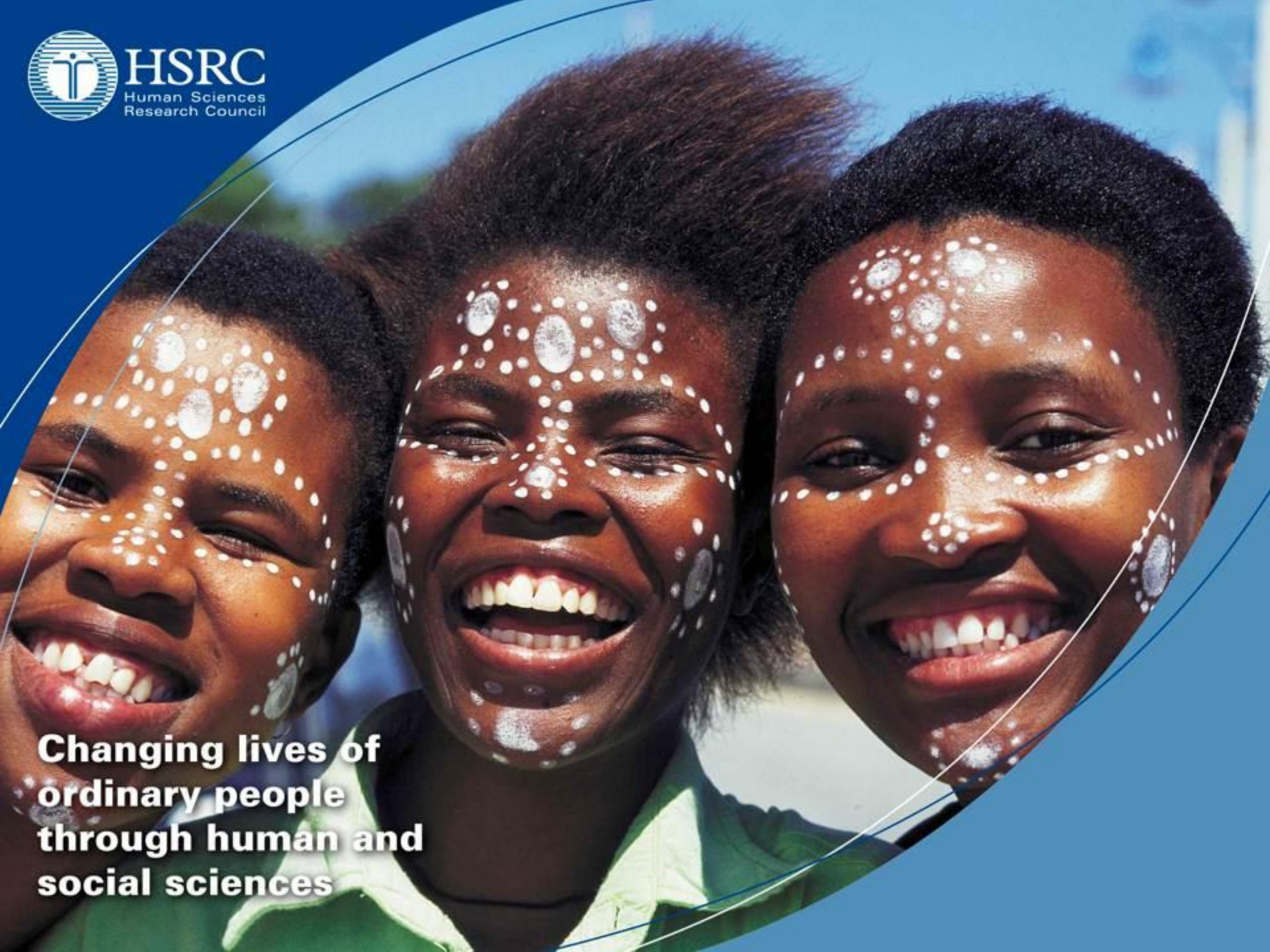




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# **Measuring Financial Literacy in Post-Apartheid South Africa: *A Quantitative Examination of a Multi- Dimensional Concept***

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Paper prepared for the 2013 Biennial Conference of the Economic Society of  
South Africa, University of the Free State Bloemfontein South Africa.



