

**ETHNIC DIFFERENCES IN SPIRITUAL INTELLIGENCE: A STUDY IN A
MULTICULTURAL CONTEXT**

by

DIANA SHANTO

submitted in accordance with the requirements
for the degree of

DOCTOR OF LITERATURE AND PHILOSOPHY

in the subject

PSYCHOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

Supervisor: Prof. Vasi Van Deventer

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Contents

	<i>Page</i>
<i>List of Tables</i>	Xii
<i>List of Figures</i>	Xiii
<i>List of Abbreviations and Symbols</i>	Xiv
<i>Abstract</i>	Xvii
<i>Declaration</i>	Xviii
<i>Dedication</i>	Xix
<i>Acknowledgements</i>	Xx
 <hr/>	
<i>Chapter 1: Introduction</i>	1
 <hr/>	
1.1 The multiple nature of intelligence	1
1.1.1 Musical intelligence	4
1.1.2 Bodily-kinaesthetic intelligence	4
1.1.3 Logical-mathematical intelligence	5
1.1.4 Linguistic intelligence	5
1.1.5 Spatial intelligence	5
1.1.6 Interpersonal and intrapersonal intelligences	5
1.1.7 Naturalist intelligence	6

1.1.8 Existential intelligence	6
1.1.9 Emotional intelligence (EQ)	7
1.1.10 Spiritual intelligence (SQ)	8
1.2 The Emergence and evidence of spiritual intelligence	8
1.3 Heightened interest in Spirituality/Religion in research	11
1.4 Ethnic identification and ethnic groups in Mauritius	12
1.5 General purpose of the present research	17
1.5.1 Statement of the research problem	18
1.5.2 Research questions	20
1.5.2.1 Study One	20
1.5.2.2 Study Two	20
1.5.3 Research objectives	20
1.5.4 Hypotheses	21
1.5.5 Methodology used in the thesis	22
1.6 Operational definition	22
1.7 Rationale and significance of the study	24
1.8 Definition of key terms	25
1.9 Content overview	26

Chapter 2: The Spiritual Realm in Psychology 28

2.1 A panoramic view of spirituality	28
2.1.1 Towards a spiritual identity	32
2.2 The history and nature of spirituality	33
2.3 Spirituality and religion: The debate and differences	35
2.4 Approaches to spirituality	42
2.4.1 Vertical-horizontal model	42
2.4.2 Five levels of consciousness	43
2.4.3 The integrated approach and the unifying approach	44
2.4.4 The Self-Other-Context-Spiritual (SOCS) Circle	45
2.4.5 A holistic model of spirituality	47
2.4.6 The whole person: A model	48
2.5 Spirituality: Its development theories	49
2.5.1 James' experiential theory of R-S development	49
2.5.2 Psychodynamic perspective: Jung's theory of R-S development	50
2.5.3 Maslow's Hierarchy of Needs	51
2.5.4 Fowler's Constructivist stage theory of faith development	53
2.6 Types of spirituality	58
2.6.1 Theistic spirituality	58
2.6.2 Existential spirituality	58

2.6.3 Community spirituality	59
2.7 The plausibility of spiritual intelligence: Concepts and theories	59
2.7.1 Existential theoretical underpinnings of spiritual intelligence	59
2.7.1.1 Emmons' theories of spiritual intelligence	59
2.7.1.2 Levin and spiritual intelligence	60
2.7.1.3 Wolman and the PsychoMatrix Spirituality Inventory (PSI)	60
2.7.1.4 Nasel and the Spiritual Intelligence Scale (SIS)	61
2.7.1.5 Wigglesworth's (2006) Simple Model of Four Intelligences	61
2.7.1.6 Vaughan's (2002) views on SQ	62
2.7.1.7 Zohar and Marshall's 12 features of SQ	63
2.7.1.8 Amram's (2007) seven dimensions of spiritual intelligence	63
2.7.1.9 King's viable model of spiritual intelligence	64
2.7.2 A proposed theory of spiritual intelligence	64
2.7.2.1 Subscales of the MSIS-1	65
2.7.2.1.1 Self-awareness and sensitivity	65
2.7.2.1.2 Transcendental awareness	67
2.7.2.1.3 Quest for meaning	68
2.7.2.1.4 Level of consciousness	69
2.7.2.1.5 Resilience	71
2.8 Conclusion	75

Chapter 3: Spirituality in the Workplace 76

3.1 Definitions of workplace spirituality	79
3.2 A brief history of workplace spirituality	85
3.2.1 Organisational spirituality and traditional religions	85
3.3 Spiritual leadership in organisations	86
3.4 Ethics and workplace spirituality	87
3.5 Measures of workplace spirituality	92
3.6 Conclusion	95

Chapter 4: Spirituality and Religion in Mauritius 96

4.1 Hinduism	96
4.2 Christianity	101
4.2.1 The Roman Catholic Church	102
4.2.2 The development of African-centred spirituality	103
4.3 Islam	105
4.4 Conclusion	108

5.1 A broad view of ethnicity	109
5.1.1 Current definitions of ethnicity	110
5.1.2 Distinctions between ethnicity and race	112
5.2 The foundations of ethnicity and its theoretical development	112
5.2.1 Assimilation theory	113
5.2.2 Primordialism	115
5.2.3 Circumstantialism	116
5.2.4 Instrumentalism	117
5.2.5 Constructionism	118
5.2.6 Integrated approach to ethnicity	121
5.2.7 The cognitive perspective on ethnicity	121
5.2.8 Symbolic ethnicity	122
5.2.9 Constructionism perspective for the present study	124
5.3 Types of ethnicity	124
5.4 Identity development theories	125
5.4.1 Erikson's theory of psychosocial development	125
5.4.2 Bronfenbrenner's ecological systems theory	127
5.4.3 Marcia's four statuses of identity model	128
5.4.4 Optimal distinctiveness theory (ODT)	129

