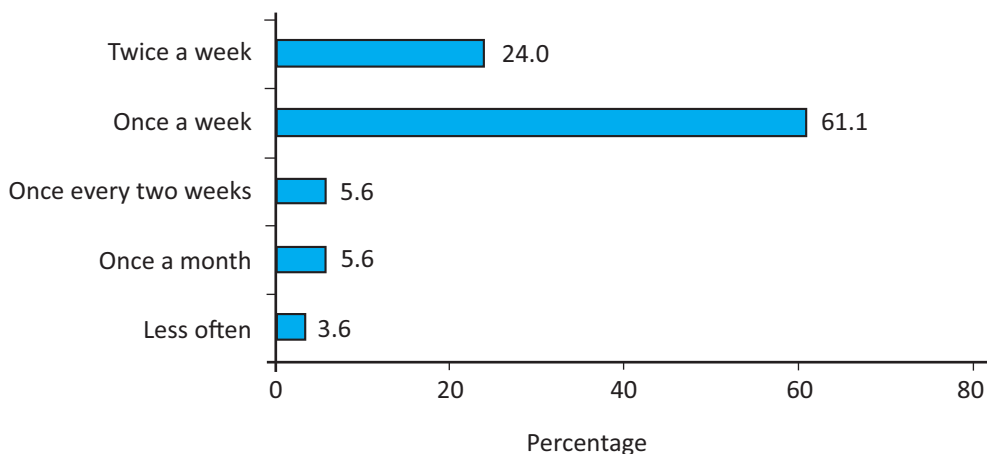
- The highest buying frequency was reported by those with secondary and tertiary qualifications. The lowest buying frequency was among primary school qualifieds and those without any formal school qualifications.
- Africans and Coloureds were the major supporters of Scratch Cards with relatively high buying frequencies.
- No substantial differences in buying behaviour were evident by gender.
- The lower income groups (below R5 000 personal income per month) showed the highest buying frequency. Higher and higher-middle income earners showed very low (if any) buying frequencies of Scratch Cards.

3.11 PARTICIPATING IN SPORTSTAKE

Respondents participating in SportStake during the month preceding the interviews represent 3.3 % of the sample population. They were requested to indicate their frequency of playing SportStake. Figure 3.10 shows that almost a quarter of participants in SportStake played twice a week (ie Saturday and Wednesday draws). However, the majority played once a week (61.1 %).

FIGURE 3.10

FREQUENCY OF PLAYING SPORTSTAKE, 2010



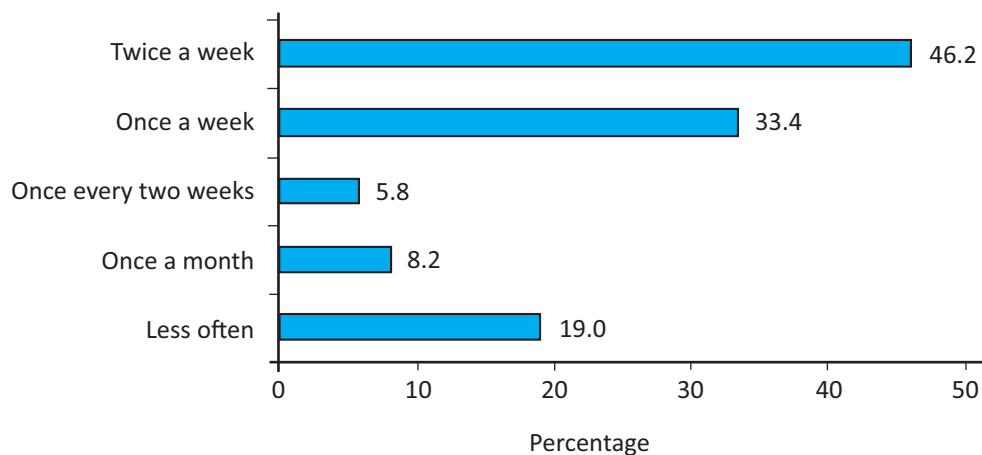
Only 82 SportStake players (3.3 % of the sample population) were captured in the survey. The demographic characteristics of these players are the following:

- No substantial differences in buying behaviour by age group are evident.
- All employment groups, with the exception of retired/nonworkers, showed relatively high buying frequencies.
- No substantial differences by education level are evident.
- The African population group recorded the highest buying frequency.
- Males are more active players than females
- Limited differences by income group are detectable.

3.12 BUYING OF POWERBALL TICKETS

The 16.4 % of respondents playing PowerBall were requested to report their frequency of buying tickets. Figure 3.11 confirmed very active involvement of PowerBall players. Just less than half (46.2 %) bought PowerBall tickets twice a week and a third (33.4 %) once a week. This implies that only 20.4 % of PowerBall players bought tickets less often than once a week.

FIGURE 3.11
FREQUENCY OF BUYING POWERBALL TICKETS, 2010



3.12.1 Buying of PowerBall tickets by age group

Table 3.26 shows marginal variations of the frequency in participating in PowerBall games by age category. The twice-a-week players ranged from 41.5 % in the 31-40-year age group to 53.4 % in the 51-60 age group. Similarly, the once-a-week buyers ranged from 27.4 % of those older than 60 years to 35.9 % in the 31-40-year age group. Combining the twice- and once-a-week buyers shows that almost eight in every 10 players in each of the age groups bought PowerBall tickets at least once a week.

TABLE 3.26
FREQUENCY OF BUYING POWERBALL TICKETS BY AGE GROUP, 2010

Frequency	18-30 years %	31-40 years %	41-50 years %	51-60 years %	Older than 60 %	Total %
Twice a week	44.1	41.5	50.6	53.4	48.1	46.3
Once a week	30.4	35.9	35.8	35.1	27.4	33.5
Once every two weeks	5.4	7.8	2.3	2.8	11.0	5.6
Once a month	11.6	9.7	4.9	2.8	8.4	8.2
Less often	8.5	5.1	6.5	6.0	5.1	6.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

3.12.2 Buying of PowerBall tickets by employment status

Employment status exercised a small influence on the frequency of buying PowerBall tickets. Table 3.27, for example, shows that all employment groups tend to buy tickets at least once a week. The only notable differences are among the unemployed – their twice-a-week frequency is lower than their once-a-week frequency while the opposite prevails in the other employment groups.

TABLE 3.27

FREQUENCY OF BUYING POWERBALL TICKETS BY EMPLOYMENT STATUS, 2010

Frequency	Full-time work %	Part-time work %	Unemployed (Looking for work) %	Retired/nonworker %	Total %
Twice a week	45.8	45.8	39.6	56.3	46.2
Once a week	32.3	28.2	43.2	24.8	33.4
Once every two weeks	4.6	4.0	9.0	8.2	5.8
Once a month	11.1	13.0	2.3	4.0	8.2
Less often	6.2	9.0	5.9	6.7	6.4
Total	100.0	100.0	100.0	100.0	100.0

3.12.3 Buying of PowerBall tickets by educational level

Table 3.28 shows a relatively high twice-a-week and once-a-week buying frequency among respondents across all educational levels.

TABLE 3.28

FREQUENCY OF BUYING POWERBALL TICKETS BY EDUCATIONAL LEVEL, 2010

Frequency	No formal schooling %	Primary (Grade 1-7) %	Secondary (Grade 8-12) %	Tertiary (Post matric) %	Total %
Twice a week	65.7	47.9	48.9	34.7	46.2
Once a week	21.9	31.8	31.9	40.0	33.4
Once every two weeks	0.0	5.2	5.8	6.7	5.8
Once a month	0.0	8.2	7.7	10.4	8.2
Less often	12.5	6.7	5.8	8.2	6.4
Total	100.0	100.0	100.0	100.0	100.0

3.12.4 Buying of PowerBall tickets by population group

Table 3.29 confirms a relatively high frequency of PowerBall participation by all population groups. However, the twice-a-week buying frequency of Whites is somewhat lower than that of the other three groups while their once-a-week buying frequency is higher.

TABLE 3.29

FREQUENCY OF BUYING POWERBALL TICKETS BY POPULATION GROUP, 2010

Frequency	African %	Indian/Asian %	Coloured %	White %	Total %
Twice a week	50.2	42.7	44.1	24.2	46.2
Once a week	33.2	26.4	35.4	41.9	33.4
Once every two weeks	6.0	8.1	2.0	4.8	5.8
Once a month	4.3	20.5	12.8	16.1	8.2
Less often	6.3	2.3	5.6	12.9	6.4
Total	100.0	100.0	100.0	100.0	100.0

3.12.5 Buying of PowerBall tickets by gender

The frequency of buying PowerBall tickets is higher among males than females (table 3.30). The twice-a-week frequency was 51.8 % for males and 40.8 % for females. Slightly more females bought tickets once a week (35.2 %) compared to males (31.5 %).

TABLE 3.30

FREQUENCY OF BUYING POWERBALL TICKETS BY GENDER, 2010

Frequency	Male %	Female %	Total %
Twice a week	51.8	40.8	46.2
Once a week	31.5	35.2	33.4
Once every two weeks	5.4	6.2	5.8
Once a month	6.5	9.8	8.2
Less often	4.8	8.1	6.4
Total	100.0	100.0	100.0

3.12.6 Buying of PowerBall tickets by personal income category

Table 3.31 reflects no substantial variation of ticket sales by personal income group. The frequencies were relatively high across all income groups with a marginally lower frequency among players earning in excess of R10 000 per month.

TABLE 3.31**FREQUENCY OF BUYING POWERBALL TICKETS BY PERSONAL INCOME CATEGORY, 2010**

Frequency	Less than R500 %	Between R501-R1 000 %	Between R1 001-R2 000 %	Between R2 001-R5 000 %	Between R5 001-R10 000 %	Between R10 001-R20 000 %	More than R20 000 %	Do not want to disclose %	Total %
Twice a week	47.6	48.7	46.2	43.3	51.4	47.5	54.3	41.5	46.5
Once a week	39.7	35.5	31.3	35.8	25.8	25.0	17.1	34.3	33.4
Once every two weeks	4.2	6.6	8.8	2.0	6.4	0.0	5.7	10.4	5.6
Once a month	2.2	6.1	10.3	13.0	10.0	18.8	11.4	2.8	8.3
Less often	6.3	3.1	3.4	5.8	6.4	8.8	11.4	11.1	6.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

3.13 LOTTERY PLAYERS: DEMOGRAPHIC COMPARISONS

Table 3.32 shows the demographic profile of lottery players by type of lottery game. Although the population profile does not differ substantially by type of lottery game, some minor differentiations are detectable.

The age profile of LOTTO/LOTTO Plus and PowerBall players is fairly similar with almost a third younger than 30 years, one quarter between 31 and 40 years and one quarter between 41 and 50 years. Popularity of these games decline substantially after age 50 with approximately 10 % of the players between 51 and 60 years and less than 10 % older than 60 years. Wina Manje Scratch Cards are the most popular among the younger age groups with almost two thirds (65.4 %) younger than 40 years. This phenomenon is even more prominent with those participating in SportStake with almost three quarters (74.4 %) younger than 40 years. The 18-30-olds (the youngest age group) are the most active SportStake players.

With regard to work status, the overwhelming majority of lottery players are involved in full-time and part-time work. These two groups represent the following percentages of players according to lottery game:

- LOTTO/LOTTO Plus : 59.6 %
- Scratch Cards : 64.1 %
- SportStake : 70.7 %
- PowerBall : 61.6 %

Unemployed people also represent a fairly substantial portion of lottery players. The percentages are:

- LOTTO/LOTTO Plus : 23.3 %
- Scratch Cards : 23.7 %
- SportStake : 18.3 %
- PowerBall : 19.3 %

PowerBall and LOTTO/LOTTO Plus are the most popular games among the retired/nonworker category. They represent 16.4 % of PowerBall players and 13.2 % of LOTTO/LOTTO Plus players.

With regard to educational level, the following is evident from table 3.32:

- Participation of people with no formal schooling in lottery games is virtually negligible.
- Close to seven out of 10 lottery participants have completed their secondary education.
- SportStake and PowerBall are the most popular games among persons with a tertiary qualification. Their participation in Scratch Cards is much lower compared to other games.

With regard to population group the following differentiations are evident:

- Africans are the most prominent players regarding Scratch Cards and SportStake with greater than 80 % representation in both games. This drops to just below 70 % in PowerBall.
- The share of Indians/Asians in lottery games is the most prominent in SportStake and the lowest in LOTTO/LOTTO Plus.
- Coloureds show the strongest representation in LOTTO/LOTTO Plus and PowerBall with no participation in SportStake.
- Whites are fairly inactive regarding Scratch Cards and SportStake but relatively prominent in PowerBall.

With regard to gender, males are very prominent in SportStake while females are dominant in Scratch Cards.

An analysis of lottery players by personal income group suggests the following patterns:

- Poor people (earning less than R500 per month) are active lottery players. Just less than a quarter of players in each lottery game earn an income of less than R500 per month. SportStake (24.4 %) and LOTTO/LOTTO Plus (23.4 %) are somewhat more popular than PowerBall (20.5 %) and Scratch Cards (21.2 %). Adding together the three lowest income categories (ie people earning less than R2 000 per month) the above phenomenon is more prominently illustrated.

- LOTTO/LOTTO Plus	:	50.3 %
- Scratch Cards	:	50.7 %
- SportStake	:	48.8 %
- PowerBall	:	36.7 %

TABLE 3.32

PROFILE OF LOTTERY PLAYERS, 2010

Demographic variable	LOTTO/LOTTO Plus %	Scratch Cards %	SportStake %	PowerBall %
1. Age categories				
• 18-30 years	30.9	34.6	40.3	27.2
• 31-40 years	27.3	30.8	34.1	27.9
• 41-50 years	24.1	23.1	19.5	25.0
• 51-60 years	10.6	8.3	6.1	10.2
• Older than 60 years	7.1	3.2	0.0	9.7
• Total	100.0	100.0	100.0	100.0
2. Work status				
• Full-time work	43.4	45.5	43.9	47.2
• Part-time work	16.2	18.6	26.8	14.4
• Unemployed (looking for work)	23.3	23.7	18.3	19.3
• Retired/nonworker	13.2	7.7	7.3	16.4
• Other (eg students)	3.9	3.8	3.7	2.9
• Total	100.0	100.0	100.0	100.0
3. Educational level				
• No formal schooling	0.7	0.0	0.0	1.2
• Primary (Grade 1-7)	11.5	9.0	7.2	10.8
• Secondary (Grade 8-12)	70.5	78.8	71.1	68.2
• Tertiary (Post matric)	17.3	12.2	21.7	19.8
• Total	100.0	100.0	100.0	100.0
4. Population group				
• African	76.3	80.8	81.9	69.7
• Indian/Asian	10.4	12.2	16.9	12.5
• Coloured	8.3	6.4	0.0	7.8
• White	5.0	0.6	1.2	10.0
• Total	100.0	100.0	100.0	100.0
5. Gender				
• Male	47.9	40.6	75.6	49.4
• Female	52.1	59.4	24.4	50.6
• Total	100.0	100.0	100.0	100.0
6. Personal income category (per month)				
• Less than R500	23.4	21.2	24.4	20.5
• Between R501-R1 000	10.8	10.3	12.2	9.4
• Between R1 001-R2 000	16.1	19.2	12.2	16.8
• Between R2 001-R5 000	22.9	25.0	23.2	22.4
• Between R5 001-R10 000	11.1	9.6	17.1	13.3
• Between R10 001-R20 000	2.9	1.9	0.0	3.2
• More than R20 000	1.7	0.0	1.2	3.0
• Do not want to disclose	11.1	12.8	9.7	11.4
• Total	100.0	100.0	100.0	100.0

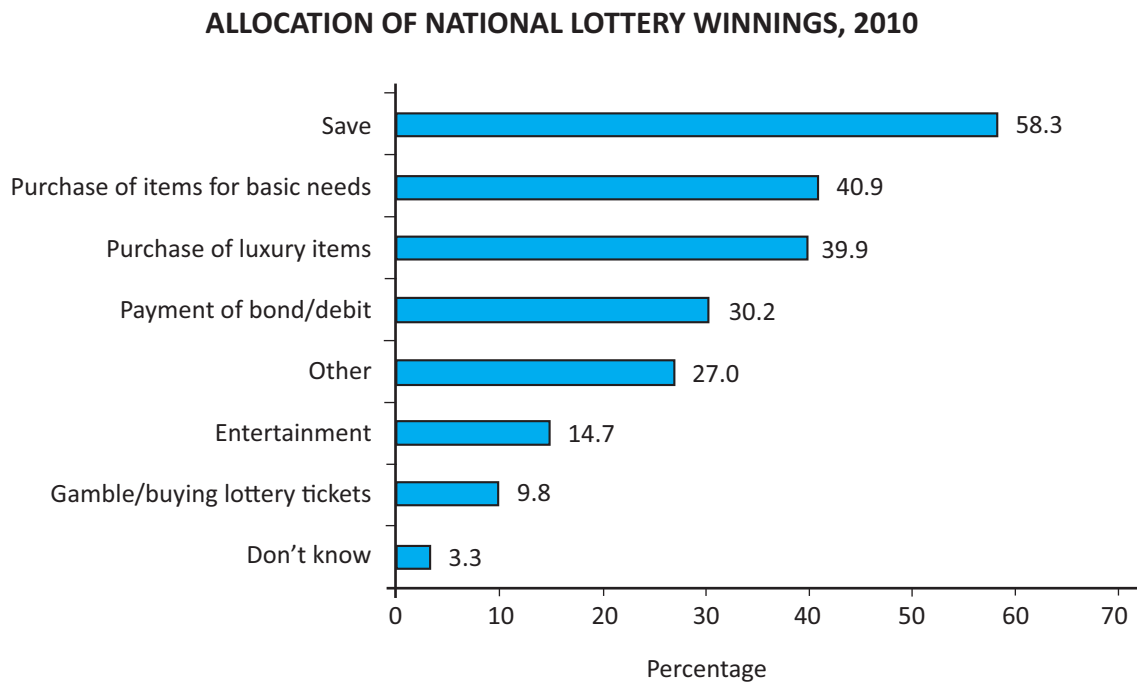
3.14 ALLOCATION OF WINNINGS

The results of the response to the question: 'If you win money in lottery games today, on what would you spend it?' are contained in figure 3.12. These responses are indicative of the possible application of winnings from lottery games. It should be kept in mind that this is a hypothetical question to all lottery participants and not only to those respondents who actually had won prizes in the past. The following were the items mostly mentioned by respondents:

- Save 58.3 %
- Purchase of necessities 40.9 %
- Purchase of luxury items 39.9 %
- Payment of bond/debt 30.2 %

The 27.0 % 'other' include, inter alia, the following: job creation, building a house, pay school fees, give to family and give to charity.