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## **ACKNOWLEDGEMENT**

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# INTRODUCTION

**Financial literacy** is less well understood in the developing world which has an impact on financial literacy programmes in developing countries.

**AIM:** develop and implement a survey of financial literacy of adults in South Africa consistent with emerging measurement best practice internationally

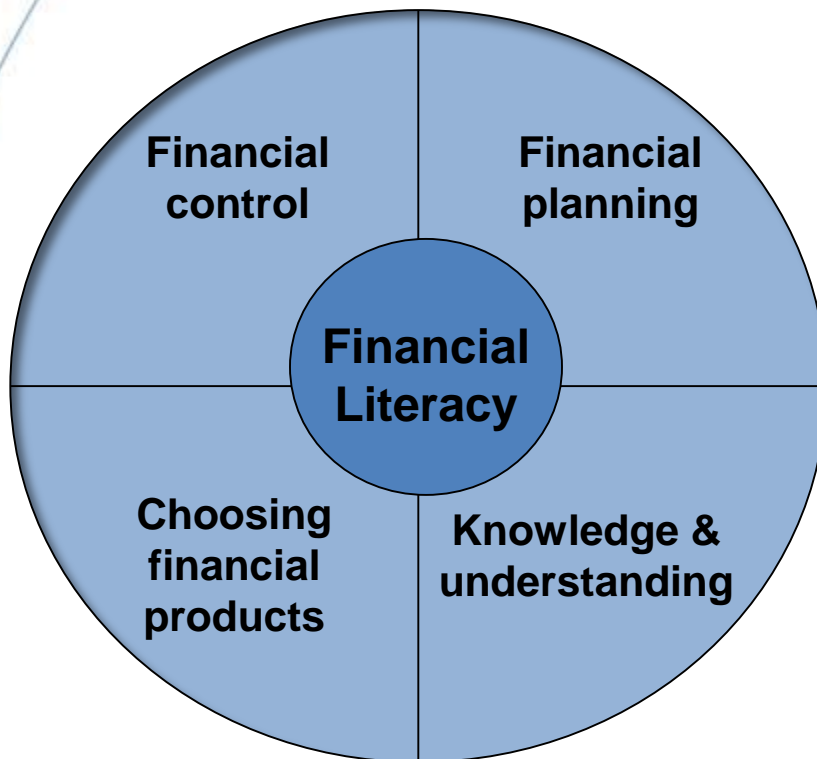
**ASSIST IN:**

- Identifying potential needs and gaps in terms of specific aspects of financial literacy, and groups at risk
- Developing a composite financial literacy score for monitoring purposes

**Analysing financial literacy** in South Africa will allow the *determinants* identified in developed world to be assessed in the developing, permitting a test of their *salience* in different economic contexts

# The International Network on Financial Education (INFE) and a New Approach to Measuring Financial Literacy

Multidimensional approach:  
Four Components



**OECD Financial literacy definition:** “a combination of awareness, knowledge, skills, attitude and behaviours necessary to make sound financial decisions and ultimately achieve individual financial wellbeing”

# MEASUREMENT CHALLENGES

**Heterogeneous Middle Income Country** with one of world's highest income inequality levels

## **VAST INEQUALITIES THAT CHARACTERIZE BOTH ACCESS TO AND THE QUALITY OF EMPLOYMENT**

*Quarterly labour force survey (QLFS)* for the second quarter of 2013: In the months of April to June this year the official unemployment rate rose to 25.6%, while the broader rate of unemployment rose to 36.8%.

The number of unemployed people rose to 4.7-million and the number of discouraged work-seekers to 2.4-million.

- Between these two groups there are now over seven million people without work.

A 2012 *Unicef* report found that 1.4 million children live in homes that rely on often dirty streams for drinking water and 1.7 million live in shacks, with no proper bedding, cooking or washing facilities.