5.5 Ethnic identity: Definitions and theories	131
5.5.1 Definitions	132
5.5.2 Theories of ethnic identity and stages of development	132
5.5.2.1 Dual or multiple identities	133
5.5.2.2 Cross's Nigrescence model of identity	133
5.5.2.3 Helms' four stages of ethnic minority identity development	134
5.5.2.4 Phinney's three-stage model of ethnic identity development	134
5.5.2.5 Identity process theory (IPT)	136
5.5.2.5.1 The application of IPT in the Mauritian context (1)	136
5.5.2.5.2 The application of IPT in the Mauritian context (2)	137
5.6 Mauritius: Its history and ethnic groups	137
5.6.1 Ethnic groups	140
5.6.1.1 The Mauritian-Creole identity	141
5.6.1.2 The Hindu identity: The majority	143
5.6.1.3 The Muslim identity	145
5.7 Multiculturalism and interculturalism	146
5.8 Conclusion	147

6.1 Research paradigm	149
6.2 Research design	151
6.3 Data collection	152
6.3.1 Questionnaires	152
6.3.1.1 The MSIS-1	153
6.3.1.2 The MEIM-R	157
6.3.1.3 The MLQ, CD-RISC, PSC, NIRO, and BIDR	157
6.3.2 Distribution and response rates	159
6.3.3 Sampling strategies	161
6.3.3.1 Study One	161
6.3.3.2 Study Two	165
6.4 Data analysis	166
6.5 Ethical considerations	168
6.6 Conclusion	170

7.1 Study One	171
7.1.1 Skewness and kurtosis	171
7.1.2 Reliability of the MSIS-1 and its subscales	175
7.1.3 Exploratory factor analysis of the Multicultural Spiritual Intelligence Scale (MSIS-1)	176
7.1.4 Research questions	183
7.1.4.1 Spiritual affiliation	186
7.1.5 Comparison of the MSIS-1 with other similar and dissimilar tests	197
7.2 Study Two	201
7.2.1 Confirmatory factor analysis	203
7.2.2 Measurement and structural invariances of the MSIS-2 across Hindu, Creole and Muslim groups	205
7.2.3 Modal fit measures for the factor model of the MSIS-2	208
7.3 Conclusion	214

8.1 The validity and reliability of the Multicultural Spiritual Intelligence Scale (MSIS)	216
8.1.1 The MSIS compared to other measures (the NIRO, PSC, and BIDR)	216
8.1.2 Dimensions of the MSIS	217
8.1.3 The implications of a five-factor model of spiritual intelligence	219
8.2 Ethnic differences in spiritual intelligence	219
8.3 Gender and spiritual intelligence	222
8.4 Ethnic identifications of the major ethnic groups	223
8.5 Limitations of the study	225
8.6 Recommendations	225
8.7 Conclusion	226
 <i>References</i>	227
 <i>Appendices</i>	268

List of Tables	Page
Table 1.1: Dimensions of the MSIS-1	23
Table 1.2: Dimensions of the MEIM-R	24
Table 2.1: Link between components of resilience and spirituality	73
Table 3.1: Different types of ethical climates	90
Table 4.1: Indian philosophy of spirituality	100
Table 5.1: Adapted from Erikson's theory of human development	127
Table 5.2: The four identity statuses suggested by Marcia (1966)	128
Table 6.1: Frequencies and percentages of responses on demographic items in Sample One ($N = 1177$) and Sample two ($N = 303$)	163
Table 7.1: Descriptive statistics for the MSIS-1 106-item pool ($N = 1074$)	172
Table 7.2: Reliability of the MSIS-1 and its subscales ($N = 1177$)	175
Table 7.3: KMO measure for each of the 106 items in the MSIS-1 ($N = 1177$)	177
Table 7.4: Rotated structure matrix for PCA with varimax rotation (major loadings for the MSIS > 0.35) ($N = 1177$)	180
Table 7.5: Reliability of the MSIS-2 and its subscales ($N = 1177$)	181
Table 7.6: Correlations among latent variables for study 1 ($N = 1111$)	182
Table 7.7: Standard guideline for evaluating correlations	185
Table 7.8: Correlation between the MSIS-1 and the MEIM including their subscales	189
Table 7.9: Correlations among related and unrelated measures with MSIS-1 and its subscales	199
Table 7.10: Descriptive statistics for the MSIS-2 29-item pool ($N = 303$)	202
Table 7.11: Skewness and kurtosis for males and females for each dimension ($N = 303$)	204
Table 7.12: Correlations among latent variables for study 2 ($N = 286$)	205
Table 7.13: Comparing the dimensions of MSIS-2 ($N = 279$) for the three ethnic groups for metric invariance	206
Table 7.14: Goodness-of-fit statistics for measurement invariance among the three ethnic groups ($N = 279$)	207
Table 7.15: Model comparisons for measurement and structural invariances across the three ethnic groups ($N = 279$)	207
Table 7.16: Parameter estimate for five-factor model ($N = 286$)	209
Table 7.17: Squared multiple correlations for the measured variables ($N = 286$)	210
Table 7.18: Comparative fit indices for the five-factor, four-factor, and three-factor models	211
Table 7.19: Covariances among variables ($N = 286$)	212