FIGURE 3.12



Respondents were invited to mention more than one item on which they would spend their winnings. Percentages allocated to the above items are therefore not necessarily indicative of the relative amounts that winners would spend on the items. A respondent mentioning, for example, savings and purchase of basic necessities would not necessarily allocate equal amounts to the mentioned items. The percentages merely refer to the proportion of respondents who would spend some (or all) of their winnings on a particular item.

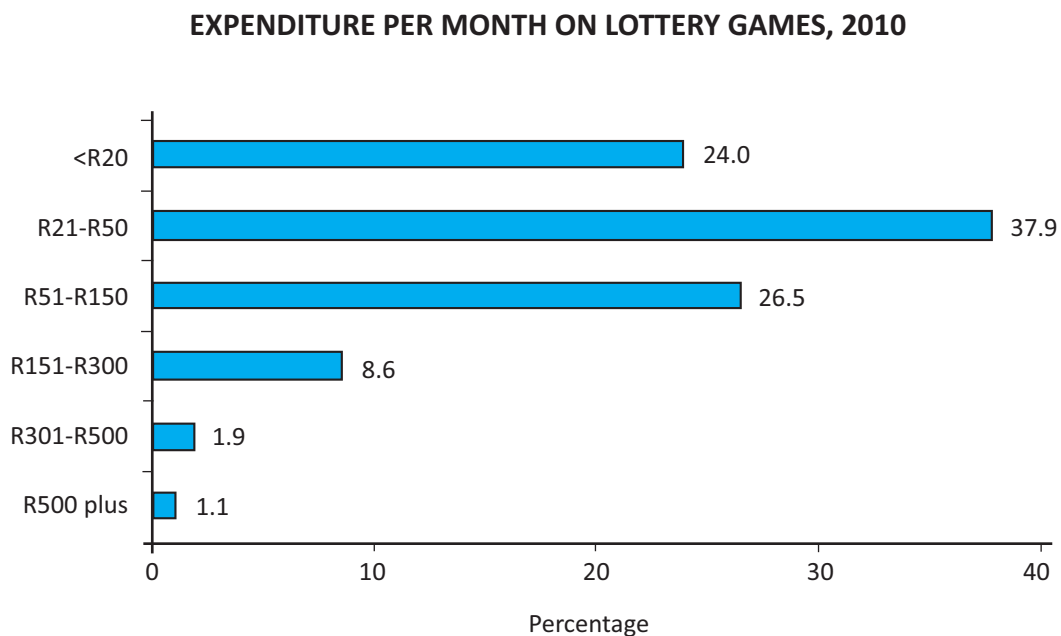
Sociodemographic characteristics emanating from the survey regarding the possible allocation of winnings are the following:

- The payment of debt increased in importance as age increased; purchasing of luxury items is of particular importance among the younger age groups and savings remain the most or second most important item among all age groups. Purchases of household necessities become less important among the 60 plus age group.
- The procurement of necessities is of particular importance to the unemployed while savings is the most frequent item mentioned by full-time and part-time workers.
- Purchases of household necessities from winnings are of particular importance to respondents with primary and secondary schooling. Savings is important in all educational categories.
- Close to one third of the African and Indian/Asian population groups recorded payment of debt as an important item for the allocation of winnings. Purchasing of basic necessities is the most important item mentioned by Coloureds while savings is of particular importance to the African and Indian/Asian population groups.
- Allocation patterns by gender are fairly similar. Females are slightly more inclined to allocate a higher priority to household necessities.
- The lower income groups tend to prioritise the purchase of household necessities while savings are recorded as important by all income groups.

3.15 EXPENDITURE ON LOTTERY GAMES

Figure 3.13 shows the distribution of monthly expenditure on lottery games by expenditure category. The figure shows that close to a quarter (24.0 %) of the population spent less than R20 per month while a further third (37.9 %) spent between R21 and R50. This implies that three out of every five lottery players (61.9 %) spent less than R50 per month. The figure also shows that 26.5 % spent between R51 and R150 and 3.0 % spent more than R300 per month on lottery games.

FIGURE 3.13



In interpreting the expenditure provided by respondents, the following should be considered:

- (a) Enquiry on individual expenditure items often results in overreporting since the procedure does not allow for balancing expenditure with disposable income. In this survey, expenditure figures were only requested for lottery games, which may result in a degree of overreporting.

- (b) The extent to which respondents perceive expenditure on lottery games as negative, neutral or positive may also influence the extent of over- or underreporting. Expenditure on gambling is often perceived as negative, which might lead to a degree of underreporting.

This aspect will be explored further during the calculation of the propensity to buy lottery tickets.

Table 3.33 shows the lottery games expenditure profile of the 2003 and 2010 surveys. In interpreting the data, the reader should note that the spending categories remained unchanged during the two survey years, ranging from less than R20 (first category) to R500 plus (last category). Due to inflation of 30.5 % during the 2001 to 2010 period, the 2010 rand values should be inflated with approximately a third to equalize the 2010 spending power of those of 2003. For example, the less-than-R20-category in 2003 should be increased to approximately 'less than R26' to compensate for the inflationary depletion of purchasing power of the rand. During this period the costs of LOTTO tickets also increased from R2.50 per ticket in 2003 to R3.50 in 2009. However, it is important to note that the R1.00 increase in the LOTTO ticket prize on 26 March 2009 was the first ticket increase since the inception of the National Lottery in 2000.

Table 3.33 shows that the percentage of respondents spending less than R20 per month decreased from 46.7 % in 2003 to 24.0 % in 2010. Those that spent between R21 and R50 increased from 32.9 % to 37.9 % and between R51 and R150 from 16.2 % to 26.5 %).

TABLE 3.33**EXPENDITURE ON LOTTERY GAMES BY EXPENDITURE CATEGORY, 2003 AND 2010**

Expenditure category	2003 %	2010 %
<R20	46.7	24.0
R21-R50	32.9	37.9
R51-R150	16.2	26.5
R151-R300	3.2	8.6
R301-R500	0.9	1.9
R500 plus	0.1	1.1
Total	100.0	100.0

3.15.1 Expenditure by age group

Table 3.34 reflects a lower expenditure level among the youngest (18-30 years) and highest (60 years plus) age categories. The majority of the middle age groups spent from R21 to R50 and from R51 to R150.

TABLE 3.34**EXPENDITURE ON LOTTERY GAMES BY AGE GROUP, 2010**

Expenditure	18-30 years %	31-40 years %	41-50 years %	51-60 years %	Older than 60 %	Total %
Less than R20	33.6	16.0	17.0	23.3	35.7	24.0
R21-R50	39.8	37.8	35.8	35.8	38.3	37.8
R51-R150	20.0	28.8	33.8	30.0	18.1	26.6
R151-R300	4.5	13.8	10.0	10.3	0.9	8.7
R301-R500	1.7	2.2	2.0	0.7	2.6	1.9
R500 plus	0.4	1.4	0.4	0.0	2.8	1.1
Do not want to disclose	0.0	0.0	0.0	0.0	1.6	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

3.15.2 Expenditure by employment status

Expenditure on lottery games by employment status confirms that considerably more full-time employees spent in excess of R50 per month than persons in the other employment categories (table 3.35). Only 18.0 % of full-time employees spent less

than R20 per month while 33.4 % and 30.8 % of retired/nonworker and unemployed respectively spent less than R20.

TABLE 3.35
EXPENDITURE ON LOTTERY GAMES BY EMPLOYMENT STATUS, 2010

Expenditure	Full-time work %	Part-time work %	Unemployed (Looking for work) %	Retired/ Nonworker %	Other %	Total %
Less than R20	18.0	25.9	30.8	33.4	9.3	24.0
R21-R50	38.4	39.8	37.8	34.7	34.5	37.8
R51-R150	26.5	26.3	27.0	22.3	38.9	26.5
R151-R300	13.1	5.8	3.4	4.5	17.3	8.6
R301-R500	2.9	0.7	1.0	1.9	0.0	1.9
R500 plus	1.1	1.5	0.0	2.3	0.0	1.1
Do not want to disclose	0.0	0.0	0.0	0.9	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

3.15.3 Expenditure by educational level

Level of schooling does not seem to affect expenditure on lottery games significantly (table 3.36). Almost three in five (60.0 %) of all educational groups spent less than R50 per month on lottery games.

TABLE 3.36
EXPENDITURE ON LOTTERY GAMES BY EDUCATIONAL LEVEL, 2010

Expenditure	No formal schooling %	Primary (Grade 1-7) %	Secondary (Grade 8-12) %	Tertiary (Post matric) %	Total %
Less than R20	11.1	23.2	23.4	27.3	24.0
R21-R50	50.0	34.5	38.8	35.6	37.8
R51-R150	19.5	33.6	26.9	20.9	26.5
R151-R300	19.5	4.4	8.4	11.8	8.6
R301-R500	0.0	2.1	1.5	3.0	1.9
R500 plus	0.0	1.1	1.0	1.4	1.1
Do not want to disclose	0.0	1.1	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0

3.15.4 Expenditure by population group

The expenditure pattern differs to some extent among the different population groups. Almost a third of Whites spent less than R20 per month. This percentage is almost one quarter for Africans and Coloureds and only 15.4 % for Indians/Asians. Almost half the Indians/Asians fall into the R21 to R50 category.

TABLE 3.37

EXPENDITURE ON LOTTERY GAMES BY POPULATION GROUP, 2010

Expenditure	African %	Indian/Asian %	Coloured %	White %	Total %
Less than R20	24.2	15.4	27.1	31.8	24.0
R21-R50	36.5	46.7	38.5	40.0	37.8
R51-R150	26.9	26.1	27.8	20.0	26.5
R151-R300	9.8	7.4	3.7	2.4	8.6
R301-R500	1.7	3.1	1.5	2.4	1.9
R500 plus	0.9	2.3	0.0	3.4	2.1
Do not want to disclose	0.0	0.0	1.5	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0

3.15.5 Expenditure by gender

Table 3.38 confirms slightly higher expenditure on lottery tickets among males than females. Almost a quarter of females (27.8 %) spent less than R20 compared to 19.8 % of males. On the other hand 11.9 % of males spent between R151-R300 compared to 5.6 % of females.

TABLE 3.38
EXPENDITURE ON LOTTERY GAMES BY GENDER, 2010

Expenditure	Male %	Female %	Total %
Less than R20	19.8	27.8	24.0
R21-R50	36.2	39.4	37.9
R51-R150	28.5	24.7	26.5
R151-R300	11.9	5.6	8.6
R301-R500	2.2	1.5	1.9
R500 plus	1.4	0.8	1.0
Do not want to disclose	0.0	0.2	0.1
Total	100.0	100.0	100.0

3.15.6 Expenditure by personal income category

Table 3.39 depicts lottery expenditure by personal income category. Generally speaking, expenditure on lottery games is negatively correlated with personal income. The propensity to spend declines as income increases. Seven in every 10 (70.2 %) of those earning less than R500 per month spent less than R50 per month. This percentage decreased to 55.4 % of those earning in excess of R20 000 per month. However, the table also confirms that sizeable percentages of higher income groups spent large amounts on lottery games.

TABLE 3.39

EXPENDITURE ON LOTTERY GAMES BY PERSONAL INCOME CATEGORY, 2010

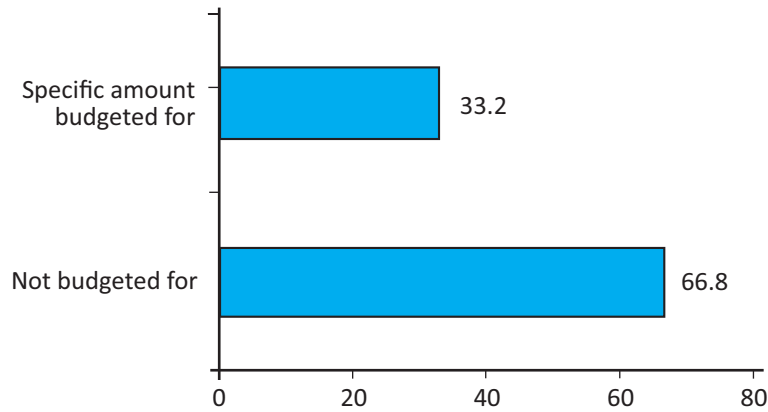
Expenditure	Less than R500 %	Between R501-R1 000 %	Between R1 001-R2 000 %	Between R2 001-R5 000 %	Between R5 001-R10 000 %	Between R10 001-R20 000 %	More than R20 000 %	Do not want to disclose %	Total %
Less than R20	33.0	28.4	24.5	15.0	14.5	36.2	19.8	22.2	23.7
R21-R50	37.2	29.7	40.3	42.2	37.9	32.2	35.6	37.5	37.9
R51-R150	25.5	32.9	21.7	31.3	21.3	12.6	18.8	30.0	26.6
R151-R300	2.8	6.2	11.7	7.7	23.5	19.0	0.0	6.1	8.7
R301-R500	1.0	2.8	1.2	2.7	1.1	0.0	10.9	2.1	1.9
R500 plus	0.5	0.0	0.7	1.0	1.7	0.0	14.9	1.0	1.0
Do not want to disclose	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

3.16 BUDGET BEHAVIOUR REGARDING LOTTERY GAMES

In order to establish the behaviour of households regarding the budgetary provision for expenditure on lottery games, the following question was put to respondents: 'Is money used for lottery games:

- (a) a specific amount budgeted for in your household budget; or
- (b) not budgeted for?

Figure 3.14 confirms that only one in every three respondents (33.2 %) made provision in their budgets for lottery games. Two thirds (66.8 %) did not make any provision. The question is: To what extent does this behaviour correspond with general budgetary behaviour, ie what percentage of households does not compile monthly household budgets at all – is it more or less than a third of households? Whatever the answer, the response is nevertheless alarming considering the fact that expenditure on lottery games might be impulsive and easily influenced by advertising and promotions, especially large jackpots.

FIGURE 3.14**HOUSEHOLD BUDGETARY PROVISION FOR EXPENDITURE ON LOTTERY GAMES, 2010**

These figures fully correspond with the findings of the 2003 survey (see table 3.40).

TABLE 3.40**HOUSEHOLD BUDGETARY PROVISION FOR EXPENDITURE ON LOTTERY GAMES,
2003 AND 2010**

Budget behaviour	2003 %	2010 %
Specific amount budgeted for	33.3	33.2
Not budgeted for	66.7	66.8
Total	100.0	100.0

The characteristics of the respondents with regard to budgetary behaviour are the following:

- (a) A lack of budgetary provision for expenses on lottery games correlates positively with age group. The younger age groups tend to neglect budgetary provision more than the older groups. No less than 75.4 % of the youngest age group (18-30 years) do not budget for lottery games. This percentage declines to 55.0 % amongst those older than 60 years.
- (b) Employment status does not impact significantly on this behaviour. Between one third and one quarter of all the employment categories, excluding retired/

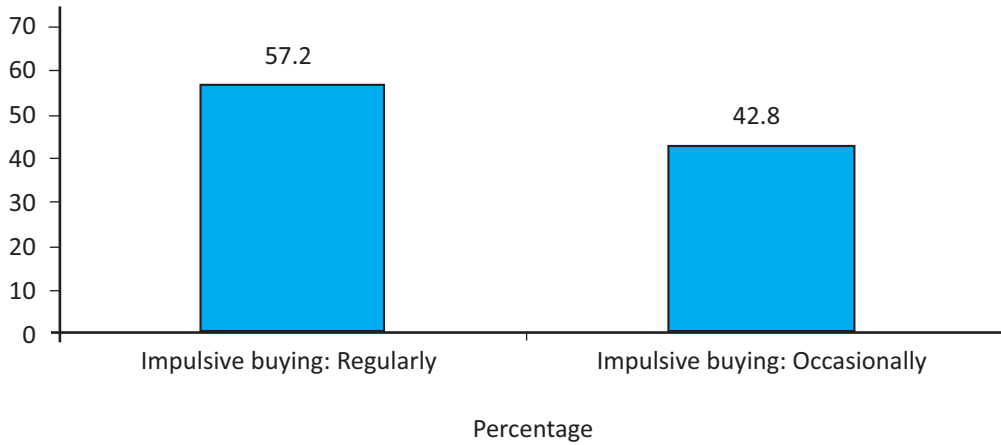
nonworkers, make budgetary provision for expenses of lottery games. This percentage amounted to 44.5 % for retired/nonworkers.

- (c) Budget behaviour is influenced to a certain extent by educational level. Just less than 20 % of respondents with no schooling make budgetary provision. This percentage increases to around a third for those with primary to tertiary qualifications.
- (d) Coloureds are not inclined to budget for the lottery. Only 14.7 % of Coloureds indicated that they make budgetary provision for lottery games. For the other three population groups budgetary provision ranged between 34.3 % for Indian/Asians and 41.2 % for Whites.
- (e) A third of males (34.4 %) and females (32.1 %) budget for a specific amount for lottery games in their household accounts.
- (f) Some variations are evident with regard to income level. Poorer and the most affluent households are more inclined to budget for lottery games than the middle income households.

A follow-up question on the above enquired on the level of impulsive spending on lottery games. Those who do not budget for lottery expenditure (66.8 %) were required to respond to the following question: 'If not budgeted for, is your spending characterised by:

- impulsive (unplanned quick) buying on an occasional basis (now and then);
or
- impulsive (unplanned quick) buying on a regular basis.'

Figure 3.15 confirms that 57.2 % of respondents, who do not budget at all, engage in impulsive expenditure on lottery games on a regular basis and only 42.8 % on an occasional basis. The fact that more than half the respondents who do not budget confirm regular impulsive spending behaviour is cause for concern. This is not only relevant for lottery expenditure budgeting but for managing personal finance in general.