# STUDY METHODOLOGY

Survey conducted by *Human Sciences Research Council*

Nationally representative of the population 16 years and older living in private households in the 9 provinces

- Primary sampling units: 500 census enumerator areas (EAs), stratified by province, geography type and majority population group
- Secondary sampling units: 7 household visiting points randomly selected per EA
- One respondent 16+ years randomly selected per household

Of 3,500 addresses issued 2,972 interviews achieved  
Responses to the survey voluntary and confidential,  
collected by face-to-face interview

Data collection: September-October 2011

# CONSTRUCTING COMPOSITE DOMAIN SCORES

## ***Standardisation of measures***

- Indicators made comparable through use of standardised 0-100 scaling

## ***Weighting and aggregation***

- Assumption of equal weighting of measures
- Aggregation: simple additive approach (standardised indicators added together and an average domain score produced)

## ***Constructing overall financial literacy score***

- In deriving the overall financial literacy score, each of the four domains were assigned equal weights
- This means that none of the four dimensions was treated as more important than the others.
- The four domain scores were averaged to create the final composite indicator



# QUESTIONNAIRE CONTENT

## FINANCIAL CONTROL

8 QUESTIONS USED

*Personal Money Management*

*Meeting Financial Needs*

*Household Budgets*

*Long-term Financial Goals*

## FINANCIAL PLANNING

5 QUESTIONS USED

*Financial Reserve Funds*

*Emergency Financial Planning*

*Propensity to Save vs Spend*

*Retirement Planning*

## PRODUCTS CHOICE

12 QUESTIONS USED

*Awareness of Products*

*Holding Products*

*Choosing and Using products*

*Selecting Advice Givers*

## FINANCIAL KNOWLEDGE

8 QUESTIONS USED

*Simple and Compound Interest*

*Inflation-time Value of Money*

*Risk, Diversification and Return*

*Self-Rated Knowledge*

## SOCIO-DEMOGRAPHIC

*Age*

*Gender*

*Education*

*Work*

*Income*

# DETERMINANTS OF FINANCIAL LITERACY

Most studies have found that *poorer individuals* tend to have *low levels* of financial literacy.

The relationship between financial literacy and wealth accumulation is *unclear*. *Reverse causality* may better explain this association.

**Hypothesis 1:** Economic position is positively associated with financial literacy, with those individuals in economically advantageous positions more likely to exhibit high financial literacy scores.

A common finding in the literature measuring differences in financial literacy is that *educational attainment* is associated with financial literacy.

This may be linked to the *cognitive abilities* that are often acquired in the process of *formal education*.

**Hypothesis 2:** Educational attainment will be positively associated with financial literacy, with those less educated individuals more likely to have low financial literacy scores.

# DETERMINANTS OF FINANCIAL LITERACY

A number of scholars have investigated the relationship between age and financial literacy, finding evidence of an inverse U-shaped age profile

**Hypothesis 3:** A non-linear relationship will be observed between age and financial literacy, with those in middle age exhibiting higher financial literacy scores than the young and the old.

The current research on financial literacy seems to suggest that differences exist between racial groups in those countries where ethnicity and financial literacy have been examined. A gender basis has also been noted in a number of studies on financial literacy.

**Hypothesis 4:** A racial hierarchy will be evident in financial literacy scores, with differences observed between racial groups in South Africa.

**Hypothesis 5:** A gender basis in financial literacy will be noted, being male will be positively associated with a high financial literacy score.

# **RESULTS OF THE 2011 BASELINE SURVEY**

The majority of South Africans scored low on all domains measuring financial literacy. This is not surprising considering the challenges faced by many South Africans during the difficult financial climate of 2011.



# INFE OECD FRAMEWORK

The use of the *INFE OECD framework* in South Africa provides a good example of what can be achieved.

- The work completed provides a *platform* to appreciate the *complexity of the financial literacy* in the context of the modern period.