List of Figures	Page
Figure 2.1: Difference between religion and spirituality	41
Figure 2.2: Ellison's (1983) model of vertical-horizontal approach	42
Figure 2.3: Vaughan's (1985, 1995) model: Five levels of consciousness or awareness	43
Figure 2.4: Integrated approach a model of looking at spiritual domain	44
Figure 2.5: Unifying approach another way of looking at spiritual dimension	45
Figure 2.6: SOCS model representing four life realities	46
Figure 2.7: A holistic paradigm of spirituality	47
Figure 2.8: Three-dimensional model of the whole person	48
Figure 2.9: Maslow's pyramid of the hierarchy	53
Figure 2.10: Hierarchy model of intelligences	62
Figure 5.1: Personal identity is the dot inside the circles and social identities surround the personal identity	130
Figure 5.2: The optimal distinctiveness model	131
Figure 7.1: Scree plot with a “jump” in eigenvalues after component one	178
Figure 7.2: Boxplot with dependent variable the MSIS-1 mean score for outlier determination across the main ethnic groups, including ‘mixed background’ and ‘others’	185
Figure 7.3: Boxplot with dependent variable the MSIS-1 mean score for outlier determination across Hindu-Mauritians, Muslim-Mauritians and Creole-Mauritians	186
Figure 7.4: A pie chart for religious and spiritual group affiliation and non-affiliation in sample one ($N = 1038$)	187
Figure 7.5: Establishing a linear relationship between the MSIS-1 score and the MEIM score	188
Figure 7.6: Boxplot showing MSIS-1 score across religions	193
Figure 7.7: Boxplot MEIM and MSIS-1 scores across gender	195
Figure 7.8: Plot 2 and plot 3 show linear relations for both male and female respectively	196
Figure 7.9: Path diagram for the hypothesised five-factor model	213

List of Abbreviations and Symbols

ACC: Anterior Cingulated Cortex

AGFI: Adjusted Goodness-of-fit Index

ANOVA: Analysis of Variances

APA: American Psychological Association

BBC: British Broadcasting Corporation

BCE: Before the Common Era

BIDR: Balanced Inventory of Desirable Responding

CD-RISC: Connor-Davidson Resilience Scale

CFA: Confirmatory Factor Analysis

CFI: Comparative Fit Index

C.R.: Critical Ratio

CQ: Cultural intelligence

DV: Dependent Variable

EFA: Exploratory Factor Analysis

EQ: Emotional Quotient

EQT: Existential Quest

g(C): Crystallized intelligence

g(F): Fluid intelligence

GFI: Goodness-of-fit Index

GLS: Generalized Least Squares

IPT: Identity Process Theory

IQ: Intelligence Quotient

ISIS: Integrated Spiritual Intelligence Scale

IV: Independent Variable

KMO: Kaiser-Meyer-Olkin

LC: Level of Consciousness

M: Mean

MANOVA: Multivariate Analysis of Variance

Mdn: Median

MEIM-R: Multi-group Ethnic Identity Measure-Revised

MI: Multiple Intelligences

MLQ: Meaning in Life Questionnaire

MUR: Mauritian Rupees

MSIS: Multicultural Spiritual Intelligence Scale

N: Number in sample

NFI: Normed Fit Index

NIRO: New Indices of Religious Orientation

No.: Number

ODT: Optimal distinctiveness theory

PCA: Principal Components Analysis

PhD: Doctor of Philosophy

PSC: Private Self-Consciousness

PSI: PsychoMatrix Spirituality Inventory

PQ: Physical Intelligence

QM: Quest for meaning

r: Correlation

R: Resilience

RCT: Rational Choice Theory

RMSEA: Root Mean Square Error of Approximation

R-S: Religion and Spirituality

S: Sensitivity

SA: Self-awareness

SD: Standard Deviation

SEM: Structural equation modeling
S.E.: Standard Error
SI: Social Intelligence
SIS: Spiritual Intelligence Scale
SM: Self-mastery
SPECT: Single photon emission computed tomography
SPSS: Statistical Package for Social Sciences
SPSS AMOS: Analysis of Moment Structures
SRMR: Standardised Root Mean square Residual
SS: Spiritual sensitivity
Std: Standard
STS: Spiritual Transcendence Scale
SQ: Spiritual intelligence
TA: Transcendental Awareness
US: United States
WPA: White Protestant American
 α : Cronbach Alpha
%: Percentage

Abstract

This study investigates the nature of spiritual intelligence and its link to ethnic identity, and gauges the difference across the main ethnic groups in Mauritius. A new scale, the Multicultural Spiritual Intelligence Scale (MSIS) was proposed, using the following six dimensions: self-awareness, transcendental awareness, levels of consciousness, the quest for meaning, sensitivity, and resilience. The MSIS was developed and tested using a cross-sectional survey research design with the option of completing a paper or online version, administered to a sample of 1,177 adult participants in Mauritius. This research looked at the three major ethnic groups in Mauritius: Hindu-Mauritians, Creole-Mauritians, and Muslim-Mauritians, and examined their conceptions of spiritual intelligence and ethnic identification. A factor analysis was conducted on the scale and five specific factors: self-mastery, transcendental awareness, spiritual sensitivity, resilience, and the existential quest. These factors emerged with factor loadings greater than 0.35. The MSIS's construct validity was tested with other similar scales, particularly Meaning in Life (MLQ) (Steger et al., 2006), the Connor-Davison Resilience Scale (CD-RISC) (Connor & Davidson, 2011), Private Self-Consciousness (PSC) (Scheir & Carver, 1985), and New Indices of Religious Orientation (NIRO) (Francis, 2007). The Balanced Inventory of Desirable Responding (BIDR) (Paulhus, 1991) was also included to check for social desirable responses and MSIS's divergent validity. A Welch ANOVA revealed a statistical difference in spiritual intelligence among the ethnic groups: Welch's F (2, 639.98) = 3.923. Spearman's rank order correlation revealed that ethnic identification was connected to spiritual intelligence: r_s (98) = 0.52, $p < 0.0005$. A Games-Howell post-hoc analysis indicated a statistically significant mean difference between Muslim-Mauritians and Hindu Mauritians (0.27, 95% CI [0.083, 0.45]) and between Muslim-Mauritians and Creole Mauritians (0.44, 95% CI [0.25, 0.62]). The Muslim-Mauritians obtained the highest score in both ethnic exploration and ethnic commitment. Ethnic identification implied a prior quest for identity, which was connected with spiritual development. A second study was conducted on a sample of 303 participants using a shorter version of MSIS to confirm the five-factor model. Implications for further research include analysing the MSIS in terms of other constructs and using the MSIS with other minority groups in Mauritius.