FIGURE 3.15**INTENSITY OF IMPULSIVE SPENDING ON LOTTERY GAMES, 2010**

This pattern of impulsive spending on lottery games is similar to the 2003 finding. Table 3.41 shows that regular impulsive buying changed marginally from 56.5 % in 2003 to 57.2 % in 2010.

TABLE 3.41**INTENSITY OF IMPULSIVE SPENDING ON LOTTERY GAMES, 2003 AND 2010**

Intensity	2003 %	2010 %
Regular impulsive buying	56.5	57.2
Occasional impulsive buying	43.5	42.8
Total	100.0	100.0

Impulsive behaviour by sociodemographic variable reveals the following:

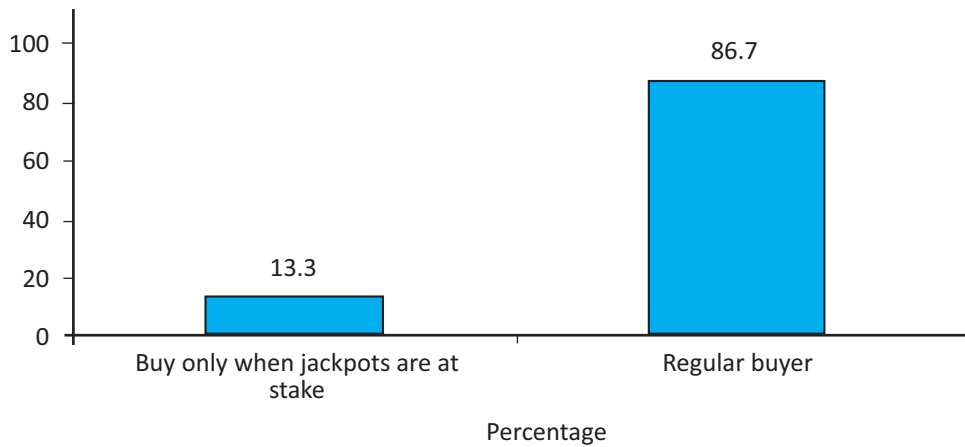
- (a) No marked differentiation in impulsive buying is evident by age group. However, it would seem that members of the oldest group (60 years plus) are somewhat more impulsive in their buying behaviour than the groups just younger than them.
- (b) A similar pattern is evident by work status with close to two in every five of all groups engaging in occasional impulsive buying.

- (c) Impulsive engagement in lottery games seems somewhat more prevalent among primary and secondary qualifieds than among tertiary qualifieds and those without any formal schooling.
- (d) Africans show the highest level of regular impulsive buying (64.0 %) and Whites the lowest (24.0 %).
- (e) Males and females recorded similar levels of regular impulsive buying (56.5 % and 57.7 % respectively).
- (f) Regular compulsive buying correlates negatively with income. The higher the income the less regular compulsive buying becomes.

3.17 IMPACT OF BIG JACKPOTS ON LOTTO AND POWERBALL EXPENDITURE

Three questions were posed to respondents on their conduct when big jackpots are at stake. This section briefly explores their responses.

The first question was: 'Do you only buy LOTTO or PowerBall tickets when big jackpots (eg R10 million or more) are at stake?' Figure 3.16 confirms that one in every 10 (13.3 %) respondents buy LOTTO and PowerBall tickets only if big jackpots are available. The other (86.7 %) respondents are more regular buyers and are not motivated to buy LOTTO and PowerBall tickets with big jackpots.

FIGURE 3.16**BUYING BEHAVIOUR OF RESPONDENTS WHEN BIG JACKPOTS ARE AT STAKE, 2010**

The above buying behaviour closely corresponds with the 2003 survey findings. Table 3.42 shows that participation in LOTTO and PowerBall only when big jackpots are at stake, increased marginally from 10.7 % in 2003 to 13.3 in 2010.

TABLE 3.42**BUYING BEHAVIOUR WHEN BIG JACKPOTS ARE AT STAKE, 2003 AND 2010**

Behaviour	2003 %	2010 %
Buy only when big jackpots are at stake	10.7	13.3
Regular buying	89.3	86.7
Total	100.0	100.0

A further analysis of the above conduct by sociodemographic variable reveals the following:

- (a) Middle-aged respondents (41-60 years) are less inclined to be influenced by large jackpots while the eldest age category (60 years plus) are motivated to buy LOTTO and PowerBall tickets by large jackpots.
- (b) Part-time workers and the unemployed conform to the average as about one in every 10 participates only during big jackpots. A slightly higher percentage

of full-time workers (14.9 %) and retired/nonworkers (17.6 %) participate only during big stakes.

- (c) Differences are evident with regard to level of education. Respondents with no formal schooling or secondary education conform to the average (just more than one in every 10 participate only during the availability of big prizes) while a larger percentage (25.4 %) of tertiary qualified persons indicated irregular participation. This percentage is only 5.5 % in the case of primary school qualifieds.
- (d) About one in every 10 Africans, Indians/Asians and Coloureds participate only during big stakes while this proportion increases to 40.0 % in the case of Whites.
- (e) No difference is evident between the two genders - one in every eight males and females participate only during big stakes.
- (f) Approximately 10 % of the lower and middle income groups participate only when big jackpots are at stake while the percentage increases to almost 40 % for the highest income group. Higher income groups are therefore slightly less regular in their behaviour with regard to the buying of LOTTO and PowerBall tickets.

A follow-up question was posed to establish whether respondents normally spend more on LOTTO and PowerBall tickets when there is a big jackpot at stake. Figure 3.17 shows that one in every five respondents (21.5 %) confirms higher spending while the rest (78.5 %) remain within their set pattern.

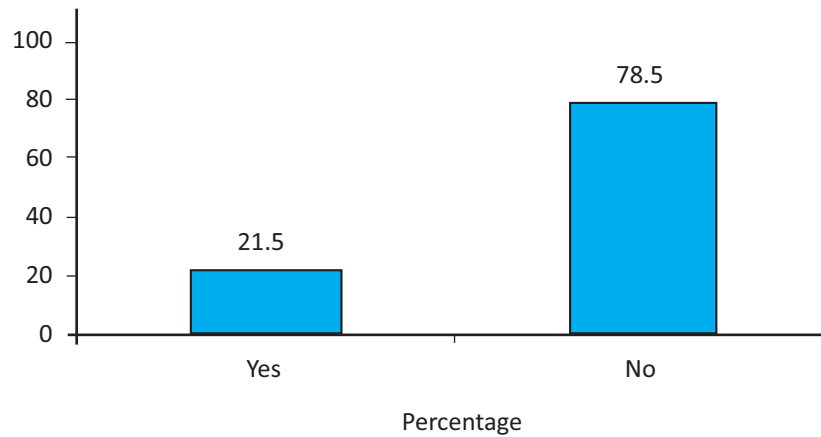
FIGURE 3.17**INCREASE IN EXPENDITURE BY REGULAR PLAYERS IF BIG JACKPOTS ARE AT STAKE, 2010**

Table 3.43 shows that the percentage of respondents confirming that larger amounts are spent on LOTTO and PowerBall when there are big jackpots at stake declined from 32.7 % in 2003 to 21.5 % in 2010.

TABLE 3.43

**INCREASE IN EXPENDITURE BY REGULAR PLAYERS IF BIG JACKPOTS ARE AT STAKE,
2003 AND 2010**

	2003 %	2010 %
Yes	32.7	21.5
No	67.3	78.5
Total	100.0	100.0

The following variations from the average are evident by sociodemographic variable:

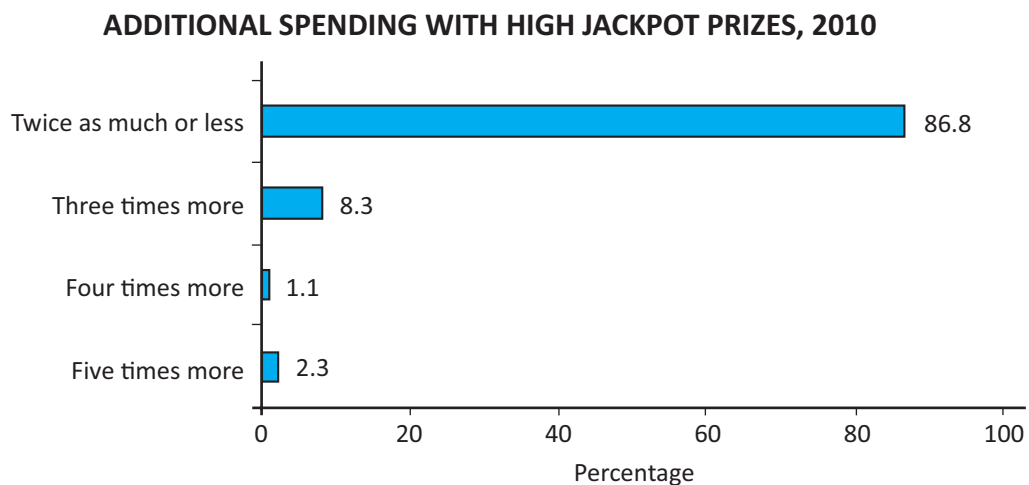
- (a) No marked differentiation across age groups is evident.
- (b) Compared to other employment groups, a smaller percentage of unemployed are inclined to increase expenditure when big jackpots are at stake.
- (c) Increased expenditure on LOTTO and PowerBall with big stakes is positively correlated with level of education. Slightly higher percentages of regular

players engaged in additional expenditure as educational level increases.

- (d) Limited variation is evident by population group. Higher expenditure ranges from 20.9 % of Africans to 24.9 % of Indians/Asians.
- (e) No differences were reported between genders.
- (f) No major differences were reported across personal income categories.

Those who confirmed higher spending (21.5 %) when high jackpot prizes are at stake, were requested to indicate approximately how much more they spend on such occasions. Figure 3.18 reveals that additional spending is not excessive. Almost nine in every 10 (86.8 %) recorded expenditure of around double the normal amount. Just less than one in every 10 respondents (8.3 %) indicated that they spend three times more at such occasions.

FIGURE 3.18



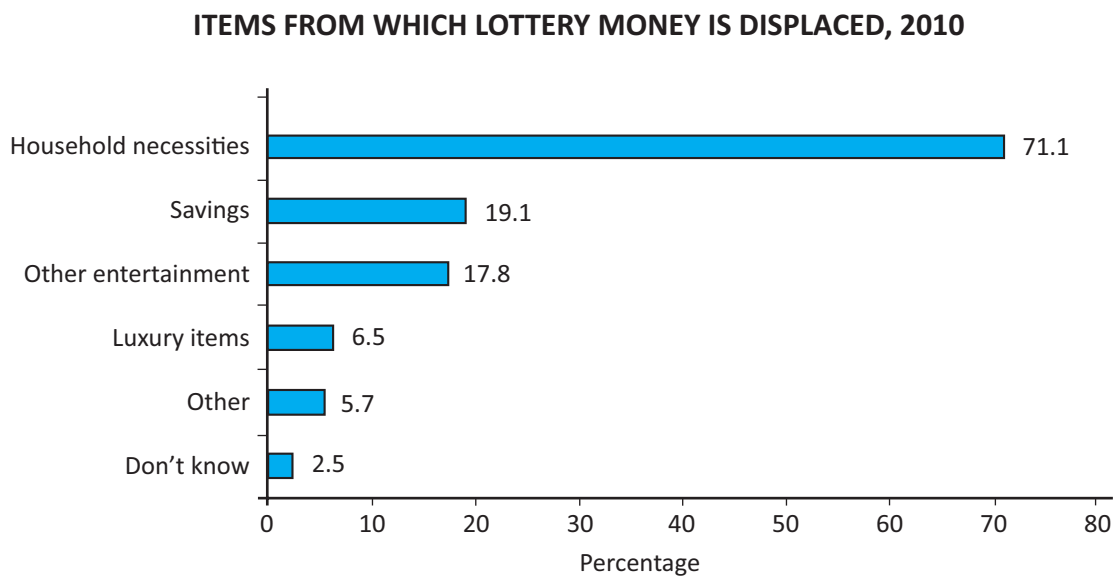
3.18 EXPENDITURE DISPLACEMENT

The question to determine the possible displacement effect read as follows: 'If you were not playing lottery games, on what would you have spent the amount allocated to the lottery instead?' Although various responses, such as 'household necessities (food, soap, etc)', 'luxury items', 'savings', and 'other entertainment' were provided in the questionnaire, interviewers were requested not to read out these alternatives, so as not to influence the response of patrons.

It should be noted that the result of the above procedure provides only a rough approximation of expenditure displacement. Respondents tend to mention only one or two items from which displacement would have been effected. In reality, household budget allocations do not always function in this manner. Respondents may displace small amounts from a large number of items rather than redirect funds from only one item (say luxury goods or savings).

The results of the response to the question are shown in figure 3.19. The following were dominant items on which lottery money would have been spent if not on lottery games: household necessities (71.1 %), savings (19.1 %) and other entertainment (11.0 %).

FIGURE 3.19



Most respondents mentioned more than one item. This procedure does not allow for determining the relative importance of the items, as respondents did not mention which percentage of money would be allocated to which item. The above figure should therefore be seen as merely reflecting the items mentioned by respondents without necessarily portraying the relative allocation of lottery money.

Any calculation of expenditure displacement should be treated with extreme caution. Households (gamblers) find it difficult to indicate what household items are forfeited in favour of lottery games. Furthermore, when asked about displacement, reference is normally made to only one or two items forfeited while there could have been several small cuts with regard to various items. Household budget behaviour often consists of small cuts on various discretionary expenditure items rather than substitution of one item by gambling. Playing of lottery games could also result in dissaving, implying no immediate displacement but the postponement of the purchase of durable goods, frequently funded from accumulated savings.

It is also important to keep in mind that gambling represents an expenditure item for households as well as an income flow resulting from winnings. However, a large number of persons spend numerous (small) amounts on gambling while the income stream is concentrated in one or two large amounts and payouts to a far smaller number of persons than originally participating in gambling expenditure.

It is calculated in chapter 5 that the propensity to buy lottery tickets amounted to 0.18 % of household expenditure. In monetary terms, households in South Africa spend, on average, only 18 cents on lottery games for every R100 household expenditure.

Table 3.44 shows a comparison of the 2003 and 2010 responses on expenditure displacement. Although the table confirms some small variation by item, the relative order and magnitude of items remains largely unchanged in 2010.

3.18.2 Expenditure displacement by employment status

Table 3.46 confirms some differences in expenditure displacement by employment status. The unemployed (78.1 %) and retired/nonworkers (73.3 %) displaced more expenditure from household necessities compared to those engaged in full- (68.7 %) and part-time work (6.2 %). A larger percentage of full- and part-time workers also dissave more than the unemployed and retired/nonworkers.

TABLE 3.46

EXPENDITURE DISPLACEMENT TO LOTTERY GAMES BY EMPLOYMENT STATUS, 2010

Expenditure displacement	Full-time work	Part-time work	Unemployed (Looking for work)	Retired/nonworker	Other	Total
Household necessities (eg food, soap)	68.7	62.2	78.1	73.3	85.8	71.1
Luxury items (eg furniture, cell phones)	8.2	7.2	5.7	3.5	0.0	6.5
Saving	21.2	26.2	12.3	16.0	15.5	19.1
Other entertainment	19.5	20.8	15.0	13.8	15.5	17.8
Other	6.7	4.1	4.5	7.0	4.9	5.7
Don't know	3.2	0.7	1.3	5.1	0.0	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

3.18.3 Expenditure displacement by educational level

Table 3.47 shows that a negative correlation prevails between displacement of funds from household necessities and level of education. No less than eight in every 10 (82.8 %) respondents with primary school qualifications transfer some of their money for household necessities to lottery games. The largest dissaving is reported by secondary qualifieds. The better educated tend to displace more money from other entertainment to lottery expenditure.

TABLE 3.47

EXPENDITURE DISPLACEMENT TO LOTTERY GAMES BY EDUCATIONAL LEVEL, 2010

Expenditure displacement	No formal schooling %	Primary (Grade 1-7) %	Secondary (Grade 8-12) %	Tertiary (Post matric) %	Total %
Household necessities (eg food, soap)	100.0	82.8	71.8	59.8	71.1
Luxury items (eg furniture, cell phones)	0.0	6.4	6.8	5.8	6.5
Saving	0.0	12.3	20.8	17.0	19.1
Other entertainment	0.0	9.6	19.2	17.9	17.8
Other	0.0	5.6	4.8	9.7	5.7
Don't know	0.0	3.2	1.9	4.6	2.5
Total	100.0	100.0	100.0	100.0	100.0

3.18.4 Expenditure displacement by population group

Relative to other population groups, Africans reported the highest displacement of money from household necessities. Dissavings (decline in savings) are of particular importance as a source of lottery money among the Indian/Asian population group (table 3.48).

TABLE 3.48

EXPENDITURE DISPLACEMENT TO LOTTERY GAMES BY POPULATION GROUP, 2010

Expenditure displacement	African %	Indian/Asian %	Coloured %	White %	Total %
Household necessities (eg food, soap)	73.3	59.2	67.9	65.9	71.1
Luxury items (eg furniture, cell phones)	6.4	8.5	10.2	0.0	6.5
Saving	19.7	27.9	6.6	12.9	19.1
Other entertainment	17.4	21.3	26.9	3.5	17.8
Other	4.0	12.8	7.2	14.1	5.7
Don't know	2.2	1.9	1.5	9.4	2.5
Total	100.0	100.0	100.0	100.0	100.0

3.18.5 Expenditure displacement by gender

Table 3.49 shows some variation in displacement behaviour by gender. Males (67.2 %) indicated a smaller displacement from household necessities than females (74.6 %). A larger percentage of males, on the other hand, displace income from other entertainment than females (22.1 % compared to 13.7 %).