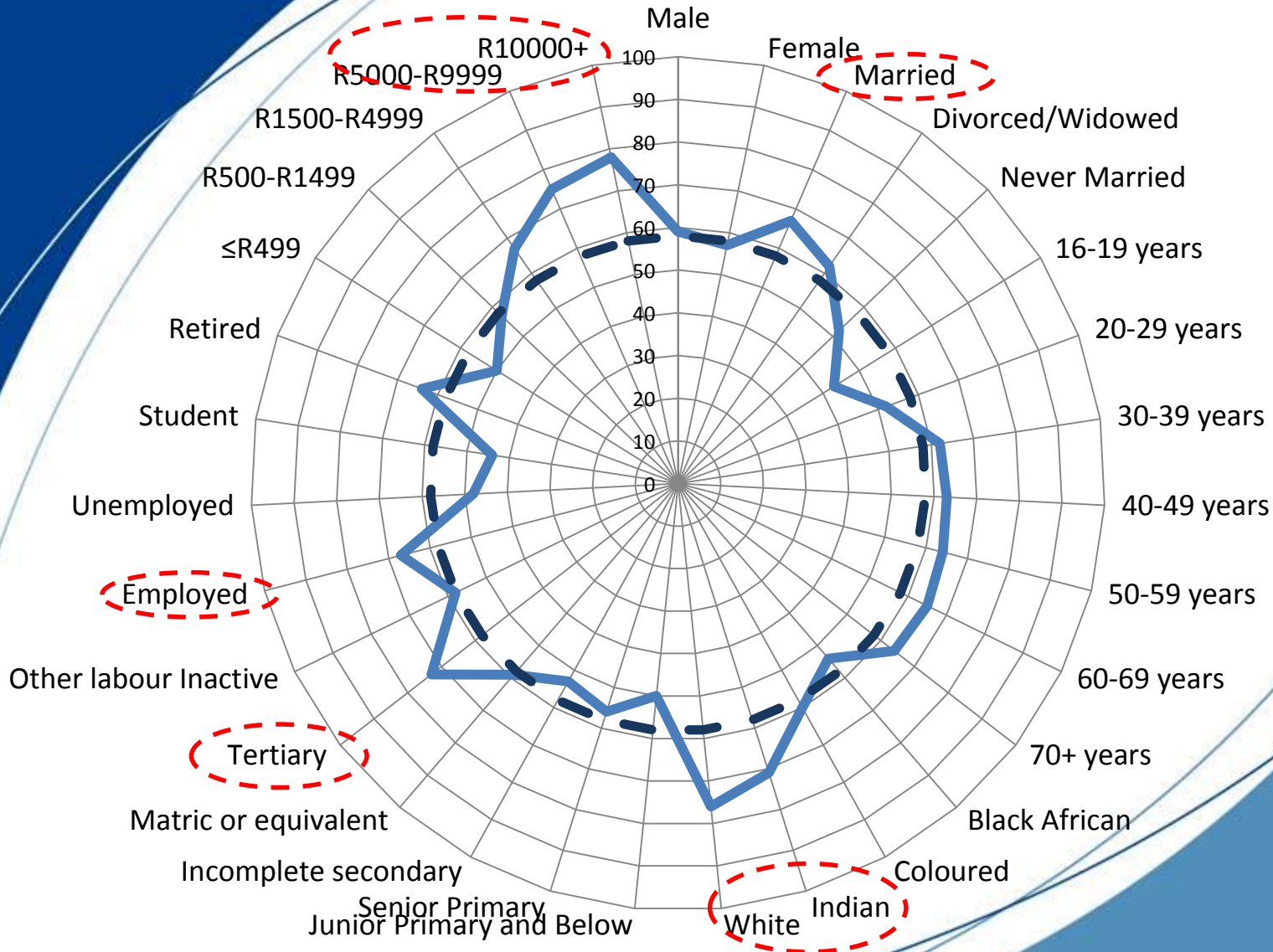
Financial domain scores, designed by the OECD, are an *important instrument* that can be used to successfully capture the many *multidimensional aspects* of financial literacy.

- The INFE OECD measures constitute a powerful tool to understand and measure financial literacy.