Keywords: spiritual intelligence, spirituality, religion, multicultural, ethnic identity, ethnic groups, ethnic difference, cross sectional survey, exploratory factor analysis, confirmatory factor analysis.

Declaration

Student Number: 4 206 230 6

I declare that "Ethnic differences in spiritual intelligence: a study in a multicultural context" is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I have not previously submitted this work, or part of it, for examination at UNISA for another qualification or at any other higher education institution.

Signature

Date

Dedication

This doctoral thesis is dedicated to my hardworking and loving parents, Mr. Anand SHANTO and Mrs. Patricia SHANTO, who have always been by my side through the good and bad times.

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Chapter 1: Introduction

This first chapter introduces the present study and situates the topic of spiritual intelligence within the broader context of general intelligence. The concept of spiritual intelligence sprouts from the theory of multiple intelligences, and emphasises the specific criteria which have to be fulfilled for an aspect of intelligence to be defined as spiritual intelligence. The rising interest in spirituality and religion in multidisciplinary research contributes to the rationale for this study. This study was conducted in Mauritius because, as a multi-ethnic society, the country provides fertile ground for a study on ethnic identity and spiritual intelligence.

1.1 The multiple nature of intelligence

Intelligence is a characteristic of individual differences held to be one of the sources of human behaviour (Gottfredson & Saklofske, 2009). In the twentieth century, studies on Intelligence Quotient (IQ) dominated the headlines of scientific and psychological publications (Deary, 2012; Zohar & Marshall, 2001). Boake (2002) and Tulsky et al. (2003, as cited in Gottfredson & Saklofske, 2009) explained that its popularity started with the Binet-Simon tests in France and their implementation in the United States, which thrust the study and the measurement of intelligence into its present main position in both the discipline and practice of psychology. Human intelligence refers to the intellectual functioning of individuals and IQ tests that relate one's performance to other test takers of similar age who sat for the same test (APA, 2015; Hunt, 2011). However, the simplicity of this notion was challenged by Selman, Selman, Selman, and Selman (2005), who saw both IQ and emotional intelligence (EQ) as too narrow to explain the multifaceted notion of human intelligence. In their famous book *The Bell Curve*, Herrnstein and Murray (1994) argued that IQ tests were exact measures of intelligence and strong predictors of success (as cited in Nisbett et al., 2012). In the traditional psychometric stance, human intelligence was described operationally as 'the ability to answer items on tests of intelligence' (Gardner, 2006, p. 5).

Gottfredson (1997, as cited in Nisbett et al., 2012) defined intelligence as the ability to reason, plan, elucidate problems, ponder abstractly, comprehend composite ideas, and to learn swiftly and from experience, rather than just as book learning, limited academic skill, or ‘test-taking smarts’ (p. 131).

Gottfredson and Saklofske (2009) explained that the initial theoretical foundations of intelligence originated from Spearman’s (1904) two-factor intelligence model defining specific (‘s’) factors and a second-order general (‘g’) factor. Spearman (1927) and Jensen (1998) argued for the predominating significance of a single process or general factor of intelligence, branded *g* (as cited in Mackintosh, 2011). The first factor obtained from factor analyses of IQ subtests and which associated all the sub-measures was the *g* factor (Nisbett et al., 2012). The two types of intelligences advanced by Horn and Cattell (1966, as cited in Gottfredson & Saklofske, 2009) were the crystallised *g(C)* and the fluid *g(F)* intelligences, representing the person’s store of knowledge and his or her ability to solve new issues respectively (Nisbett et al., 2012).

Complex descriptions of intelligence have been highlighted by several studies (Gottfredson & Saklofske, 2009). Thurstone (1938), Guilford (1967) and Gardner (1993, 2006) all claimed that there is a diversity of distinct intelligences (as cited in Mackintosh, 2011). Culross and Winkler (2011) advanced Sternberg’s perception of successful intelligence, ‘the triarchic theory’ (Gottfredson & Saklofske, 2009, p. 184), which departed from the classic theory of intelligence, and instead defined intelligence as having the skill to accomplish one’s personal standards within one’s sociocultural setting. The three elements or intelligences that successful people use to control their cognitive profiles and outward settings are the analytic, creative, and pragmatic. Sternberg’s (1981, as cited in Mackintosh, 2011) inquiry revealed three characteristics of intelligence, namely problem-solving, verbal, and social competency. According to Papadopoulos, Parrila, and Kirby (2015), Das’s (1994) work on the conceptualisation and assessment of IQ defied the notion of general intelligence on the basis that the brain consists of interdependent but different functional systems. Das’s concerns were the processes by which intelligent behaviour was fashioned, and not just the result such as a score of tests (Papadopoulos et al., 2015). Das (2015) proposed an alternative brain-focused perspective to the *g* factor, which consisted of three systems and four main cognitive processes, namely a planning system, an attention system, and an information

processing system. The planning system concerns the executive functions such as monitoring and organising behaviour. The attention system governs arousal and vigilance. The information processing system is made up of simultaneous and successive processes.