TABLE 3.49

EXPENDITURE DISPLACEMENT TO LOTTERY GAMES BY GENDER, 2010

Expenditure displacement	Male %	Female %	Total %
Household necessities (eg food, soap)	67.2	74.6	71.1
Luxury items (eg furniture, cell phones)	7.8	5.4	6.5
Saving	20.4	17.8	19.1
Other entertainment	22.1	13.7	17.8
Other	5.4	6.0	5.7
Don't know	1.8	3.2	2.5
Total	100.0	100.0	100.0

3.18.6 Expenditure displacement by personal income category

As could be expected, displacement from household necessities to lottery games correlates negatively with personal income level. The higher the income the lower the need to use money intended for basic needs for the lottery.

TABLE 3.50

EXPENDITURE DISPLACEMENT TO LOTTERY GAMES BY PERSONAL INCOME CATEGORY, 2010

Expenditure displacement	Less than R500 %	Between R501- R1 000 %	Between R1 001- R2 000 %	Between R2 001- R5 000 %	Between R5 001- R10 000 %	Between R10 001- R20 000 %	More than R20 000 %	Do not want to disclose %	Total %
Household necessities (eg food, soap)	80.5	70.8	68.0	73.4	59.7	64.4	61.4	67.0	71.3
Luxury items (eg furniture, cell phones)	5.5	7.8	5.2	6.7	9.9	0.0	0.0	7.9	6.5
Saving	10.3	21.4	22.0	22.7	26.2	2.3	18.8	21.5	19.1
Other entertainment	14.9	18.5	10.8	28.3	18.3	20.2	24.8	10.3	17.8
Other	4.0	5.7	5.1	3.9	11.8	12.6	15.8	5.1	5.8
Don't know	1.8	0.0	3.4	1.4	1.7	4.6	4.0	7.6	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

3.19 SPENDING ON LOTTO AND POWERBALL TICKETS

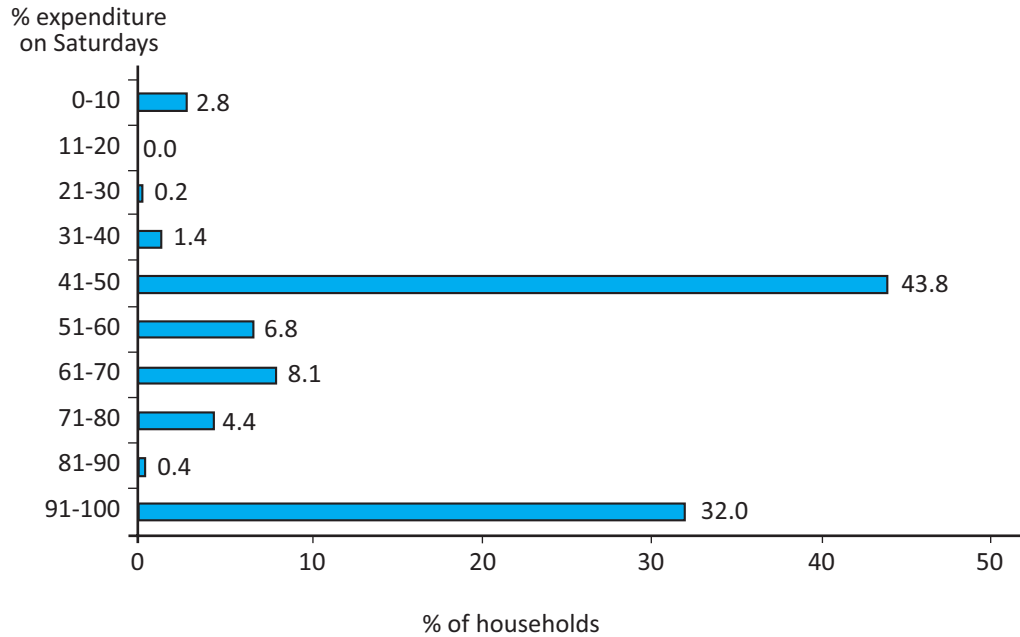
The research instrument enquires on the distribution of ticket buying between midweek and weekend draws for both LOTTO and PowerBall tickets.

3.19.1 Spending on LOTTO tickets: Wednesdays and Saturdays

Figure 3.20 shows the percentage of respondents who spend a portion or all of their expenditure intended for the procurement of LOTTO tickets on Saturdays. Just more than two in every five (43.8 %) of the respondents confirm an equal distribution of expenditure between Saturday and Wednesday draws. Just less than a third (32.0 %) of respondents indicated that they buy tickets only for the Saturday draw. Only 4.4 % of respondents (ie the sum of the percentage of households who spend between 0 % and 40 % on Saturdays) spend more for the Wednesday than Saturday draw and 51.7 % (ie the sum of the percentage of households who spend between 51 % and 100 % for the Saturday draw) confirmed that they spend more for the Saturday draw than the

Wednesday draw. This finding correlates closely with the Saturday-Wednesday divide of expenditure established during the 2003 survey.

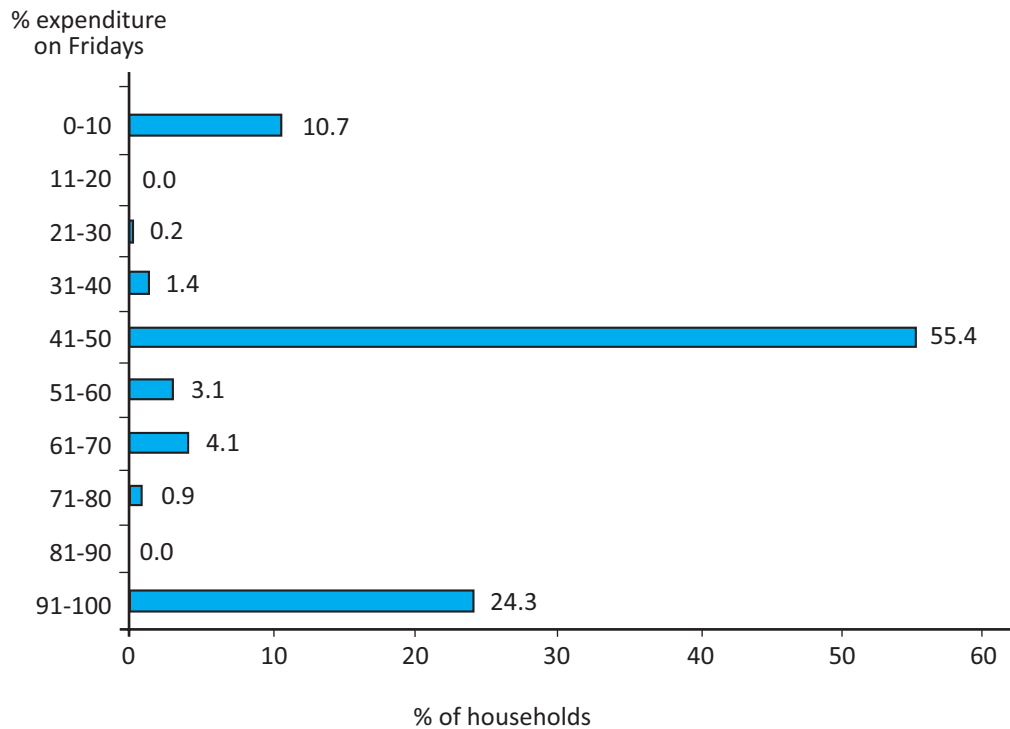
FIGURE 3.20
PERCENTAGE OF EXPENDITURE ON LOTTO TICKETS FOR THE SATURDAY DRAW, 2010



3.19.2 Spending on PowerBall tickets: Tuesdays and Fridays

Figure 3.21 shows the percentage of respondents who spend a portion or all of their expenditure on PowerBall tickets on Fridays. The following pattern emerges from the table:

- Buying for Friday draw only : 24.3 %
- % who buy more for the Friday than Tuesday draw : 8.1 %
- % who buy more for the Tuesday than Friday draw : 12.3 %
- Equal distribution between Friday and Tuesday draws : 55.4 %

FIGURE 3.21**PERCENTAGE OF EXPENDITURE ON POWERBALL TICKETS FOR THE FRIDAY DRAW, 2010****3.20 PERCEPTIONS OF WINNING**

Several questions were posed to respondents to establish their perceptions of the lottery process as well as their chances of winning LOTTO and PowerBall. Understanding of concepts such as randomness, probability and discrete events and players' perceptions of their chances of winning were tested.

Randomness is a theoretical concept, which can be defined in terms of probability. It refers to the chance that something will happen. The description 'random' usually implies equal probabilities. In probability selection (of numbers), each unit (ball) has a known, nonzero probability of being selected. Probability selection implies the use of a random selection mechanism. Discrete events refer to the lack of any continuum. Each draw is an event in itself and does not influence any follow-up draw (Martins et al 1996 and Bless & Kathuria 1993).

3.20.1 Winning LOTTO/LOTTO Plus

The first question on perceptions of winning LOTTO/LOTTO Plus was formulated as follows: ‘Do you think that all 49 numbers in LOTTO/LOTTO Plus draw have exactly the same chance to be selected with each draw?’ Figure 3.22 shows that 57.0 % of respondents expressed the opinion that all the numbers have the same chance of selection at each draw. Interestingly, just less than a third (30.2 %) of respondents felt that all the numbers do not have the same chance of selection at each draw.

FIGURE 3.22

RESPONSE TO: ‘DO YOU THINK THAT ALL 49 NUMBERS HAVE EXACTLY THE SAME CHANCE TO BE SELECTED WITH EACH DRAW?’, 2010

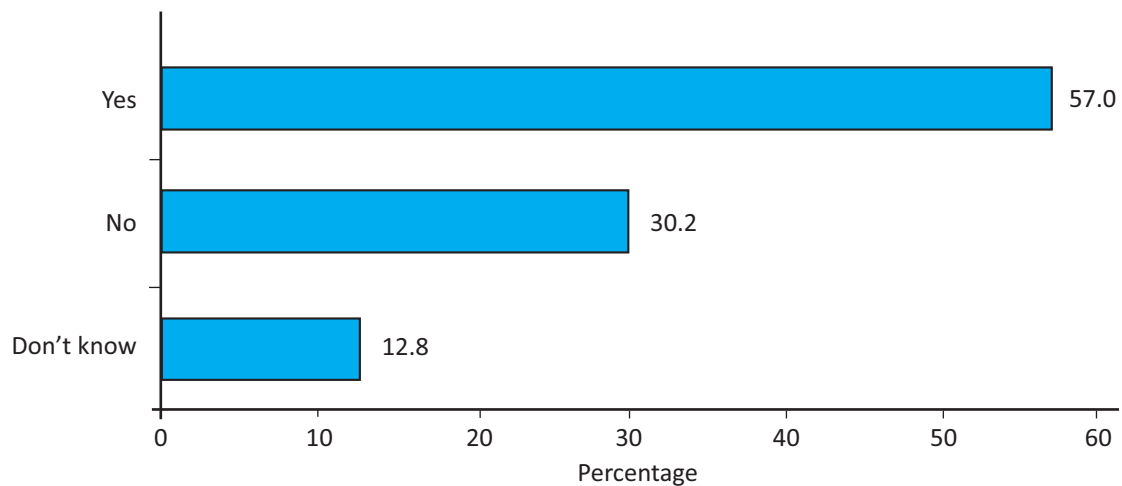


Table 3.51 shows the findings of the 2003 and 2010 surveys with regard to the above question. Unfortunately, the 2003 question did not allow for a ‘don’t know’ alternative. It can probably be assumed that the ‘no’ response in 2003 may also include the ‘don’t know’ alternative. The table reflects limited changes in the perceptions of winning LOTTO/LOTTO Plus during the past seven years. The percentages of those thinking that all 49 numbers have exactly the same chance of selection with each draw remain almost the same – 60.0 % in 2003 and 57.0 % in 2010. Those that doubt an even chance for all numbers may be in the vicinity of a third of the population.

TABLE 3.51

**PERCEPTIONS THAT ALL 49 NUMBERS IN LOTTO/LOTTO PLUS HAVE THE SAME CHANCE TO
BE SELECTED WITH EACH DRAW, 2003 AND 2010**

Response	2003 %	2010 %
Yes	60.0	57.0
No	40.0	30.2
Don't know	-	12.8
Total	100.0	100.0

The respondents in the 2010 survey who felt that the numbers do not have the same chance of being drawn, exhibit a variety of sociodemographic characteristics:

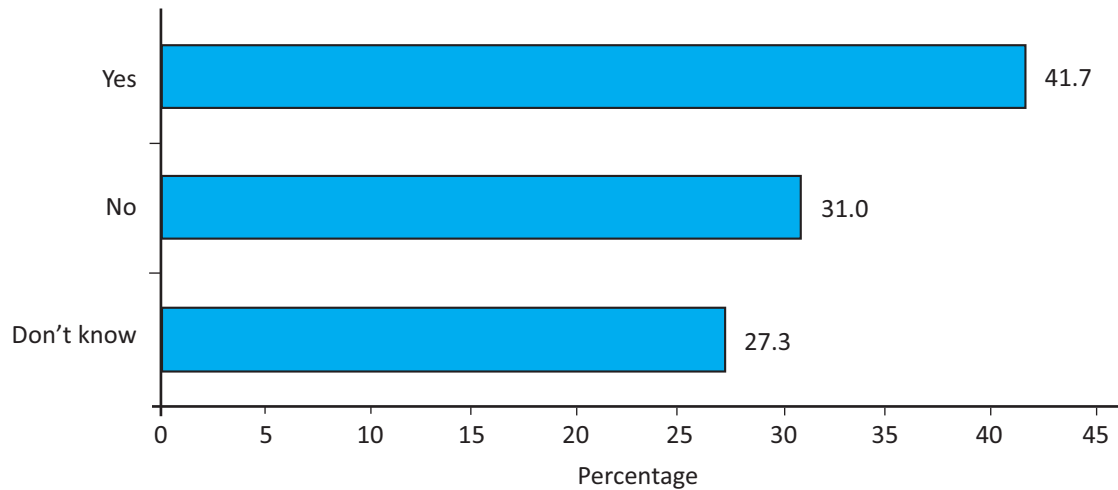
- no differentiation by age group
- unemployed
- no differentiation by educational level
- Coloured
- female
- lowest income brackets

3.20.2 **Winning PowerBall**

Respondents participating in lottery games during the month preceding the interview were also asked if they think that the 65 numbers of the PowerBall draw have exactly the same chance to be selected with each draw. Figure 3.23 shows that, as was the case with the LOTTO/LOTTO Plus question, just less than a third (31.0 %) doubt the equal chance of each of the 65 numbers.

FIGURE 3.23

RESPONSE: 'DO YOU THINK THAT ALL 65 NUMBERS IN THE POWERBALL DRAW HAVE EXACTLY THE SAME CHANCE TO BE SELECTED WITH EACH DRAW?', 2010



3.20.3 Selecting numbers

Follow-up questions enquired on the perceptions of respondents of number combinations. Figure 3.24 shows the reaction to the question: 'Do you think that in any draw the chances of drawing the combination 1 2 3 4 5 6 are the same, worse or better than the chances of drawing 13 39 23 7 11 42?' A mixed response was forthcoming. It is important to note that just more than two in every five (42.7 %) expressed the opinion that it has the same chance. Just more than one quarter (29.4 %) think it has a better chance and 28.0 % perceived the chance as worse. This clearly confirms a lack of insight into the probability principle on which the selection procedure is based.

FIGURE 3.24

RESPONSE TO: 'DO YOU THINK THAT IN ANY DRAW, THE CHANCES OF DRAWING THE COMBINATION 1 2 3 4 5 6 ARE BETTER THAN THE CHANCES OF DRAWING 13 39 23 7 11 42?', 2010

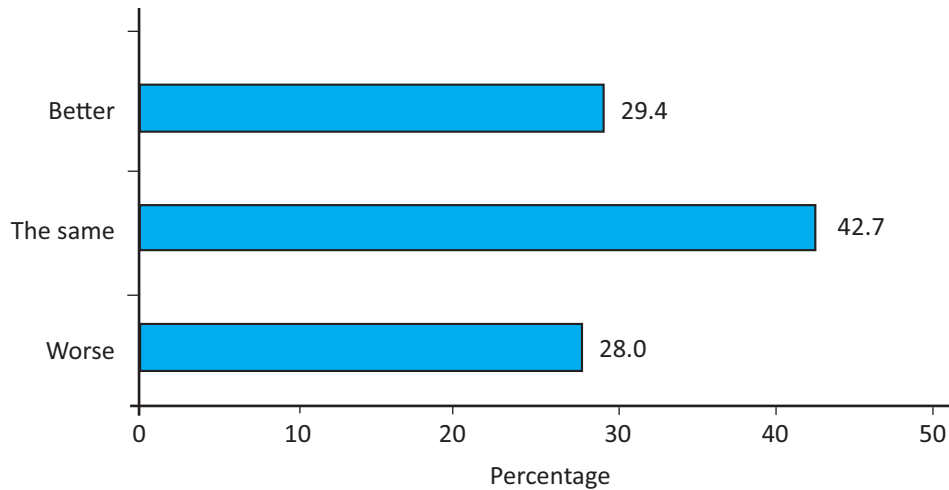


Table 3.52, showing a comparison of the 2010 findings with the 2003 results, confirms the same lack of insight into the probability principle in 2010 as was the case in 2003. Only two in every five (36.5 % in 2003 and 42.7 % in 2010) felt that the chance of drawing the combination 1 2 3 4 5 and 6 is the same as drawing the combination of 13 39 23 7 11 and 42.