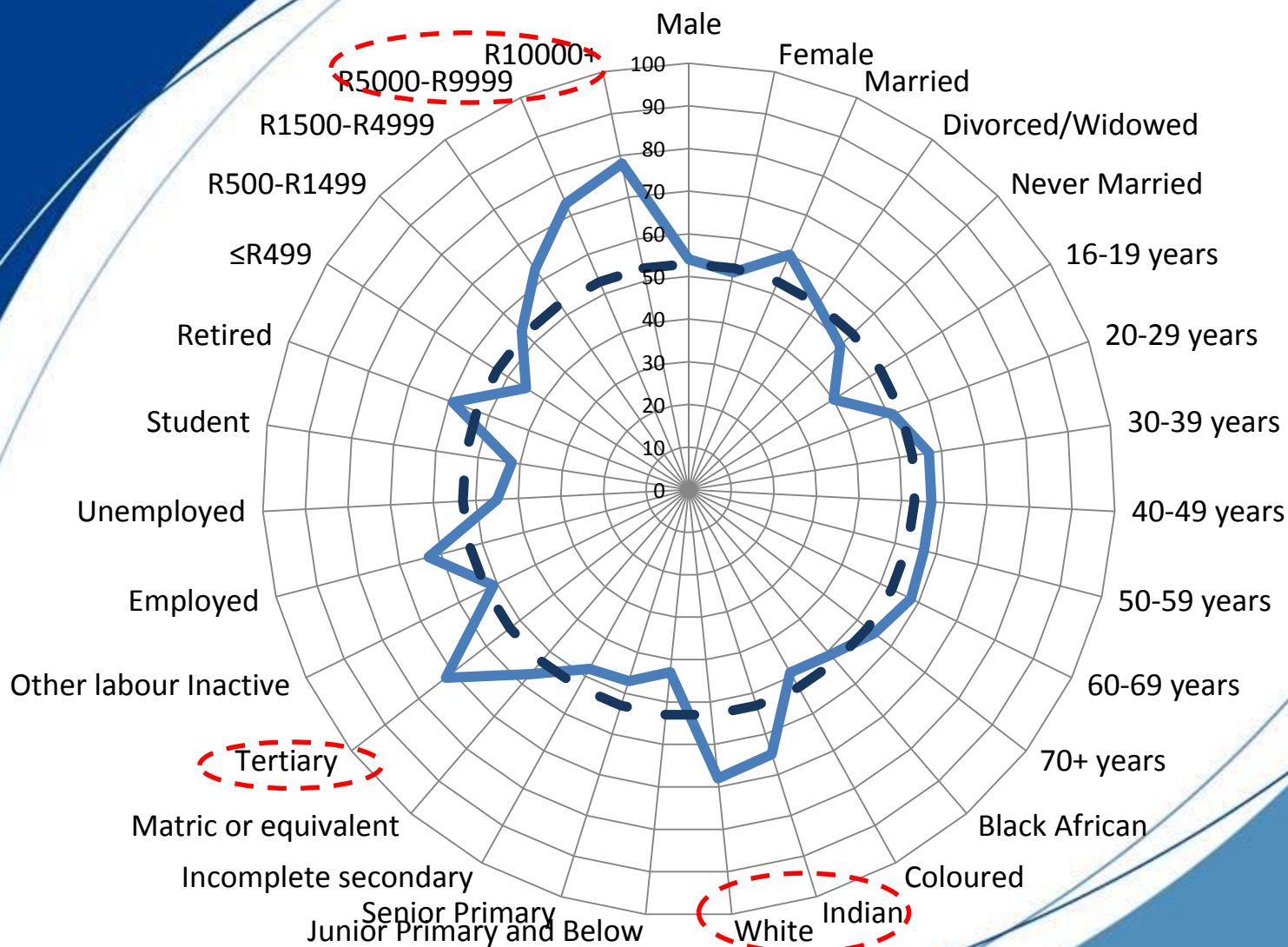
A tool that can identify *financial vulnerable groups* and provide a context to campaign for greater consumer education.

Measures are vital to the *scholarship* on financial literacy and will provide a *rich* source of data for scholars.