Gardner (1993, as cited in Armstrong, 2009) proposed enlarging the scope of human potential beyond the limits of the IQ score. He also posited intelligence as a ‘biopsychological potential to process information’ (1999, pp. 33–34) which can be triggered in a cultural background to solve problems or generate products which are of value in a culture. Gardner et al. (1996, as cited in Anthony, 2008) asserted that society and culture impact on definitions of intelligence, and thus any definition of intelligence mirrors cultural and societal values. Gardner (2006) introduced the concept of multiple intelligences (MI), which viewed intelligence as a ‘computational capacity’ (p. 5) stemming from human biology and psychology, and MacHovec (2002, as cited in Mahasneh et al., 2015; see also Kristeller, 2009) perceived spiritual intelligence (SQ) as an expansion of Gardner’s MI theory. MI theory, in contrast to the classical view, described intelligence as the universal human capacity to process information and the ability to solve problems involving both anticipation and goal setting (Gardner, 2006).

Eight main criteria were suggested for an intelligence to be defined as such (Armstrong, 2009; Gardner, 2006, 2011). The first condition was a probable isolation by brain damage; second, the presence of savants, prodigies, and other outstanding individuals; third, a typical development history and a definable set of expert ‘end-state’ (Armstrong, 2009, p. 149) functioning; fourth, an evolutionary history and evolutionary credibility; fifth, validation from psychometric outcomes; sixth, authentication from experimental psychological tasks; seventh, recognisable core operation(s); and finally, a predisposition to encoding in a symbol system (Gardner, 1999, 2011). Intelligence became a functional notion that was divided into eight categories: linguistic, logico-mathematical, spatial, bodily-kinaesthetic, musical, interpersonal, intrapersonal, and naturalist. More recently, a ninth category of existential intelligence was added (Armstrong, 2009; Gardner, 2006).

An apercu on the different intelligences is provided before embarking on the main topic of spiritual intelligence, SQ for short. Ghamrawi (2014) studied the usage of MI in the classroom and found that memory of acquired vocabulary was greater with MI than with traditional methods

which was consistent with Schumann's (1997) research (as cited in Ghamrawi, 2014). Additionally, more intelligences were included with increasing research which used criteria set by Gardner (2006) as a guideline. Spirituality can be regarded as a type of intelligence, as it anticipates functioning and adaptation in addition to enhancing the ability to solve issues and reach goals (Hosseini, Elias, Krauss & Aishah, 2010). Though Joseph and Sailakshmi (2011) agreed about the functions of SQ, they viewed it as distinct from spirituality. SQ is a set of skills people employ to relate, manifest, and symbolise spiritual resources, morals, and qualities in ways that expand their everyday functioning and wellbeing (Joseph & Sailakshmi, 2011). In Sharma, Mittal, and Singh's study (2011), SQ and academic achievement were positively correlated. SQ is hereditary, worldwide, and is present in all main world religions, sciences, and arts (Baesler, 2004).

1.1.1 Musical intelligence

Gardner (2006) claimed that musical intelligence is biologically determined, as it is found in the right hemisphere of the brain and is independent of other intelligences, as is seen in autistic children. Further research showed that infants have the 'raw' (Gardner, 2006, p. 9) ability to process musical information in early childhood. This intelligence necessitates the ability to perceive, distinguish, compose, and express musical patterns like a music composer or a performer (Armstrong, 2009; Gardner, 1999).

1.1.2 Bodily-kinaesthetic intelligence

Bodily-kinaesthetic intelligence involves the potential of using one's body or part of it to solve problems or shape products, as, for instance, athletes, surgeons, and artisans do (Gardner, 1999). Gardner (1993, as cited in Armstrong, 2009) added that bodily-kinaesthetic intelligence encompassed specific physical capacities such as coordination, balance, agility, strength, suppleness, and speed, along with proprioceptive, tactile, and haptic skills.

1.1.3 Logical-mathematical intelligence

Logical-mathematical intelligence comprises the aptitude to investigate problems logically, perform mathematical operations, and examine issues scientifically (Gardner, 1999). People such as mathematicians or scientists tend to show such intelligence and are seen as sensitive to logical patterns and associations and to processes such as hypothesis testing (Armstrong, 2009).

1.1.4 Linguistic intelligence

Armstrong (2009) described this intelligence as the ability to employ words proficiently in both speech and writing. The examples given were poets, politicians, and editors. This intelligence embraces the skill to navigate the construction, semantics, pragmatic usage, and phonology of language.

1.1.5 Spatial intelligence

Spatial intelligence encompasses the potential to identify and control the patterns of wide space and those of more limited areas, such as pilots and architects do (Gardner, 1999). Armstrong (2009) explained that the skill to perceive the visual-spatial world precisely involved sensitivity to colour, line, figure, structure, space, and the relationships that exist among these features. Individuals with this capacity, such as artists, can execute transformations upon their observation of the visual-spatial world.

1.1.6 Interpersonal and intrapersonal intelligences

Thorndike (1936) and Thorndike and Stein (1937), as cited in Crowne (2009, 2013a), suggested the notion of social intelligence (SI), namely the skill to understand and handle people.

They divided social intelligence into interpersonal and intrapersonal intelligences. Social intelligence as a whole relates to the ability to understand other people, particularly their intentions, motivations, and how to deal with them. It also comprises sensitivity to facial expressions, voice, and gestures; the capacity to discriminate among several types of interpersonal cues; and the skill to respond efficiently to those cues in a practical manner (Armstrong, 2009). Examples of people with such abilities are salespersons, religious leaders, and politicians (Gardner, 1983, as cited in Goleman, 1996). According to Joseph and Sailakshmi (2011), spiritual intelligence inspires both intra- and interpersonal dialogue and can be used to curtail conflicts.