TABLE 3.52

CHANCES OF DRAWING THE COMBINATION 1 2 3 4 5 6 OR THE COMBINATION 13 39 23 7 11 42, 2003 AND 2010

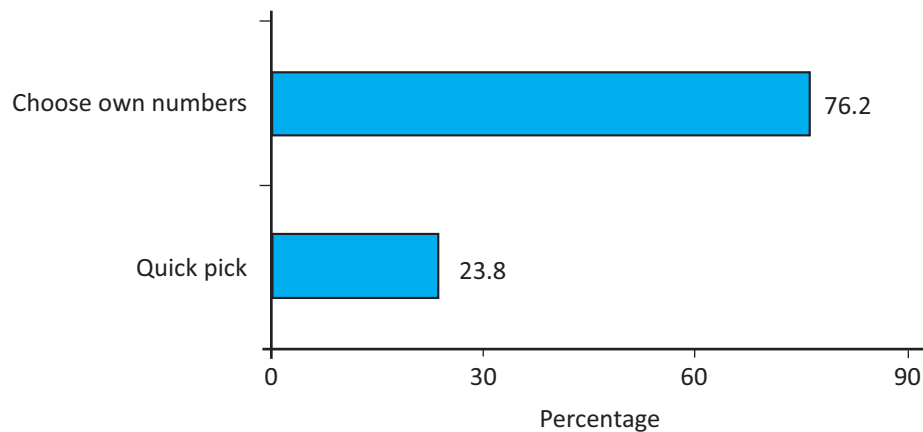
Response	2003 %	2010 %
Better	27.0	29.4
The same	36.5	42.7
Worse	36.5	28.0
Total	100.0	100.0

A further question posed was to establish the perceived difference between own choice and the use of a quick pick. The question read: 'Do you think that you have a better chance of winning if you choose your own numbers or, alternatively, use a quick pick?' Again, respondents expressed a preference for one of the two methods,

implying a perceived difference in the chances of winning depending on the selection method. Figure 3.25 shows that almost eight in every 10 (76.2 %) respondents were of the opinion that the chances of winning were enhanced by choosing one's own numbers while almost one in every five (23.8 %) felt the quick pick method enhanced their chances of winning. These findings closely resembled the 2003 findings that were as follows: better chance when choosing own numbers – 81.9 % and quick pick – 23.8 %.

FIGURE 3.25

PERCENTAGE OF RESPONDENTS THAT PERCEIVED A BETTER CHANCE OF WINNING WHEN CHOOSING OWN NUMBERS RATHER THAN QUICK PICK, 2010



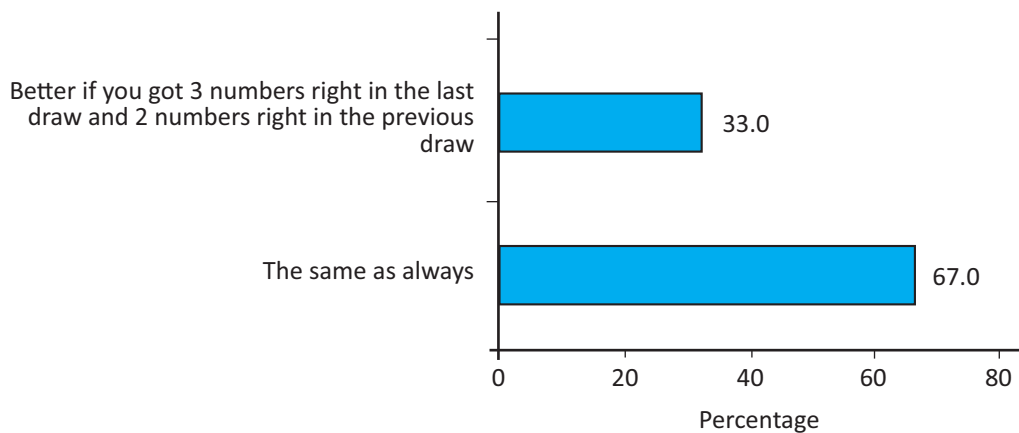
The sociodemographic features of those favouring the quick pick to enhance their chances of winning are as follows:

- middle to older age groups
- retired/nonworkers
- tertiary qualifieds
- Indian/Asian and White
- no gender differentiation
- higher income categories

In relation to the issue of discrete events, the question concerned read: ‘Do you think that your chances of getting four numbers right in the next draw are: (a) better if you got three numbers right in the last draw and two numbers right in the previous draw, or (b) the same as always?’ Figure 3.26 shows that one in every three lottery players expressed the view that their chances of getting four numbers right in a next draw are better if previous draws showed some correct numbers. These participants perceived the selection of numbers for lottery games as a continuum improving their winning chances if previously selected numbers were right. Virtually the same findings were recorded in 2003: 33.8 % (33.0 % in 2010) and 66.2 % (67.0 % in 2010).

FIGURE 3.26

DO YOU THINK THAT YOUR CHANCES OF GETTING 4 NUMBERS RIGHT IN THE NEXT DRAW ARE: (2010 FINDINGS)



The sociodemographic characteristics of respondents believing in improved chances during successive draws are the following:

- younger than 40 years
- limited differentiation by employment status
- no formal schooling or tertiary qualifieds
- Indian/Asians
- female
- limited variations by personal income category

3.21 PLAYING LOTTO AND POWERBALL

Several questions were posed to respondents on their chances of winning LOTTO/ LOTTO Plus or PowerBall and the effect of introducing new games on lottery gaming behaviour.

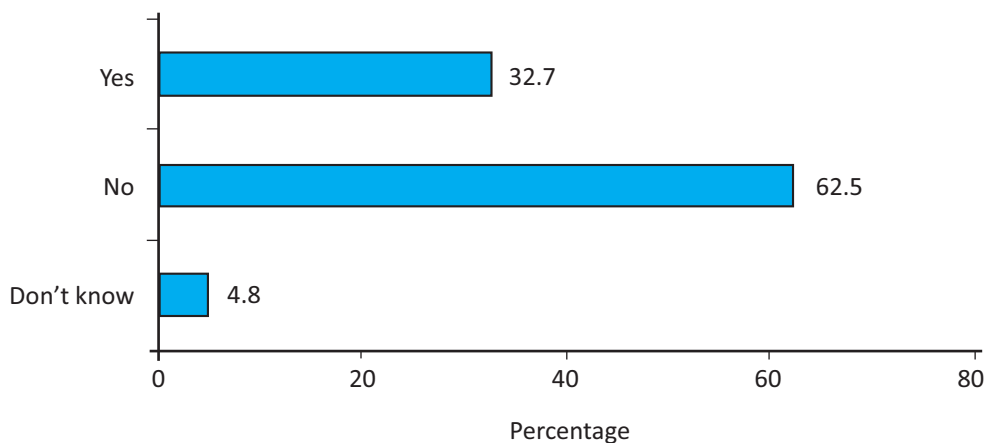
3.21.1 Expenditure on LOTTO tickets: 2007 and 2010

Respondents participating in LOTTO during the month preceding their interview were asked the following question: ‘Do you spend more on LOTTO tickets now compared to 2007 (three years ago)? This question was introduced in the research design to determine the spending behaviour of LOTTO players since the introduction of Gidani and PowerBall. It is recommended that future questionnaires should rather refer to changes in expenditure behaviour for ‘lottery games’ in general rather than only ‘LOTTO tickets’ per se.

Figure 3.27 reflects the percentages of respondents who increased/decreased their expenditure on LOTTO tickets since the commencement of Gidani operations in 2007. One third (32.7 %) of respondents confirmed that they spent more (in 2010) on LOTTO tickets than in 2007.

FIGURE 3.27

INCREASE IN EXPENDITURE ON LOTTO TICKETS DURING THE PAST THREE YEARS FROM 2007 – 2010



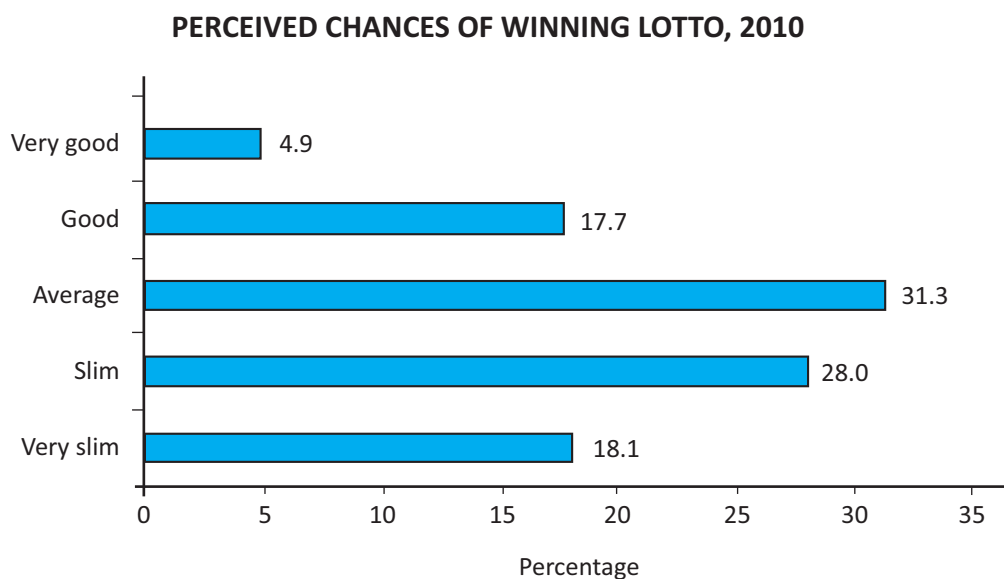
3.21.2 Probability of winning LOTTO

A question was also included on the perceived odds of winning LOTTO. The question was formulated as follows: 'What, in your opinion, are the chances (probability) of winning LOTTO?'

- very good (say a chance of 1 in 40)
- good
- average
- slim
- very slim (say a chance of 1 in 13 million)'

The results of the response to this question are contained in figure 3.28. Although the chances of winning LOTTO are very slim, the figure shows that one in every five (22.6 %) LOTTO ticket buyers perceived their chances of winning as 'good' and 'very good'. Together with the 'average' group (31.3 %), just more than half (53.9 %) the LOTTO participants regarded their chances of winning as ranging from 'average' to 'very good'. The table confirms that only one in every five (18.1 %) respondents has a realistic view of the chances of winning, namely 'very slim'.

FIGURE 3.28



The 2010 findings differ only marginally from those of 2003. Table 3.53 shows that the 'good' and 'very good' categories declined from 32.1 % in 2003 to 22.6 % in 2010 while the 'very slim' category (1 in 13 million chance) declined only from 19.7 % to 18.1 % of lottery game players.

TABLE 3.53

PERCEIVED CHANCES OF WINNING LOTTO, 2003 AND 2010

Chances	2003 %	2010 %
Very good	7.6	4.9
Good	24.5	17.7
Average	29.6	31.3
Slim	18.6	28.0
Very slim	19.7	18.1
Total	100.0	100.0

The sociodemographic characteristics of the 'realistic' group regarding the odds of winning as very slim, are as follows:

- older than 60 years
- retired/nonworkers
- tertiary qualifieds
- White population group
- not gender specific
- earn more than R10 000 per month

The facts are:

- The odds of winning are one in 13 million
- Every draw of the winning numbers is an independent chance event
- Past outcomes have no influence on the next outcome.

- It doesn't matter if you play the same or different numbers each time. The odds of winning are always the same.
- The odds of winning are not influenced by the number of tickets sold.

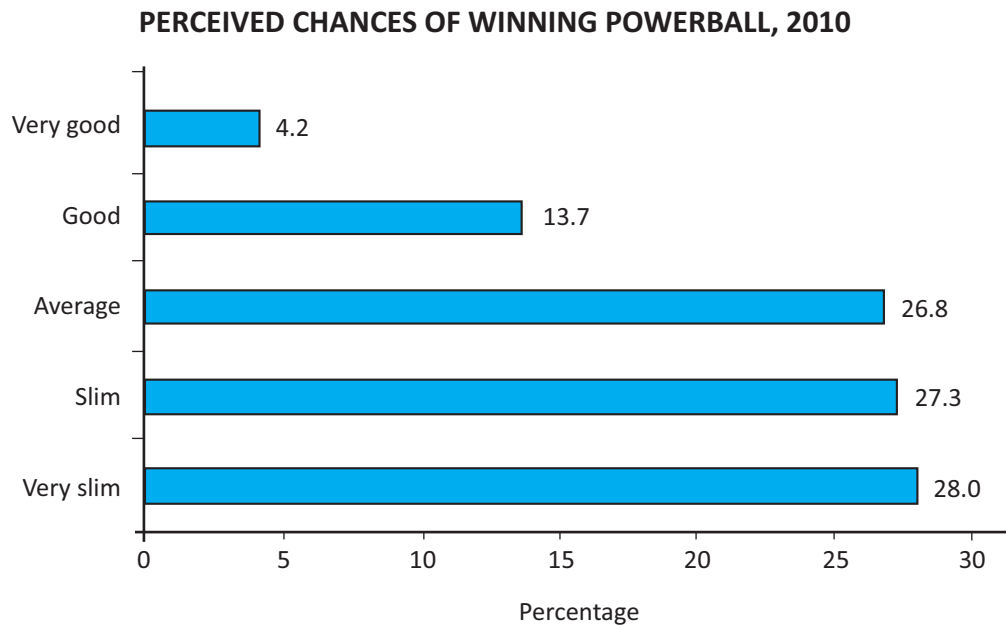
3.21.3 Probability of winning PowerBall

The same question on the perceived odds of winning PowerBall was included in the questionnaire. The question was formulated as follows: 'What, in your opinion, are the chances (probability) of winning PowerBall?'

- very good (say a chance of 1 in 40)
- good
- average
- slim
- very slim (say a chance of 1 in 24 million)

Figure 3.29 shows that just more than half (55.3 %) the respondents saw their chances as slim or very slim. The rest (44.7 %) regarded their chances as ranging between very good and average. Although PowerBall players evaluated their chances of winning somewhat more realistically than their chances of winning LOTTO, a large percentage still regard their chances as unrealistically high.

FIGURE 3.29

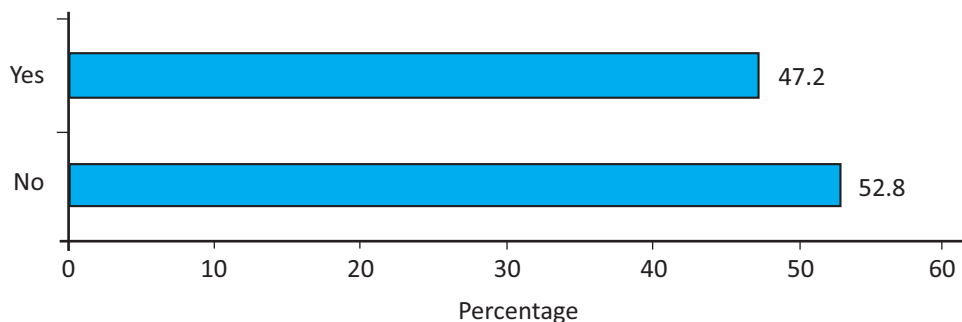


3.21.4 Additional playing alternatives

Respondents were asked whether they had played PowerBall since its introduction on 16 October 2009. Figure 3.30 shows that close to half of the respondents (47.2 %) confirmed their participation in PowerBall since its introduction.

FIGURE 3.30

PERCENTAGE OF RESPONDENTS PARTICIPATING IN POWERBALL SINCE IT'S INTRODUCTION, 2010

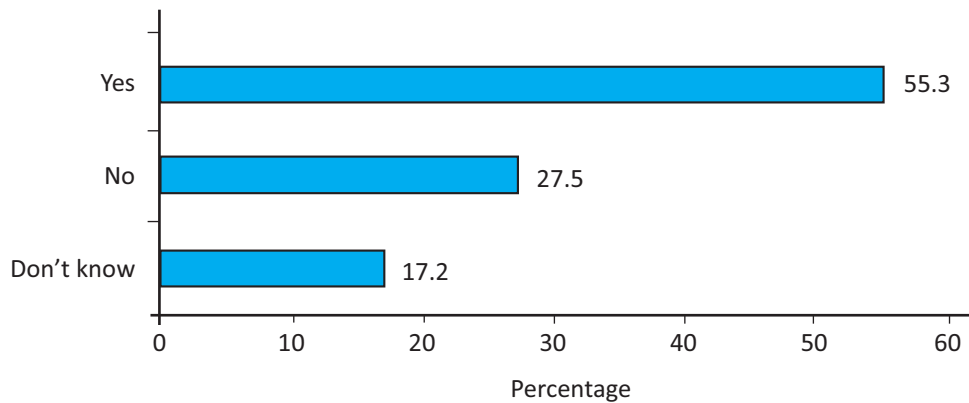


Of those that confirmed playing PowerBall since its introduction, nine in every 10 (88.3 %) also bought PowerBall tickets during the 30 days preceding the survey.

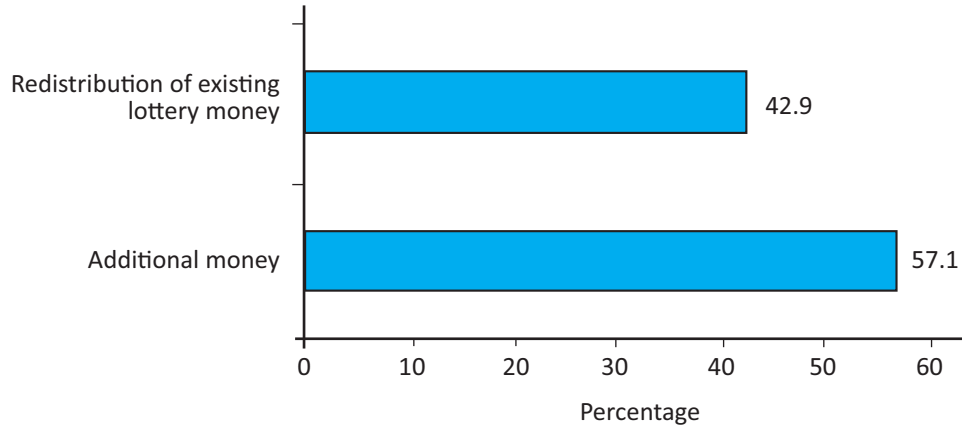
Respondents were also probed on their willingness to participate in more playing alternatives than LOTTO/LOTTO Plus, Scratch Cards, SportStake and PowerBall, should the National Lottery decide to introduce such alternatives. Figure 3.31 shows that just more than half the respondents (55.3 %) confirmed their willingness to participate in such new alternatives; just more than a quarter (27.5 %) would not participate while 17.2 % were uncertain.

FIGURE 3.31

POSSIBILITY OF PARTICIPATING IN NEW LOTTERY GAMES SHOULD SUCH ALTERNATIVES BE INTRODUCED, 2010



A follow-up question was set to the 55.3 % who affirmed their intention to participate in new games, enquiring on the origin of the money for such games – would they use additional money or redistribute the existing amount among a larger number of games? Figure 3.32 shows that 42.9 % of respondents would simply redistribute existing amounts and 57.1 % would allocate additional moneys to the new gaming alternatives.