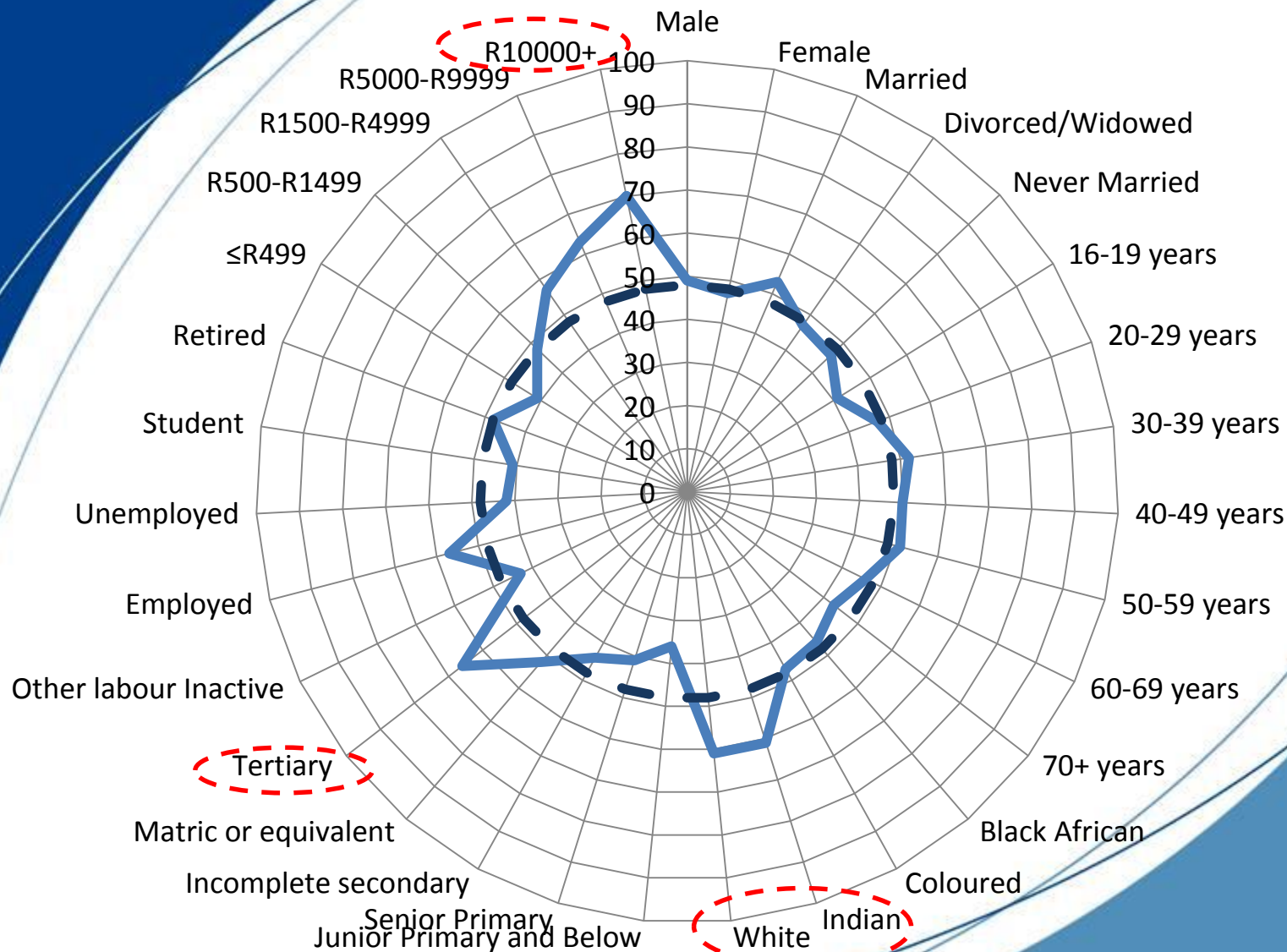
# FINANCIAL CONTROL



# FINANCIAL PLANNING

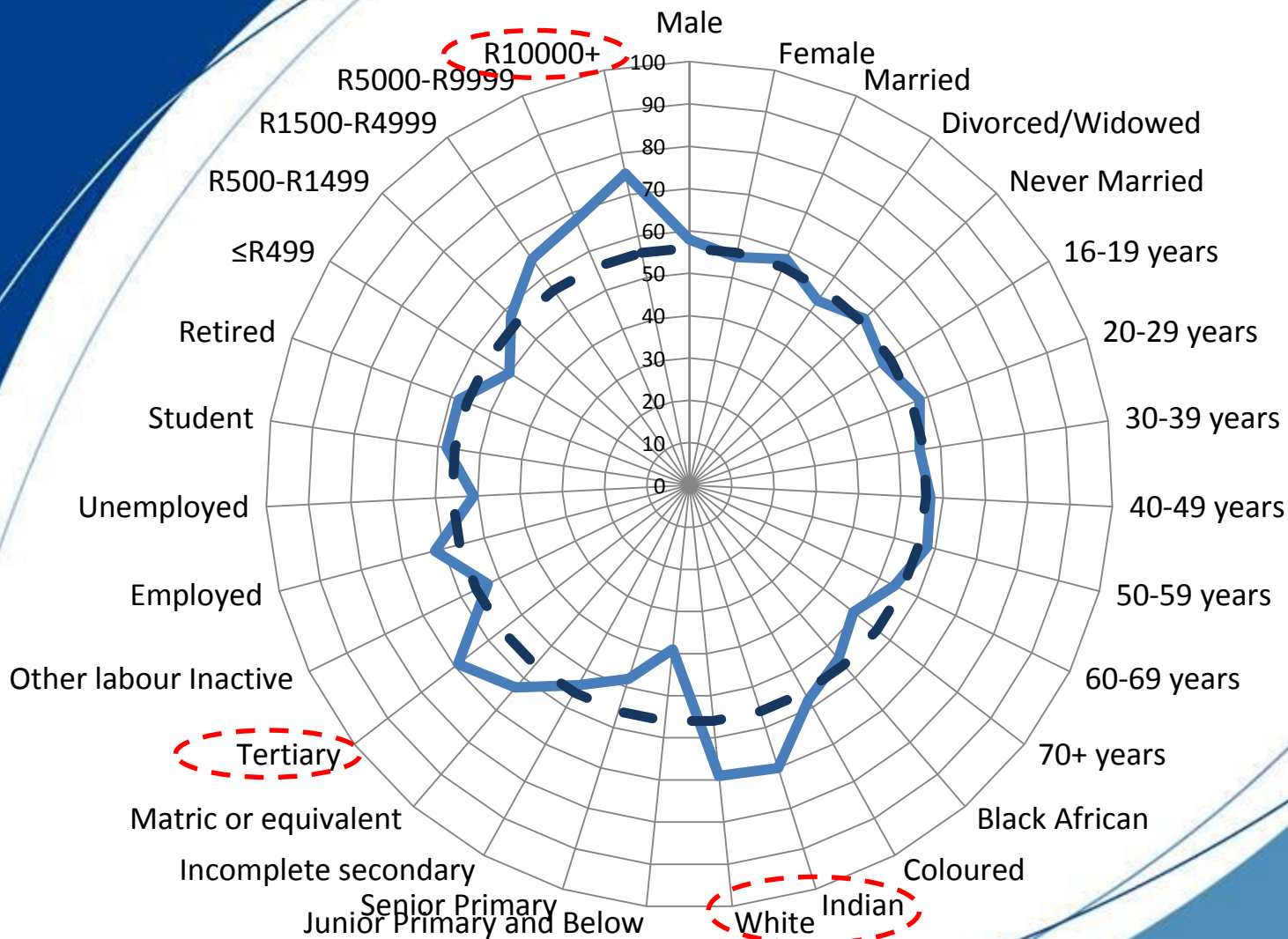


# PRODUCT CHOICE





# FINANCIAL KNOWLEDGE



# BIVARIATE RESULTS

**Wealthy respondents** were more likely than the poor to have high scores on the financial domain scores.

**Educational attainment** seems to show a strong correlation with all domains, with those less educated individuals having lower literacy domain scores than their more educated counterparts.