According to Gardner (1983, as cited in Goleman, 1996), intrapersonal intelligence is a ‘correlated ability’ (p. 39) twisted inward, a skill to form a precise, veridical model of one’s self and to be able to use that model to function successfully in life. Intrapersonal intelligence is related to a well-defined picture of one’s self, including both its weaknesses and its strengths—a self-awareness of the thoughts, emotions, and feelings, as well as a capacity for self-understanding and self-mastery. In short, it is about self-knowledge and the skill to adapt in light of such information (Armstrong, 2009).

1.1.7 Naturalist intelligence

Naturalist intelligence is related to competence in the appreciation and organisation of the different species in the flora and fauna, a sensitivity to other natural features such as mountains and cascades, and the ability to differentiate among several objects (Armstrong, 2009).

1.1.8 Existential intelligence

The ninth intelligence proposed by Gardner (1999) includes religious leaders such as imams and priests as well as philosophers. Gardner (1999, as cited in DeBlasio, 2011) defined existential intelligence as the capacity to situate oneself with regard to the outermost extent of the

cosmos, the boundless and the minute, and the associated capacity to place oneself with regard to such existential characteristics of the human state as the importance of life, the significance of death, the final destiny of the physical and the psychological worlds, and such intense experiences as love of another human being or absolute captivation by a work of art. In brief, existential intelligence has to do with ultimate questions (Gardner, 1999, as cited in Armstrong, 2009).

1.1.9 Emotional intelligence (EQ)

Although Gardner's multiple intelligence theory was initially proposed to encompass only nine main intelligences, more intelligences were suggested and evidenced by several authors. Goleman (1996) popularised the concept of emotional intelligence (EQ), which he defined as an ability to self-motivate, to persist in face of adversity, to manage urges, and to delay gratification. The author continued with his definition of EQ to include the ability to control one's moods, to maintain peace of mind despite distress, and to feel empathy. Salovey et al. (2003, as cited in Crowne, 2013b) defined EQ as an ability to focus on insights into and expression of emotion correctly and adaptively. They also added that EQ was the ability to understand emotional information, use feelings to assist thought, and to control one's own emotions and influence those of others. In short, Joseph and Newman portrayed EQ as 'emotion perception, emotional understanding, and emotion regulation' (2010, as cited in Shao, Doucet & Caruso, 2015, p. 232). Crowne (2009, 2013a) advanced that EQ and cultural intelligence (CQ) were subsets of SI. CQ was defined as a set of multidimensional skills which includes cultural knowledge, the observance of mindfulness, and the selection of behavioural competencies (Thomas & Inkson, 2004, as cited in Crowne, 2013b). Crowne (2013a) noted that findings from researchers diverge, as some found SI and EQ to be the same construct while others observed CQ to build on both SI and EQ. According to several authors, there were two conceptualisations of EQ (Wilks, Neto & Mavroveli, 2015; Shao et al., 2015). EQ was viewed as either a trait or an ability. Wilks et al. (2015) explained that EQ as a trait comprises the self-viewed emotion-related abilities situated at the lower stages of personality hierarchies. They comprised the affective features of personality gauged by self-reported

inventories (Siegling, Furnham & Petrides, 2015; Wilks et al., 2015). Ability EQ, on the other hand, was a set of mental capacities examined by performance measures (Wilks et al., 2015).

1.1.10 Spiritual intelligence (SQ)

Spiritual intelligence (SQ) is the latest addition to the list of intelligences. King and DeCicco (2009) defined SQ as a mental ability that contributes to spiritual development, and observed that it meets the criteria for intelligence. Firstly, SQ involves a set of mental capacities that differ from preferred behaviours. Secondly, SQ develops throughout the lifespan. Thirdly, the adaptive function of spirituality has been evidenced in several studies. Santos (2006, as cited in Esmaili, Zareh & Golverdi, 2014) viewed SQ as the ability to perceive the significance of the principles of life. According to Fry (2003), spiritual intelligence is a central ability that directs other abilities such as EQ (see also Ronel & Gan, 2008, as cited in Kaur, Sambasivan & Kumar, 2013). Fry and Wigglesworth (2010) described SQ as an ability to display the behaviour of ‘altruistic love through wisdom and compassion’ (p. 34), in a state of equanimity irrespective of the circumstances (see also Wigglesworth, 2012). Chin, Anantharaman, and Tong (2011) remarked that both SQ and EQ concerned the deepest feelings or souls of employees in organisations. Furthermore, both EQ and SQ produced many similar behaviours, attitudes, and competencies, which brought about greater work accomplishment (Tischler, Biberman & McKeage, 2002). However, the ‘transformative power’ (p. 5) and integrative function of SQ distinguish it from EQ (Zohar & Marshall, 2001). SQ defies limits and questions the rules. An analysis of its neurological foundation revealed that SQ unified all other intelligences, such as EQ and IQ (Zohar & Marshall, 2001).

1.2 The emergence and evidence of spiritual intelligence

Benson, Roehlkepartain and Rude (2003) defined spiritual development as the process of maturing the inherent human capacity for self-transcendence, in which the self is rooted in something holy and greater than the self. It is the developmental apparatus formed in and outside

religion which boosts the quest for ‘connectedness, meaning, purpose, and contribution’ (Benson et al., 2003, pp. 205–206). Benson et al. added that people actively mould their spiritual growth, and that it is especially germane to child and adolescent development (Benson et al., 2003). Lipscomb and Gersch (2012) did a qualitative small-scale study with children on spiritual listening which involved questions on the existence of the soul, the meaning of happiness, and the nature of God; they found that the spiritual listening sessions assisted children in examining their meaning-making structures, which allowed them to connect the concrete and metaphysical features of their lives.