FIGURE 3.32**ORIGIN OF MONEY FOR PLAYING NEW LOTTERY GAMES SHOULD SUCH ALTERNATIVES BE INTRODUCED, 2010****3.22 ALTERNATIVE PLAYING METHODS**

During the recent past, Gidani has introduced several innovative methods of easing the effort of participating in lottery games. Respondents participating in lottery games during the month preceding their interviews were requested to indicate their usage of several of these methods as well as their levels of satisfaction with these methods. Table 3.54 reflects an exceptionally small number of lottery players using new electronic playing methods. Less than 1 % make use of on-line banking (0.8 %) and bank ATMs (0.4 %). Only 1.9 % play lottery games through their cellphones. In contrast, more than a third (34.2 %) play lottery games through till points in supermarkets. These low levels of utilising alternative methods by lottery players correspond with the findings discussed in section 3.4 where nonplayers reported limited playing incentives embedded in alternative playing methods.

Respondents were also asked to rate their satisfaction with the various methods on a 10-point scale where 1 = very dissatisfied and 10 = very satisfied. Till points in supermarkets recorded high satisfaction rating of 8.23 (out of 10) (table 3.54). Although rated by only a small number of respondents, on-line banking (7.23 out of 10) and cellphones (7.33 out of 10) yielded relatively high satisfaction ratings. A low satisfaction score of only 4.95 (out of 10) was recorded for ATMs.

TABLE 3.54

**USAGE OF AND SATISFACTION LEVELS FOR A SELECTION OF LOTTERY
PLAYING METHODS, 2010**

Method	Usage (% of players)	Satisfaction rating (Out of 10)
Through on-line banking	0.8	7.23
Through a cellphone	1.9	7.33
Using a bank ATM	0.4	4.95
Through till points in supermarkets	34.2	8.23

3.22 IMPACT OF GAMBLING

Several statements on lottery games were put to lottery players requesting them to indicate whether they agree or disagree with the statements. A 'don't know' alternative was also allowed. The statements with the percentage of respondents in agreement with them are shown in table 3.55.

The five statements relating to the financial impact of lottery games reveal the following:

- 53.4 % of respondents indicated that winnings from lottery games had helped them financially
- 70.3 % had lost more than they had won
- 8.3 % had borrowed money to play lottery games
- 23.6 % confirmed that they had spent more money on lottery games than intended
- 16.2 % were criticised by others about spending too much on lottery games

The above suggests some negative effects on the financial situation of respondents. The intensity of these negative effects is measured in chapter 4. However, the table confirms that 77.3 % of respondents were aware of the risks of playing lottery games and 52.3 % were aware of programmes to assist people spending excessively on lottery games.

TABLE 3.55**LEVEL OF AGREEMENT WITH STATEMENTS ON THE IMPACT OF LOTTERY GAMES, 2010**

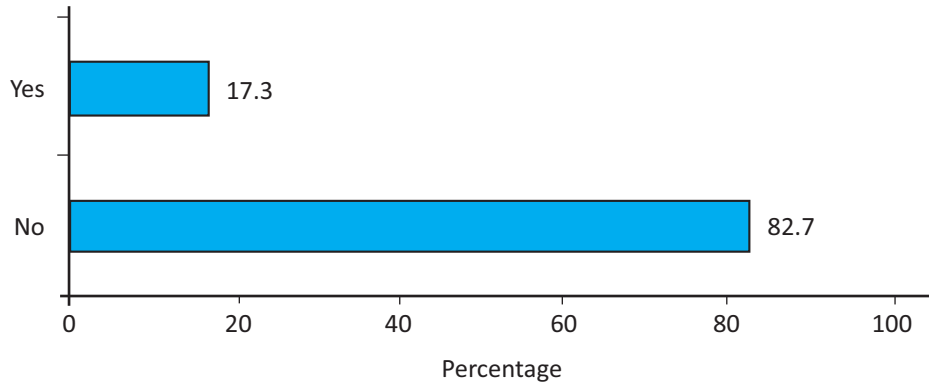
Statements	Agree	Disagree	Don't know	Total
Winning with lottery games helped me financially	53.4	43.3	3.3	100.0
I have lost more than I have won with lottery games	70.3	26.7	3.0	100.0
I have borrowed money to play lottery games	8.3	90.2	1.4	100.0
I have spent more money on lottery games than intended	23.6	75.4	1.1	100.0
People have criticised me about spending too much money on lottery games	16.2	82.2	1.7	100.0
I am aware of the risks of playing lottery games	77.3	20.0	2.7	100.0
I am aware of programmes to assist problem gamblers	52.5	40.9	6.6	100.0

3.24 PARTICIPATION IN THE MODES OF GAMBLING

In an effort to establish the participation of lottery players in other modes of gambling, respondents were asked to indicate their participation in other modes of gambling in addition to lottery games. Figure 3.33 shows that only 17.3 % of lottery players also participated in other modes of gambling during the month preceding their interviews. This implies that more than eight in every 10 (82.7 %) lottery players did not participate in any other gambling activities during the month preceding their interviews.

FIGURE 3.33

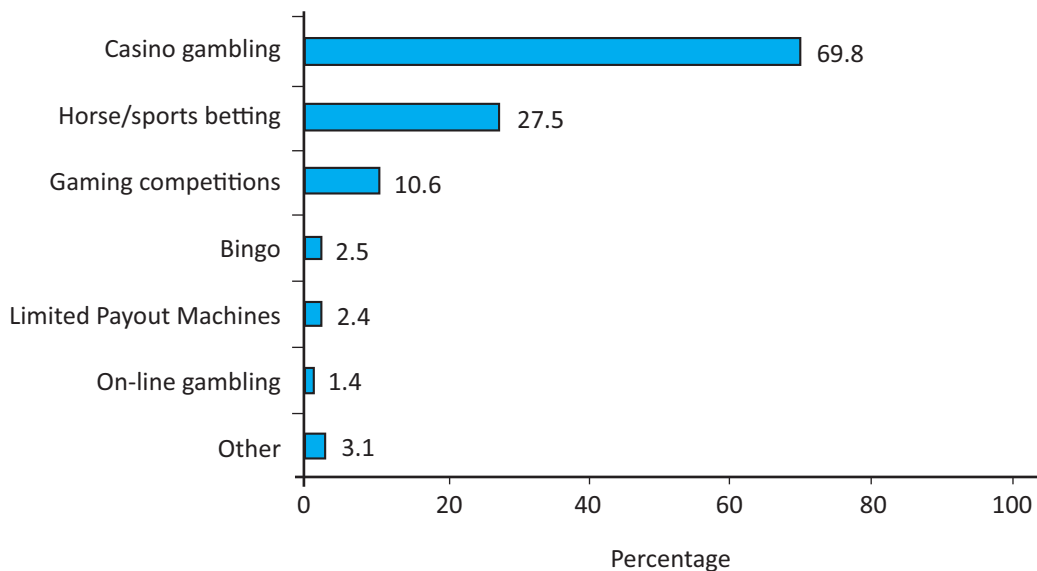
PERCENTAGE OF LOTTERY PLAYERS ALSO PARTICIPATING IN OTHER MODES OF GAMBLING, 2010



Those participating in other modes of gambling (17.3 % or 170 respondents) were required to identify the other gambling modes in which they engage. Figure 3.34 reveals that 69.8 % frequented casinos, 27.5 % betted on horses/sports events and 10.6 % participated in gaming competitions.

FIGURE 3.34

OTHER GAMBLING ACTIVITIES ENGAGED IN BY LOTTERY PLAYERS (1 MONTH PRIOR TO INTERVIEW), 2010

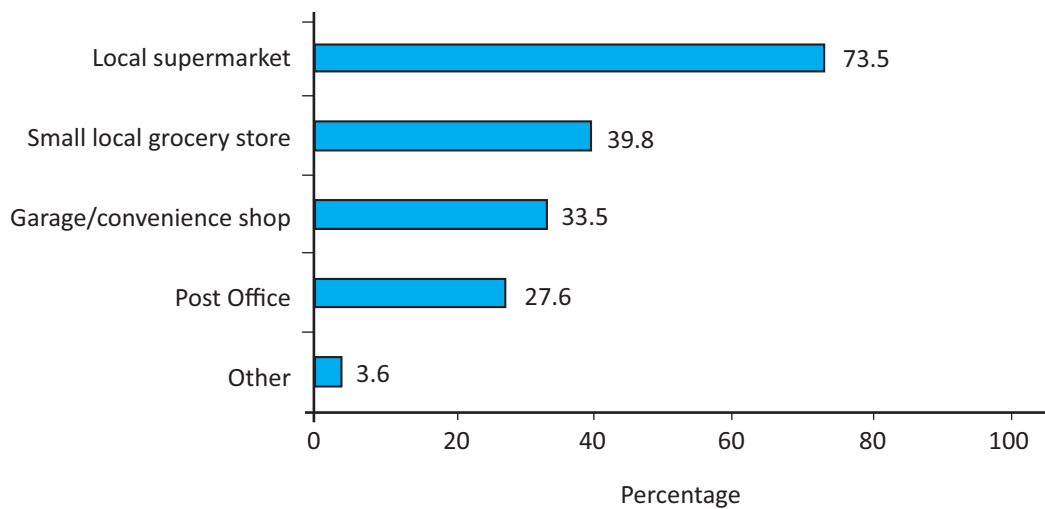


3.25 RETAIL OUTLETS

No less than 8 448 retail outlets are accredited to sell lottery tickets. Respondents were requested to name the type of outlet normally used to buy their lottery tickets or Scratch Cards. Figure 3.35 depicts the outlets most often used. Note that the percentages add up to more than 100 %, implying that some of the respondents named more than one type of outlet. Almost three in every four respondents (73.5 %) buy their LOTTO tickets/Scratch Cards from their local supermarket. This is followed by small local grocery stores (39.8 %), garage/convenience shops (33.5 %) and post offices (27.6 %).

FIGURE 3.35

OUTLETS USED TO PROCURE LOTTERY TICKETS/SCRATCH CARDS, 2010



Respondents (only those playing lottery games) were requested to rate their satisfaction with several aspects at the retail outlets on a 10-point scale where 1 is poor and 10 excellent. Respondents were also requested to provide the major reason for their dissatisfaction.

Table 3.56 shows the mean (average) satisfaction rating. All the satisfaction ratings yielded mean scores above 7.5 (out of 10), signalling a very high level of satisfaction

with services rendered by retailers. The following aspects received ratings above eight, which are exceptionally high mean satisfaction ratings:

- availability of payslips/coupons (8.63 out of 10)
- printouts of LOTTO/LOTTO Plus results (8.54 out of 10)
- payment of prizes by retailers (8.50 out of 10)
- attitude of staff (8.45 out of 10)
- courtesy of staff (8.35 out of 10)
- empathy of staff (8.26 out of 10)

The following two aspects, although receiving relatively high ratings, scored just less than 8.0 (out of 10):

- systems always being on-line (7.82 out of 10)
- availability of a writing surface (7.91 out of 10)

The above high satisfaction ratings are confirmed by the relatively low percentage of dissatisfied clients (ie those allocating a rating of less than 6 out of 10). Table 3.56 shows that dissatisfied clients amounted to less than 5 % for all services except systems always being on-line and the availability of a writing surface. Almost one in every 10 respondents was dissatisfied with the continuous off-line of systems (9.8 %) and the availability of a writing surface (10.9 %).

The following were recorded as reasons for dissatisfaction with the aspects measured in this question.

- (a) Availability of writing space (10.9 % dissatisfied respondents)
- need more space/limited space/no space
 - available space crowded by people
 - no pens available
 - queues too long

- (b) Systems always being off-line (9.8 % dissatisfied respondents)
- electricity
 - sometimes off-line
 - network problems
 - causes inconvenience when off-line
 - have to travel 8 km to retailers – if off-line have to revisit
- (c) Printout of LOTTO results (4.5 % dissatisfied respondents)
- current results not available
 - not willing to help/short tempered
 - only recent results are printed out
 - too busy to assist
- (d) Attitude of staff (3.0 % dissatisfied respondents)
- not enough attention paid to customers
 - not willing to help
 - slow at times
 - poor service
 - don't know how to use machines
 - impatient
- (e) Empathy of staff (2.4 % dissatisfied respondents)
- not concerned
 - slow service
 - long queues
 - staff get irritated
 - don't attend to LOTTO – only caring for own shop
- (f) Payment of prizes by retailers (2.4 % dissatisfied respondents)
- sent elsewhere for certain amounts
 - sent to post office
 - sometimes no money available
 - payment on certain days only

- (g) Availability of pay slips/coupons (2.3 % dissatisfied respondents)
- not available
 - poor standard of machines/must be improved
 - not always enough
- (h) Courtesy of staff (1.9 % dissatisfied respondents)
- staff are rude
 - bad treatment
 - not friendly
 - always bored and tired
 - don't provide pens

TABLE 3.56**SATISFACTION LEVELS AND DISSATISFIED RESPONDENTS, 2010**

Variable	Satisfaction rating (out of 10)	% of dissatisfied respondents (rating below 6)
Attitude of staff	8.45	3.0
Courtesy of staff	8.35	1.9
Empathy of staff	8.28	2.4
Printout of lottery results	8.54	4.5
Payment of prizes by retailers	8.50	2.4
Systems always being on-line	7.82	9.8
Availability of pay slips/coupons	8.63	2.3
Availability of a writing surface	7.91	10.9

3.26 NATIONAL LOTTERIES DISTRIBUTION TRUST FUND (NLDTF)

Several questions were asked on the NLDTF's activities and funding strategies. This section portrays the response to these questions.

3.26.1 NLDTF activities and funding

Table 3.57 shows the response to five questions concerning the NLDTF. In the first question, respondents (lottery players) were asked if they think that players should

have a say in who gets 'good cause' funding. Almost two thirds (65.0 %) expressed the opinion that players should have a say, 25.2 % opposed this view and 9.8 % don't know.

In response to the question on the extent to which the funding of good causes affects playing behaviour, only a quarter (25.8 %) of respondents confirmed that 'good cause' funding has an effect on playing behaviour, such as the amount of money spent on lottery games and the frequency of engagement in lottery playing.

Table 3.32 shows that almost half the lottery players (48.8 %) indicated that they would stop playing if money was not fairly distributed to beneficiaries.

Almost two in every five respondents (42.8 %) affirmed their awareness of organisations having received lottery funding while only one in every 10 (11.1 %) affirmed awareness of organisations in their immediate area that had benefited from lottery funding.

TABLE 3.57

NLDTF ACTIVITIES AND FUNDING, 2010

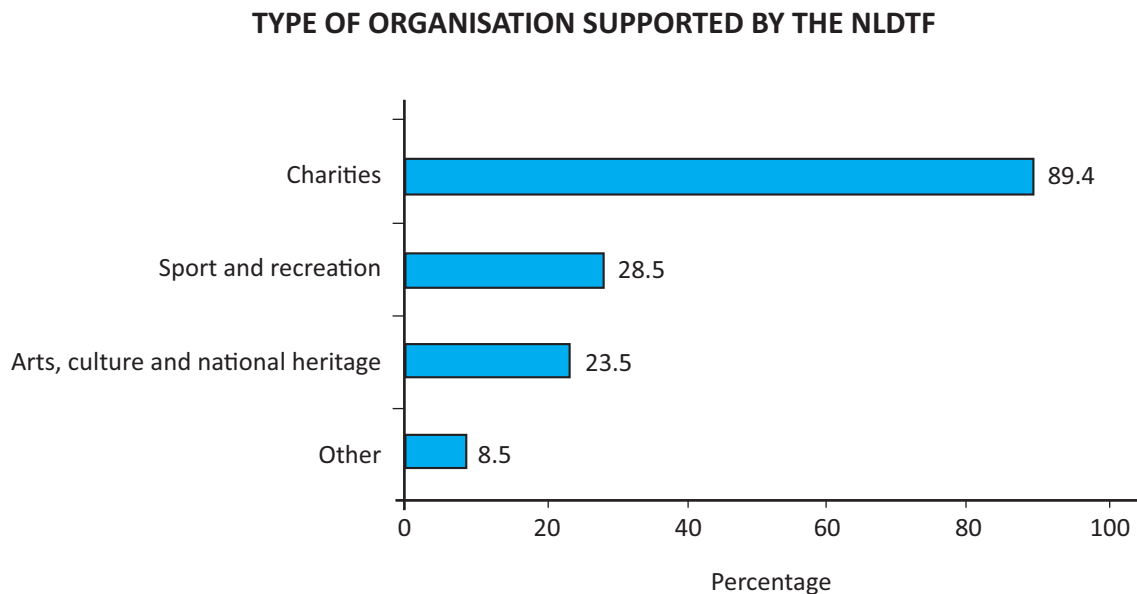
Statements	Agree	Disagree	Don't know	Total
Do you think that players should have a say in who gets good cause (NLDTF) funding?	65.0	25.2	9.8	100.0
Does the funding of good causes affect your playing patterns?	25.8	69.7	4.5	100.0
Would you stop playing if money was not fairly distributed?	48.8	41.1	10.0	100.0
Are you aware of any organisations that have received lottery funding?	42.3	57.7	-	100.0
Are you aware of any organisations in your area that have received lottery funding?	11.1	88.9	-	100.0

3.26.2 Type of organisation supported by the NLDTF

Lottery players were asked their opinion on what type of organisations the lottery should support. Figure 3.36 shows that the overwhelming majority (89.5 %) favoured the support of charities. This is followed by sport and recreation (28.5 %) and arts,

culture and national heritage (23.5 % of respondents). The 'other' mentioned by 8.6 % of respondents include, inter alia, the following (which are also linked to charity): old age homes, abused women and children, clinic schools, rehabilitation centres, students in need, disabled children, HIV/AIDS orphans, unemployed and cancer patients.