**Age** has an effect on financial literacy although the effect is somewhat weaker than expected on financial knowledge.

**Substantial racial group differences** were observed, with white and Indian South Africans scoring higher, on average, in all domains than their black African or coloured counterparts.

**Men** were found to be score higher on all domains but the gender difference noted was *minor* and the significance of the relationship smaller than anticipated (particularly on the financial control and financial planning domains).

	Financial Control		Financial Planning		Product Choice		Financial Knowledge	
	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.	Coef.	Sig.
Male	Ref.		Ref.		Ref.		Ref.	
Female	1.38	n.s	1.07	n.s	0.75	n.s	0.51	n.s
16-19 years	Ref.		Ref.		Ref.		Ref.	
20-29 years	4.30	*	5.01	*	-1.39	n.s	-2.11	n.s
30-39 years	10.23	***	7.52	**	-0.43	n.s	-4.94	*
40-49 years	8.91	***	7.24	**	-1.28	n.s	-2.76	n.s
50-59 years	11.99	***	7.66	**	0.68	n.s	0.10	n.s
60-69 years	18.28	***	9.93	**	-2.15	n.s	-1.69	n.s
70+ years	20.60	***	8.82	*	-5.32	n.s	-8.33	*
Black African	Ref.		Ref.		Ref.		Ref.	
Coloured	3.65	*	-4.03	*	1.06	n.s	1.85	n.s
Indian	-0.72	n.s	-0.78	n.s	1.82	n.s	2.77	n.s
White	4.03	*	-0.22	n.s	0.97	n.s	6.89	**
Junior Primary and Below	Ref.		Ref.		Ref.		Ref.	
Senior Primary	6.58	**	6.58	**	3.21	*	9.43	***
Incomplete secondary	11.06	***	11.06	***	7.12	***	13.81	***
Matric or equivalent	15.63	***	15.63	***	12.03	***	20.82	***
Tertiary	20.99	***	20.99	***	18.47	***	19.64	***
≤R499	Ref.		Ref.		Ref.		Ref.	
R500-R1499	2.26	*	3.60	**	2.32	**	3.72	**
R1500-R4999	6.70	***	8.52	***	5.89	***	5.76	***
R5000-R9999	8.23	***	14.37	***	8.05	***	5.45	*
R10000+	9.08	**	17.94	***	12.72	***	10.38	**
Adj. R-squared	0.30		0.30		0.35		0.23	

# MULTIVARIATE RESULTS

**Economic status and labour market position** emerging as strong predictors on all domains

**Educational attainment** was found to be a strong predictor on all financial literacy domains

**Age** was found to be a significant predictor of financial control and financial planning but not product choice and financial knowledge

- An inverse U-shaped age profile was **not found** on any of the domains

**Race** was not a significant predictor of the financial planning and product choice domains

- White South Africans were found to be significantly different from their non-white counterparts on the financial knowledge domain

**Gender** was not a significant predictor on any of the domains and no evidence of gender basis was found



The South African economy is still recovering from the *2009 financial recession* and the nation's financial institutions are struggling to sustain *robust economic growth* in a difficult global market.

The results highlight the need for *targeted interventions* and *consumer education programmes* that will promote financial inclusion and *improve awareness* of financial services.

- The forthcoming national consumer financial education strategy must establish a set of *adaptive* interventions that target vulnerable groups.

Periodic *multidimensional* evaluations of financial literacy are required in order to *identify target groups* and their changing needs, as well as *monitor* the cumulative effect of interventions directed at producing a more *financial capable citizenry*

**Financial Education Policy:** Survey data and measures has assisted by....

*...identifying target groups*

*...provided comparable year-on-year measure*

## **Evaluation approach:**

Show which socio-demographic groups being reached and which messages are getting through to risk groups.

- Also understand the rate at which societal change is occurring

**Future Financial Literacy Surveys:** Intentions for the future research in South African Social Attitudes Survey (SASAS)...

- Repeat core financial literacy core module year-on-year
- Repeat every 3-5 years, full financial literacy module



THANK YOU FOR YOUR ATTENTION

**ALL QUESTIONS WELCOME**