Empathy is an indispensable requirement for spiritual intelligence and a proof of SQ (Joseph & Sailakshmi, 2011), and spiritual advancement is a process of development towards wholeness (Caroll, 2001). Spirituality demands an existential search for a sense of direction and answers for questions pertaining to life and death and meaning of life (Ho & Ho, 2007). The search for meaning is marked by doubt and struggle. Failure to resolve this crisis can lead to alienation and feelings of purposelessness. Transcendence describes a person’s relationships with him- or herself, with others, with nature, or with a Supreme Being (Ho & Ho, 2007), and spirituality is about the relationship with the transcendent, which is beyond the self and within the self (Reinert & Koenig, 2013). It concerns the self in a larger context, which is inclusive of the world around. The author referred to the opposite as self-encapsulation, which takes a solely individualistic perspective into consideration.

Tanyi (2002) described Watson’s theory (1989), in which he depicted spirituality as owned by people and as granting self-awareness, greater consciousness, and the power to transcend the normal self. According to Wilber (1993), spirituality portrayed as a higher level of consciousness is viewed by the East as ‘total freedom’ (p. 10) from the ego, whereas the West perceives it as strengthening of the ego. Spirituality forms part of the cardinal values of an individual’s value system (Ho & Ho, 2007)—a metavalue which permeates the life of a person. The type of awareness that demands spiritual evolution has propelled metacognitive skills into the limelight. Spiritual energy forms part of a person’s energy and influences his or her resilience capacity (Patterson & Kelleher, 2005). Anthony (2008) suggested an integrated intelligence—a purposeful and conscious use of the ‘extended mind’ (p. 234) in view of performing productively within a given

environment. The extended mind is the condition of personal consciousness whereby personal awareness is instilled with a transpersonal awareness which goes beyond the limits of the personal mind and the confines of the sensory organs (Sheldrake, 2003, as cited in Anthony, 2008).

Zohar and Marshall (2001) viewed spiritual intelligence as the ‘ultimate intelligence’ (p. 4) which forms the basis for the proper functioning of rational IQ and EQ. According to the authors, these were variations of the three fundamentals, IQ, EQ and SQ, which were also connected to three basic neural systems in the human brain. As Wigglesworth (2012) stated, spiritual intelligence is not merely one intelligence among many; if it is greatly advanced, it could be a source of guidance and direction for the other components of human potential. Baesler’s (2004) review of MacHovec (2002) described a joint view of Eastern and Western perspectives on SQ, which emphasised individual and social spiritual progress respectively for a comprehensive understanding of SQ. Research by Persinger (1996) and Ramachandran (1998) found the presence of a ‘God Spot’ (as cited in Selman et al. 2005, p. 23; Zohar & Marshall, 2001, p. 11) in the human brain which produces the impression of God-like experiences. Single-photon emission computed tomography (SPECT) camera scans displayed remarkable action in the left hemisphere of the brain, the ‘posterior superior parietal lobe’ (Newberg, D’Aquili & Rause 2002, p. 4) when a person meditated. SPECT scans demonstrated the neural sectors that light up when spiritual or religious matters were discussed (Selman et al., 2005). The limbic system—the ‘transmitter of God’ (p. 138)—was found to be an inherent constituent of spiritual thoughts and experiences according to research (Joseph, n.d., as cited in Mark, 2006). Furthermore, cultural variations were observed in experiments with Western participants responding to the allusion of God while Buddhists responded to symbols important to them (Zohar & Marshall, 2001). Azari, Missimer, and Seitz (2005, cited in DeBlasio, 2011) found that religious experience engages socio-relational cognition when interacting with a particular neocortical network. Selman et al. (2005) reported on research by Newberg (n.d.), who examined Tibetan Buddhists’ and Franciscan nuns’ brains and detected greater activity in the frontal area during deep meditation and prayer and lesser activity in the orientation segment of the brain. Furthermore, Singer’s studies on the neural process which connects experiences and gives meaning to them prompted the identification of a new kind of intelligence (Zohar & Marshall, 2001). This new intelligence transcends both the IQ and EQ

functions (Zohar & Marshall, 2001). Furthermore, Pare-Llinas' (n.d.) work on 40Hz neural oscillations in the brains revealed that consciousness was an inherent ownership of the brain (Selman et al., 2005; Zohar & Marshall, 2001). An experimental study highlighted the importance of SQ training as a new psychological and religious notion to treat psychological disorders and enhance the mental health of adolescents (Charkhabi, Mortazavi, Alimohammadi & Hayati, 2014). Many authors have looked at SQ and how it relates to other constructs such as job satisfaction (Yahyazadeh-Jeloudar & Lotfi-Goodarzi, 2012; Zamani & Karimi, 2015), professional ethics (Esfahani & Najafi, 2015), and personality traits (Mahasneh, Shammout, Alkhazaleh, Al-Alwan & Abu-Eita, 2015). Upadhyay, Upadhyay, and Pinto (2015) proposed inserting SQ into the organisational ecosystem to steer organisational effectiveness.

1.3 Heightened interest in Spirituality/Religion in research

Statistics have shown that 86 percent of Americans believe in God and 52 percent consider religion as very important in their lives, and 52 percent believe that religion can answer all or most of today's problems (Gallup, 2015). Barrett (2001, as cited in Saroglou, 2011) observed that 72 percent of the world's population was part of the four main religions (Christianity, Islam, Hinduism, and Buddhism). Religion and spirituality were often used interchangeably, but the two terms are becoming increasingly differentiated. Various definitions have been quoted in the literature for clarity purposes. According to Brown, Carney, Parrish, and Klem (2013), people tend to think of religion as 'an institutionalized set of beliefs and practices' (p. 111) by which people communicate to a Higher Power. Spirituality, on the other hand, was referred to as 'a sense of connectedness' (Brown et al., 2013, p. 111) to God(s), deities, the Infinite, or Higher Consciousness, an openness to the boundless beyond human existence and understanding. Spirituality was present in every person (Hoogestraat & Trammel, 2003). Spirituality was the 'gestalt of the total process of human life and development' (Rovers & Kocum, 2010, p. 7). The upswing in the 'spiritual industry' (Roof, 2003, p. 137) supports the actual growing interest in spirituality in both religious and non-religious institutions.