FIGURE 3.36



3.27 SUMMARY

The findings of the survey clearly confirm substantial changes in the sociodemographic profile of lottery players between the 2003 and 2010 lottery surveys. These changes suggest a more mature and stable lottery-playing community with fewer irregular and novelty players. The findings also suggest a smaller participation of the less affluent in lottery games. The following serves to illustrate these changes:

- (a) The propensity to play lottery games declined from 69.4 % of the adult South African population (18 years and older) in 2003 to 39.3 % in 2010.
- (b) Although the less affluent are still active lottery players, their share in lottery gaming shows a marked decline. The unemployed, as a percentage of lottery players, declined from 36.9 % in 2003 to 23.0 % in 2010 and those earning a monthly income of less than R1 000 from 60.5 % in 2003 to 34.7 % in 2010.

- (c) The general decline in lottery participation of the South African population is also evident from the increased percentage of the population who do not gamble at all. Abstainers seem to feel fairly strongly about refraining from gambling as is evident from the limited motivational appeal reported on alternative means of accessing lottery games (eg on-line banking facilities, cellphone and bank ATMs). Fewer than 10 % of nonplayers confirmed that the latter methods would not encourage them to participate in lottery games.

The above lottery playing conduct does not seem to originate from negative perceptions of the National Lottery. Three in every five respondents regarded the National Lottery as good for society and almost eight in every 10 expressed the opinion that people should not be discouraged from playing lottery games.

Participation in lottery games varies substantially by type of game. It ranges from an adult participation rate of 32.3 % in LOTTO to only 3.3 % in SportStake. LOTTO Plus stood at 26.3 % and PowerBall at 16.4 % in 2010. Very high playing frequencies are recorded. Close to 80 % of participants play at least once a week (with the exception of Scratch Cards, which stood at almost 50 %). The spending patterns on lottery games suggest that although the number of lottery players has declined, their per capita expenditure showed a marked increase between 2003 and 2010. Those that spent less than R50 per month decreased from 89.6 % in 2003 to 61.9 % in 2010.

It would seem that the above relatively high participation levels are strongly motivated by the motive to win. Several questions were posed to respondents to gauge their perceptions of their chances of winning and their understanding of the dynamics on which the lottery process is based. The following was evident in this regard:

- A lack of understanding of the principle of randomness. Almost a third of respondents expressed the opinion that the 49 numbers in LOTTO and 65 in PowerBall do not have the same chance of being selected with each draw. The majority of respondents also expressed the view that the chances of drawing

some combinations are better than those of other combinations.

- A third expressed the view that their chances of selecting the winning numbers improve if previous draws show some numbers selected previously. The perception is, therefore, that past positive outcomes influence future chances and that every draw is not an independent chance event.
- Perceived chances of winning lottery games are extremely high. One in every five participants regard their chances of winning LOTTO and PowerBall as good or very good. Together with those perceiving their chances as average, half the participants regard their chances of winning as ranging from average to very good.

The respondents who express unrealistically high expectations of winning the lottery and exhibit a lack of understanding of concepts such as randomness and discrete events are generally from the poorer segments of the South African population.

CHAPTER 4

PROBLEM GAMBLING

4.1 INTRODUCTION

Gidani and the National Lotteries Board requested the BMR to investigate problem gambling and problem gamblers as part of this study. It is not the intention of this chapter to dwell on the conceptual issues of problem gambling but purely to report on the survey findings. However, reference is also made to aspects concerning problem gambling as summarised in the reports of the National Centre for the Study of Gambling (NCSG), the booklet published by the South African Responsible Gaming Trust (SARGT), and the Website maintained by the SARGT.

4.2 PROBLEM GAMBLING

Gambling is defined as staking something valuable in the hope of winning a prize where the outcome is unknown to the participants. Playing lottery games is regarded as a gambling activity.

Whether gambling is regarded as a vice or a form of recreation depends on moral judgements, which vary in different cultures, at different points in history and among different individuals. Recreational gambling, which is benign from the point of view of the gambler, provides at least the following pleasures:

- playing games
- fantasising about winning large sums of money
- feeling artificially endangered
- being in a stimulating environment

Gambling behaviour should be viewed as problematic when gamblers are:

- gambling excessively and thereby causing significant harm to themselves and to others, and
- failing to control this excessive behaviour by themselves and without assistance.

A problem gambler is somebody whose gambling activities negatively influence other parts of his/her life such as his/her work, family life, financial welfare and/or studies.

Based on the above, the NCSG recognises three different classes of gambling behaviour. While each may be difficult to distinguish at times, most of the authorities worldwide now recognise these three groups.

- (a) Recreational gamblers gamble on social occasions with friends or colleagues. They have pre-determined acceptable losses and, by and large, their gambling activities cause little harm and their behaviour is associated with minimal guilt. They simply require information and education on gambling behaviour in order to make sensible decisions.
- (b) Problem gamblers spend too much time and money gambling. Their behaviour causes harm both to themselves and others and may be associated with much guilt. Most NCSG patients requiring treatment fall into this group and they very often respond positively to the intervention.
- (c) Compulsive and pathological gamblers have a psychiatric disorder diagnosable by strict criteria. It is regarded as a disorder of impulse control and has a very poor prognosis. Such gamblers are unable to control their gambling, with consequent significant damage to themselves and others, and they are very difficult to treat. They normally constitute a minute percentage of gamblers (SARGT 2001:2).

Compulsive expenditure is not peculiar to gambling. Studies have shown that between 1 % and 2 % of adults have some compulsive shopping tendencies. Psychiatrists in Britain, for example, have cautioned compulsive shoppers that retail therapy could soon be officially recognised as a psychiatric disorder. This addiction is expected to be

entered in the next edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) and can then be claimed from medical aid funds (news24 2003).

The NCSG states that there are severe methodological difficulties surrounding attempts to measure the incidence of problem gambling, most of which apply to all studies of this kind but some of which are peculiar to, or apply with especial force in South Africa. Consequently, all figures for prevalence should be treated only as rough estimates.

4.3 INSTRUMENT USED IN THIS STUDY

Instruments for measuring problem gambling invite respondents to identify themselves as having or not having particular symptoms of problematic behaviour. These symptoms vary in their severity and in the degree to which they manifest with people not identified as having a problem. All cut-off points, distinguishing between compulsive and noncompulsive gamblers, are therefore to some extent arbitrary (Collins & Barr 2001:7). This chapter looks at the results of applying the 20 Gamblers Anonymous (GA) questions to determine the extent of problem gambling.

Gamblers Anonymous (GA) offers the following questions to anyone who may have a gambling problem. Their 20 questions are provided to help the individual decide whether he or she is a compulsive gambler and wants to stop gambling. They read as follows (adjusted to refer to National Lottery games):

- GA1 Have you ever lost time from work due to participation in National Lottery games?
- GA2 Has participation in National lottery games ever made your home life unhappy?
- GA3 Has participation in National Lottery games affected your reputation (the way others see you)?
- GA4 Have you ever felt remorse after participation in National Lottery games?
- GA5 Have you ever participated in National Lottery games to get money with which to pay debts or otherwise solve financial difficulties?

- GA6 Has participation in National Lottery games caused a decrease in your ambition or efficiency (drive to succeed in life)?
- GA7 After losing have you felt you must return as soon as possible and win back your losses?
- GA8 After a win with lottery games, have you felt a strong urge to return and win more?
- GA9 Have you often participated in National Lottery games until your last rand was spent?
- GA10 Have you ever borrowed to finance your playing lottery games?
- GA11 Have you ever sold anything to finance participation in National Lottery games?
- GA12 Are you reluctant to use money earmarked for lottery games for normal expenditures?
- GA13 Does participation in National Lottery games make you careless of yourself or your family?
- GA14 Do you participate in National Lottery games more than you had planned?
- GA15 Do you ever participate in National Lottery to escape worry or trouble?
- GA16 Have you ever committed or considered committing an illegal act to finance lottery games?
- GA17 Does participation in lottery games cause you to have difficulty in sleeping?
- GA18 Do arguments, disappointments or frustrations cause you to participate in lottery games?
- GA19 Do you have an urge to celebrate any good fortune by a few hours of gambling?
- GA20 Have you ever considered self-destruction as a result of your participation in National Lottery games?

A study by the NCSG (Collins & Barr 2001) contains a very comprehensive analysis of measuring compulsive gambling. They applied not only the GA questionnaire but also other methodologies such as the SOGS questionnaire (South Oaks Gambling Screen) and the 10 questions based on the Harvard DSM IV criteria as used in a UK prevalence study in 2000 (Sproston, Erens & Orford 2000).

In applying the above methodologies, the NCSG established a benchmark by questioning respondents who were already in a treatment programme. These were people who identified themselves and were identified by others as having problems with gambling. They were asked to complete the SOGS questionnaire and the 10 questions based on the Harvard DSM IV criteria in addition to the 20 GA questions. They were requested to answer on the basis of what was applicable to them before they came into treatment. On the basis of the above, the NCSG established that 14 or more affirmatives to the 20 GA questions constitute a conservative cut-off point for identifying addictive or pathological gamblers (Collins & Barr 2001:72).

The 2010 survey put the above 20 GA questions to all respondents who participate in lottery games at least twice a week. The assumption was made that compulsive gambling implies excessive spending, which, in turn, could be equated with lottery participation at least twice a week. The frequency of gambling can be regarded as the best indicator of problem gambling.

The following aspects are covered in the rest of the chapter:

- the number of affirmatives with regard to the GA questions;
- the risk profile of problem gamblers

4.4 IDENTIFICATION OF THE PROBLEM GAMBLER IN THE NATIONAL LOTTERY

Table 4.1 reflects the percentage of respondents according to the number of affirmative ('yes') responses to the 20 GA questions. Readers should be reminded that the percentages refer only to those who buy lottery tickets at least twice a week (531 respondents or 54 % of those playing lottery games during the one month preceding the survey).

The table shows that almost one third of respondents (31.0 %) recorded no affirmatives at all and therefore experience no addictive problems whatsoever. The percentage

distribution of affirmative responses tends to decline as the number of 'yes' counts increases. For example, 18.2 % of the respondents gave two affirmative responses while only 1.1 % recorded 10 affirmative responses. As indicated in the NCSG survey, those with a score of 14 or more affirmatives can be classified as addictive or pathological gamblers. According to the table, 0.1 % of those playing lottery games at least twice a week fall into this category. In terms of a number of respondents, only one of the 531 high frequency players recorded 14 affirmative responses to the 20 GA questions. This represents less than 0.1 % of the lottery players captured in the survey.

TABLE 4.1
FREQUENCY COUNT OF AFFIRMATIVE RESPONSES FOR
NATIONAL LOTTERY PLAYERS, 2010

Number of affirmatives to GA questions	% distribution	Cumulative %
0	31.0	31.0
1	18.2	49.3
2	16.5	65.8
3	10.3	76.1
4	7.9	84.0
5	5.2	89.1
6	4.4	93.6
7	3.3	96.9
8	0.7	97.5
9	0.6	98.1
10	1.1	99.2
11	0.2	99.4
12	0.2	99.6
13	0.2	99.9
14	0.1	100.0
Total	100.0	-

Table 4.2 shows the cumulative frequency count of affirmative responses of lottery players in 2003 and 2010 to the 20 GA questions. The table clearly suggests a substantial decline in the 'yes' responses to the GA questions, implying a decline in the problems experienced by lottery players. The percentage with only one 'yes' response increased from 30.0 % in 2003 to 49.3 %, the percentage with five from 66.1 % to 89.1 % and the percentage with 10 from 93.2 % to 99.2 %. Of particular significance is that the

percentage with 14 or more 'yes' responses (ie the problem gamblers) declined from 2.5 % to 0.1 %.

TABLE 4.2

**FREQUENCY COUNT OF AFFIRMATIVE RESPONSES FOR NATIONAL LOTTERY PLAYERS,
2003 AND 2010**

Number of affirmatives to GA questions	Cumulative % 2003	Cumulative % 2010
0	20.3	31.0
1	30.0	49.3
2	39.9	65.8
3	50.0	76.1
4	58.9	84.0
5	66.1	89.1
6	73.9	93.6
7	81.0	96.9
8	86.3	97.5
9	89.7	98.1
10	93.2	99.2
11	94.8	99.4
12	96.6	99.6
13	97.5	99.9
14	98.7	100.0
15	98.9	
16	99.6	
18	100.0	

Table 4.3 shows the percentage of affirmatives among lottery players per GA question as well as the ranking of the questions. The table confirms that the following five issues recorded the most affirmatives with regard to the lottery:

- GA8 – 46.2 % of respondents buying lottery tickets twice a week: After a win with lottery games, have you felt a strong urge to return and win more?
- GA7 – 35.0 %: After losing have you felt you must return as soon as possible and win back your losses?
- GA5 – 24.7 %: Have you ever participated in lottery games to get money with which to pay debts or otherwise solve financial difficulties?
- GA14 – 20.1 %: Do you ever participate in lottery games more than you had planned?

- GA19 – 18.6 %: Do you have an urge to celebrate any good fortune by a few hours of gambling?

The above shows that the most affirmatives centred largely around reactions after winning or losing money. As could be expected, since the motive of winning captured the imagination of the majority of high frequency players, critical questions such as GA 16 (committing illegal acts to finance lottery games), GA11 (selling of something to finance lottery games), GA18 (negative effect on player's reputation), GA17 (consideration of self-destruction), GA13 (careless of family) and GA15 (losing time from work) yielded minimal affirmative responses.

TABLE 4.3

**FREQUENCY COUNT OF AFFIRMATIVE RESPONSES FOR
LOTTERY GAMES PLAYERS**

GA questions	Lottery affirmatives %	Rank
GA1	4.3	15
GA2	4.9	11
GA3	2.7	18
GA4	4.6	14
GA5	24.7	3
GA6	7.0	9
GA7	35.0	2
GA8	46.2	1
GA9	10.1	7
GA10	4.9	11
GA11	1.2	19
GA12	12.0	6
GA13	4.1	16
GA14	20.1	4
GA15	8.9	8
GA16	0.9	20
GA17	7.0	9
GA18	4.9	11
GA19	18.6	5
GA20	3.0	17

4.5 **CONCLUSION**

The result of the survey suggests virtually no addictive or pathological conduct among National Lottery players. This is of particular significance, given the relatively high participation frequency of lottery players.

CHAPTER 5

PROPENSITY TO BUY LOTTERY TICKETS

5.1 INTRODUCTION

This chapter focuses on the propensity to buy lottery tickets as well as the welfare impact on households resulting from allocating a portion of household budgets to lottery games. The redistributive effect of the money spent on lottery games is also addressed.

The calculations are made for 2009 with some references to 2010. Where available, historical figures are quoted since the inception of the National Lottery in 2000.

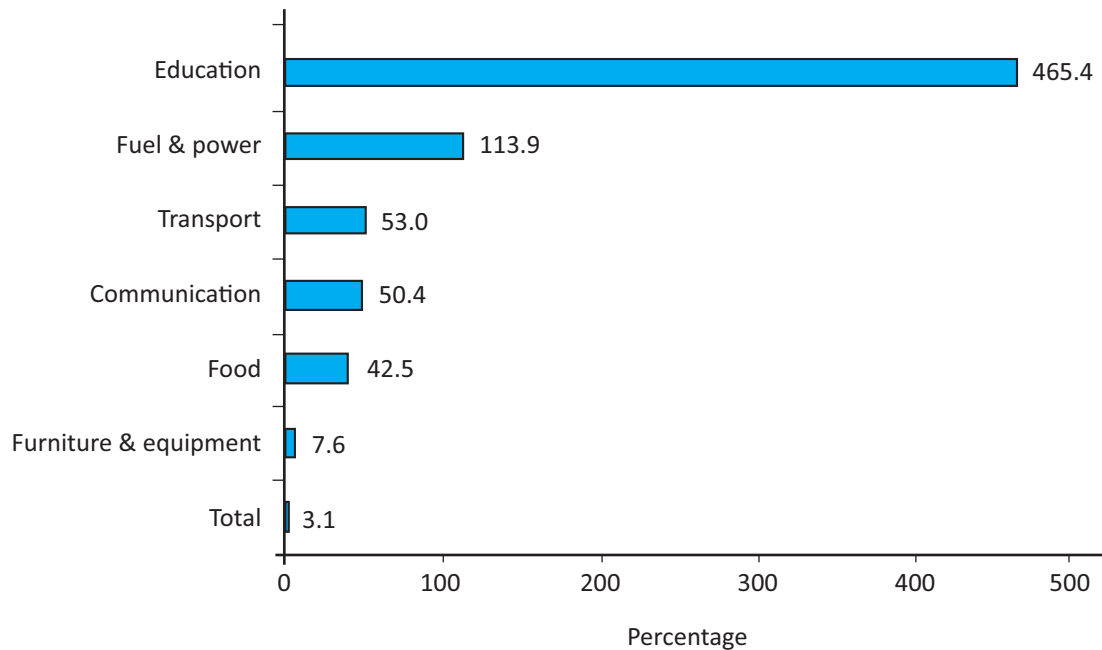
5.2 HOUSEHOLD EXPENDITURE PERSPECTIVE

When considering the allocation of household expenditure to lottery games, it should be kept in mind that immense structural changes have emerged in household expenditure patterns over the past few years. Apart from the creation of an alternative expenditure avenue with the introduction of the lottery, other expenditure changes have also occurred. The general trend suggested by household expenditure calculations over the past 25 years is a considerable increase in expenditure on services (eg communication, education and health) and a corresponding decrease in expenditure on goods (eg food and clothing). Figure 5.1 shows the changes in the percentage of household expenditure on a number of items from 1993 to 2003 (Martins 2003).

The percentage of household expenditure on education increased by 465.4 % and that on fuel and power by 113.9 % while the percentage allocated to food increased by only 42.5 % and that allocated to furniture and equipment by only 7.6 %.

FIGURE 5.1

**GROWTH OF HOUSEHOLD EXPENDITURE ALLOCATED TO SELECTED ITEMS, 1993 – 2003
(CURRENT PRICES)**



The above figure highlights the changes in expenditure patterns of only a few products and services. However, these examples suffice to illustrate that major structural changes in household expenditure patterns coincided with the establishment of gambling and other services in South Africa. Although these changes are evident from the middle of the 1990s, they accelerated towards the end of the 1990s due to, inter alia, the introduction of new communication and computer technology as well as changed government expenditure priorities, that resulted in large private contributions to services such as education and health. The World Bank (2001:224) also confirms that, internationally, the urbanisation process tends to produce lower-than-average shares of expenditure on retail items, such as food and clothing, and higher-than-average shares for services, such as transport, education and communication. All these changes may contribute to decreased retail sales. It would be inappropriate to single out one item such as lottery games, cellphones or education as the sole culprit for lower expenditure on other retail items.

5.3 PROPENSITY TO BUY LOTTERY TICKETS

This section highlights the methodology used in calculating the propensity to buy lottery tickets. In evaluating expenditure tendencies, several environmental issues such as the worldwide economic recession, household financial debt and financial vulnerability issues, changed household expenditure profiles and the structural change in the sociodemographic profile of lottery players should be considered.

5.3.1 Household expenditure

Table 5.1 contains the household cash expenditure in South Africa by main expenditure group for 2009. Total cash expenditure amounted to R1 478.3 billion in 2009. (This amount excludes an amount of R177.9 billion allocated by households to income tax.)

Expenditure on gambling is included in the 'miscellaneous' expenditure group that amounted to R64.1 billion. Expenditure items included in this expenditure group ('miscellaneous') are, apart from gambling, inter alia, the following: membership fees of organisations; professional fees; lawyer's fees and bank charges/interests; and financial expenses and contributions. The table shows that the share of this expenditure group amounted to 4.3 % of household expenditure, of which a small portion originates from expenditure on lottery games.

TABLE 5.1

TOTAL ANNUAL HOUSEHOLD CASH EXPENDITURE BY MAIN EXPENDITURE GROUP, 2009

Main expenditure group	2009	
	R million	%
Food	380 716	25.8
Clothing, footwear and accessories	90 105	6.1
Housing and electricity	215 561	14.6
Household fuel & light	89 091	1.9
Transport	118 992	8.0
Medical and dental	106 669	7.2
Education	62 166	4.2
Insurance and funds	63 534	4.3
Recreation, entertainment and sport	42 081	2.8
Furniture and household equipment	50 139	3.4
Alcoholic beverages	46 944	3.2
Cigarettes and tobacco	21 928	1.5
Washing and cleaning materials	12 652	0.9
Personal care	48 031	3.2
Communication	34 324	2.3
Reading matter and stationery	7 341	0.5
Domestic workers	10 307	0.7
Support of relatives	17 149	1.2
Holiday/weekend (excluding transport)	9 617	0.7
Miscellaneous	64 063	4.3
Savings	47 855	3.2
Total - tax	1 478 277	100.0

Source: BMR, Unpublished information

5.3.2 Expenditure on lottery games at current and constant prices

Table 5.2 shows the expenditure on lottery games at current prices as well as the value of prizes paid out since the establishment of the lottery. The value of lottery ticket sales (all lottery modes) increased from R2.4 billion in 2000 (March to December) to R4.2 billion in 2009. Expenditure shows some variation over time. It increased to R4.3 billion in 2002 and declined gradually to R4.0 billion in 2006. With the six-month interruption during the license change from Uthingo to Gidani, lottery ticket sales dropped to R1.7 billion in 2007 and picked up again to R4.2 billion in 2009. Total prizes paid out represented 48.9 % of total sales over the entire 2000 to 2010 period, ranging

from R1.1 billion in 2000 to R2.0 billion in 2009 (and R0.7 billion for the first 3 months of 2010).

The contribution to total ticket sales by lottery mode is as follows for 2009:

- LOTTO : 62.8 %
- LOTTO Plus : 22.6 %
- SportStake : 6.0 %
- PowerBall : 5.6 %
- Scratch Cards : 3.0 %

In interpreting the above shares by type of game, it should be remembered that PowerBall was introduced only in October 2009 and had thus been in operation for less than three months in 2009. The relative shares of the lottery games for the first three months of 2010 are as follows:

- LOTTO : 38.9 %
- LOTTO Plus : 14.3 %
- SportStake : 4.1 %
- PowerBall : 41.1 %
- Scratch Cards : 4.4 %

The above clearly shows the popularity of PowerBall during January to March 2010, with it clearly becoming the most popular lottery mode. This may be influenced by the relatively large jackpots offered by PowerBall and the fact that it is a new lottery game. The popularity may decline over time as the novelty effect normally attached to new experiences wears off.

TABLE 5.2
TOTAL TICKET SALES OF AND PRIZES PAID OUT ON LOTTERY GAMES, 2000-2010
(EXCLUDING SCRATCH CARD SALES FROM 2003-2010)

Lottery games	March- Dec 2000	Jan-Dec 2001	Jan-Dec 2002	Jan-Dec 2003	Jan-Dec 2004	Jan-Dec 2005	Jan-Dec 2006	Jan-March/ Oct-Dec 2007	Jan-Dec 2008	Jan-Dec 2009	Jan-March 2010
	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm	Rm
LOTTO											
• Sales	2 281.5	3 491.9	4 202.7	4 123.5	3 279.0	3 168.5	3 106.7	1 258.2	2 572.4	2 653.2	541.4
• Prize pool	1 032.1	1 690.2	2 061.3	2 025.1	1 648.7	1 527.3	1 602.4	638.8	1 247.2	1 219.1	265.5
LOTTO plus ¹⁾											
• Sales	-	-	-	-	852.6	919.6	955.5	401.8	857.3	953.5	198.5
• Prize pool	-	-	-	-	435.4	443.1	482.5	196.2	427.7	477.4	99.1
SportStake ²⁾											
• Sales	-	-	-	-	-	-	-	-	89.6	254.6	57.0
• Prize pool	-	-	-	-	-	-	-	-	44.4	128.8	30.5
PowerBall ³⁾											
• Sales	-	-	-	-	-	-	-	-	-	234.8	572.1
• Prize pool	-	-	-	-	-	-	-	-	-	116.8	272.2
Scratch Cards ⁴⁾											
• Sales	110.0	133.3	104.0	..	..	..	..	27.9	180.0	128.7	22.7
• Prize pool	54.4	74.4	60.9	..	..	..	..	12.7	71.8	60.4	9.8
Total											
• Sales	2 391.5	3 625.2	4 306.7	4 123.5	4 131.6	4 088.1	4 062.2	1 687.9	3 699.3	4 224.8	1 391.7
• Prize pool	1 083.5	1 764.6	2 122.2	2 025.1	2 084.1	1 970.4	2 084.9	847.7	1 791.1	2 002.5	677.2

1) Introduced January 2004

2) Introduced August 2008

3) Introduced October 2009

4) Scratch Card information not available for 2003 to 2006 and January-December 2007

Source: (a) National Lottery 2010

(b) Gidani (Pty) Ltd, Unpublished information

(c) Ligthelm 2003

Table 5.3 shows the expenditure on lottery games at constant prices (2008 prices). This means that the inflation factor is removed from the rand values during the entire period and values are expressed at constant or real prices. Real expenditure shows an initial increase in lottery expenditure from its inception in 2000 (R3.8 billion) to a high point of almost R6.0 billion in 2002. From 2003 a gradual decline is evident to 2008 with a slight increase again from 2008 to 2009 from R3.7 billion to R3.9 billion. The R3.9 billion in 2009 is a third (29.2 %) lower than the R6.0 billion in 2002. The 2007 sales of R1.9 billion are atypical due to the suspension of lottery games for almost six months during that year.

TABLE 5.3

**EXPENDITURE ON LOTTERY GAMES AT CONSTANT (2008 PRICES) AND CURRENT VALUES,
2000-2009**

Year	Average CPI index	Lottery sales	
		Current values Rm	Constant 2008 prices Rm
2000	62.5	2 391.5	3 826.4
2001	66.1	3 625.2	5 484.4
2002	72.1	4 306.7	5 973.2
2003	76.3	4 123.5	5 404.3
2004	77.4	4 131.6	5 337.9
2005	80.0	4 088.1	5 110.1
2006	83.7	4 062.2	4 853.2
2007	89.7	1 687.9	1 881.7
2008	100.0	3 699.3	3 699.3
2009	107.1	4 223.8	3 943.8

Source: Stats SA 2010 (CPI)

Considering the household expenditure trend on lottery games from the first full year in 2001 to the last full year in 2009, the following is evident:

- Average percentage growth at current prices : 1.5 %
- Average percentage decline at constant prices : -4.2 %
- Total percentage growth at current prices : 16.5 %
- Total percentage decline at constant prices : -28.4 %

The above figures confirm a slight increase in lottery expenditure at current prices but a substantial decline at constant prices between 2001 and 2009.

It seems from the above that the National Lottery in South Africa is starting to show a level of maturity and stability at round about R4 billion. This could increase in future should new lottery games be introduced. Almost half the lottery players indicated that they should consider alternative games positively. Almost 57 % of the respondents indicated that they would allocate additional money to these games. The high level of stability and maturity in the lottery market place is probably due to the fact that the novelty effect has worn off (with the exception of PowerBall) and that retail outlets are well developed to service the whole South African community.

Table 5.4 shows the per capita expenditure on lottery games by the South African population (18 years and older) and lottery players for 2009 at current prices. The average per capita expenditure for lottery players amounted to R368 in 2009. Subtracting the average per capita prize money of R174 results in an average amount of R194 forfeited by lottery players in favour of the National Lottery. For the South African population as a whole (18 years and older), the average amount spent on lottery games amounted to R145 in 2009. An average amount of R69 flows back into the household income and expenditure stream, resulting in the forfeiture of an average amount of R76 per capita by all adult South Africans.

TABLE 5.4

AVERAGE PER CAPITA EXPENDITURE BY THE POPULATION (18+ YEARS) AND LOTTERY PLAYERS, 2009 (CURRENT PRICES)

Variable	Per capita expenditure by population 18+years R	Per capita expenditure by lottery players R
Total expenditure	145	368
Prize money	69	174
Amount forfeited	76	194

Source: Derived from table 5.2 and unpublished BMR data

5.3.3 Definition of propensity to buy lottery tickets

Propensity to buy lottery tickets is defined as the percentage of household cash expenditure allocated to all five lottery games. The amount of household budgets allocated to lottery games is calculated as follows:

$$\begin{aligned}
 & \text{Total amount spent by lottery players} \\
 & - \text{(minus) amount returned to players} \\
 & = \text{(equals) gross revenue of the National Lottery} \\
 & \div \text{(divided) by total household expenditure} \\
 & = \text{(equals) propensity to gamble (or percentage of expenditure forfeited by} \\
 & \text{households)}
 \end{aligned}$$

The above calculation implies that the prize money allocated to lottery players by the National Lottery reverts back to households as part of their income and expenditure stream. However, it should be noted that the allocation of prize money is largely concentrated in a few households while gambling expenditure is effected by a large number of households. This redistributive effect is discussed in section 5.3.5.

5.3.4 Calculation of propensity to gamble

Table 5.5 shows the propensity to buy lottery tickets, ie the amount of household budgets allocated to the National Lottery, in 2009. The table shows that close to

R2.0 billion (47.4 %) of the total value of sales of R4.2 billion was paid out as prizes to lottery players. This implies that an amount of R2.2 billion was forfeited in favour of the National Lottery for distribution to good causes, Gidani operations and commission to retailers. Dividing this amount (R2.2 billion) into total disposable household income of R1 453.3 billion resulted in a propensity to buy lottery tickets of 0.15 %. This implies that an amount of 15c in each R100 spent by households was allocated to lottery games in 2009. It may be argued that the percentage of household expenditure allocated to lottery games can be slightly higher due to the fact that Powerball was only introduced on 16 October 2009 and therefore played for just less than three months during the year. On the assumption that spending and prize levels would remain constant even if PowerBall had been available for the full year and that spending on PowerBall was not displaced from other games (was therefore new money), the estimated propensity to gamble would increase from 0.15 % to 0.18 %.

TABLE 5.5

PROPENSITY TO PLAY LOTTERY GAMES, 2009

Propensity to play lottery games	2009
Total value of sales	R4 096 090 840
Prizes returned to players	R1 942 098 431
Amount forfeited by players (a)-(b)	R2 153 992 409
Total household expenditure	R1 453 268 754 096
Propensity to play lottery games (e)÷(d)	0.15 %
Propensity adjusted for full PowerBall year	0.18 %

The propensity to buy lottery tickets was calculated at 0.45 % for 2002. This implies a substantial decline to only 0.18 % for 2009. Per R100 household expenditure, the amount allocated by households to lottery tickets declined from 45c in 2002 to only 18c in 2009. This resulted in a decline of almost 60 % in the portion of household expenditure allocated to lottery games.

Table 5.6 shows the propensity to play the various lottery games as well as the distribution amongst the games for every R100 spent on lottery games. The propensity to buy lottery tickets ranges from a low of 0.005 % for Scratch Cards to 0.099 % for LOTTO tickets. The table also shows that, for every R100 spent on lottery games, R55

will be allocated to LOTTO, R18 to LOTTO Plus and R20 to PowerBall. (The latter is on the assumption of a full year's access to PowerBall tickets.) Only R4 out of each R100 will be spent on SportStake and R3 on Scratch Cards.

TABLE 5.6

PROPENSITY TO BUY LOTTERY TICKETS BY LOTTERY MODE, 2009

Lottery games	Propensity %	Allocation of each R100 spent on lottery games R
LOTTO	0.099	55
LOTTO Plus	0.033	18
SportStake	0.008	4
PowerBall ¹⁾	0.035	20
Scratch Cards	0.005	3
Total	0.165	100

1) Based on a full year

5.3.5 Redistributive effects

Participation in lottery games gives effect to a significant redistributive effect of lottery money among players through prizes. This section illustrates this effect with regard to LOTTO and PowerBall. However, the magnitude of redistribution differs by type of game – with a larger effect in the case of LOTTO and PowerBall compared to other lottery games.

The contract with Gidani stipulates that, over the license period, money generated by the sale of LOTTO and PowerBall tickets should be allocated as follows:

- Prizes : 45 %
- Distribution to good causes : 34 %
- Operations, including salaries,
advertising, overheads of Gidani : 15 %
- Commission to retailers : 6 %

The license contract further stipulates that the 45 % allocated to LOTTO and PowerBall prizes should, over the license period, be divided as follows:

	LOTTO	PowerBall
• Division-1 prize (jackpot) :	18.25 %	42.07 %
• Division-2 prize :	4.00 %	13.33 %
• Division-3 prize :	9.00 %	9.36 %
• Division-4 prize :	5.00 %	3.56 %
• Division-5 prize :	16.75 %	7.30 %
• Division-6 prize :	11.00 %	6.94 %
• Division-7 prize :	36.00 %	4.62 %
• Division-8 prize :	-	12.82 %
• Total :	100.00 %	100.00 %

The redistributive effect of the above is shown in tables 5.7 for LOTTO and 5.8 for PowerBall. The tables illustrate the total ticket sales and prize pool for the Saturday 6 March 2010 draw (LOTTO) and the Friday 23 April 2010 draw (PowerBall).

On the basis of an assumption of an average expenditure of R10 per draw, table 5.7 shows that approximately 2.6 million people contributed to the ticket sales of R26.0 million for the Saturday 6 March 2010 LOTTO draw. [As shown in section 3.17 almost one in every five (21.5 %) respondents indicated higher expenditure during large jackpot prizes, implying that the average expenditure per draw might be slightly higher if large jackpots are available.] Of these 2.6 million people, only 4.6 % (118 731 players) received anything back in the form of prizes. One person received R13.8 million, 13 persons received R156 215 each and 101 received division-3 prizes to the amount of R10 440 each. No less than nine in every 10 winners (88.6 %) each received R40. On average, an extremely large number of people (2.6 million) each spent small amounts while the prizes were heavily concentrated in only 105 people (division 1 to 3 prizes).

The same pattern emerges in table 5.8, illustrating the redistributive effects of the PowerBall draw of Friday 23 April 2010. Approximately 1.4 million punters bought PowerBall tickets while only 8.4 % shared in the prize pool. One person received the jackpot of R10.9 million and 69 901 received division 8 prizes to the amount of R11.00 each.

TABLE 5.7

TOTAL LOTTO TICKET SALES AND PRIZE POOL, SATURDAY 6 MARCH 2010

	Total amount R	Total number of participants/winners	Individual payout R
Total ticket sales	26 035 978	2 603 598 ¹⁾	-
Total prize pool	23 353 601	118 731	-
Division 1	13 797 494	1	13 797 494
Division 2	468 645	3	156 215
Division 3	1 054 440	101	10 440
Division 4	585 760	224	2 615
Division 5	1 958 704	5 744	341
Division 6	1 282 158	7 498	171
Division 7	4 206 400	105 160	40

1) Based on an assumption of an average expenditure of R10 for this draw

TABLE 5.8

TOTAL POWERBALL TICKET SALES AND PRIZE POOL, FRIDAY 23 APRIL 2010

	Total amount R	Total number of participants/winners	Individual payout R
Total ticket sales	13 884 272	1 388 427 ¹⁾	-
Total prize pool	13 961 037	116 311	-
Division 1	10 933 745	1	10 933 745
Division 2	832 848	1	832 848
Division 3	584 780	35	16 708
Division 4	222 171	719	309
Division 5	455 504	1 328	343
Division 6	423 480	28 232	15
Division 7	273 598	16 094	17
Division 8	768 911	69 901	11

1) Based on an assumption of an average expenditure of R10 for this draw

The above confirms the large redistributive effect resulting from participating in lottery games.

5.4 SUMMARY

Although participation in lottery games is often accused of being responsible for substantial household expenditure displacement, calculations show that only 0.18% (ie 18 cents in every R100 spent by households) is allocated to lottery games. However, this average propensity to play lottery games may differ substantially by household income level. Poor households spending even a small amount on the lottery may forfeit a sizeable percentage of their income while the same or even a larger amount may be negligible in the case of affluent households. LOTTO also has a substantial redistributive effect. Millions of patrons spend small average amounts per person per draw while less than one in every 10 receives anything back. Only 0.1 % of players receive substantial prize money from LOTTO and PowerBall. Although all the winnings from lottery games revert back to the household income stream, large jackpot prizes are normally invested and do not, therefore, form part of the normal day to day household expenditure cycle.

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