Research has supported the positive influence of spirituality on employee wellbeing and on the organisational performance (Karakas, 2010). Studies have shown that spirituality could operate as a schema (Verno, Cohen & Patrick, 2007). Verno et al. (2007) highlighted that spirituality was linked to low levels of despair, high levels of optimism (Pritt, 1998, as cited in Verno et al., 2007), and higher self-esteem (Park, Meyers & Czar, 1998 as cited in Verno et al., 2007). Spirituality was negatively linked with mental illness (Mitchell & Weatherly, 2000, as cited in Mat Saad, Hatta & Mohamad, 2010). Frazier, Mintz, and Mobley (2005) and Hackney and Sanders (2003) described the benefits of spirituality on health as enormous, ranging from a positive influence on self-acceptance and self-development to a decrease in stress (as cited in Mat Saad et al., 2010). Older people also felt positive impacts on their physical health (Wang et al., 2005, as cited in Mat Saad et al., 2010). Richards and Bergin (2005) noted the escalating interest in attending to spirituality and religious issues in counselling (as cited in Parker, 2009). Winston (1991) stated that in marriage and family therapy, clients spoke of their spiritual issues most of the time (as cited in Coffey, 2002). Hoogestraat and Trammel (2003) noted that spiritual and religious discussions in therapeutic settings could be indispensable for treatment. Spirituality and religion were crucial and substantial parts of a great number of people's lives and welfare, and thus demand inclusion in the counselling process and interpersonal dynamics (Brown et al., 2013). Aponte (2002) argued that therapists also regarded spirituality as a possible resource for helping and giving a sense of bearing to the client. The power of therapy was boosted by spirituality (Aponte, 2002). Clients could tap from the reservoir of spiritual resources, make moral choices, and 'become grounded' (Aponte, 2002, p. 18) through the use of their personal beliefs in problem-solving.

1.4 Ethnic identification and ethnic groups in Mauritius

Ethnicity is a multidimensional social boundary established by people's consciousness of genuine or alleged shared pedigree (Schermerhorn, 1970, as cited in Calvillo & Bailey, 2015), cultural practices, and the distinctness of a community (García Coll, Crnic, Lamberty, Wasik, Jenkins, Vázquez García & McAdoo, 1996; Helms, 2007). In a multi-ethnic society, ethnic identity is a relevant social identity (Greig, 2003; Umaña-Taylor, 2011, as cited in Umaña-Taylor, 2015),

a vital part of the self (Bernal, Knight, Garza, Ocampo & Cota, 1990; see Chávez & Guido-DiBrito, 1999), and essential to the mental functioning of ethnic and racial minority groups' members (Phinney, 1990). Umaña-Taylor (2015) posited that a person has multiple social identities, which include both cognitive and affective components. Ethnic identity denotes allegiance to a cultural group and dedication to its cultural practices (Helms, 2007). In this thesis, ethnicity is not conceived as a biologically determined phenomenon but as a social construction generated by individuals as they affiliate themselves with specific ethnic groups (McKinlay & McVittie, 2011). The ethnic identity developmental paradigm means a convergence of Eriksonian/Marcian identity theory and social identity theory (Pahl & Way, 2006; Phinney, 1990; Syed & Juang, 2014). Phinney (1990) described Tajfel and Turner's (1979) social identity theory as advancing the idea that group membership bestows a sense of belongingness that promotes a positive self-concept. Similarly, Greig (2003) stated that youths with a secure ethnic identity reported higher self-esteem and better psychological health. Phinney and Ong's multidimensional developmental paradigm of ethnic identity underscored the fundamental processes of exploration and commitment which were fashioned over time (Phinney & Ong, 2007; Syed, Walker, Lee, Umaña-Taylor, Zamboanga, Schwartz, Armenta & Huynh, 2013). Ethnic identity exploration concerns the process of searching for, examining, and gaining knowledge and experiences about the meaning of one's ethnic origin. Ethnic identity commitment is the process of developing a sense of attachment or belongingness (Phinney, 1990) and an affective bond to one's ethnic group (Pahl & Way, 2006; Phinney & Ong, 2007; Syed et al., 2013).

Previous work on ethnic minorities tended to associate one's ethnic group identification label with one's ethnic identity. However, since the 1990s, studies have looked at the level of ethnic identification (Umaña-Taylor, Diversi & Fine, 2002). One of the main measures of ethnic identity is the Multigroup Ethnic Identity Measure (MEIM, Phinney, 1992; Umaña-Taylor, Diversi & Fine, 2002). Differences within in-group ethnic identity were linked to variations in views, values, and behaviours (Bernal et al., 1990). Bernal et al.'s (1990) study on the development of ethnic identity with children from 6 to 10 years from a minority Mexican group noted that older children reported a greater ability to self-label their ethnic group or self-sort. They also had higher

ethnic constancy,¹ enhanced knowledge of their ethnic group behaviours and values, and favoured their in-group ethnic behaviours. Ethnic behaviours were defined as the involvement in social, cultural, and traditional events with other in-group members (French, Coleman & DiLorenzo, 2013). The children's in-group identification and social constancy were forged by socialisation (Ocampo, Knight & Bernal, 1997) and encounters with the dominant society (Bernal et al., 1990). Ethnic socialisation and discrimination could influence the designs of ethnic identity (French, Seidman, Allen & Aber, 2006). Parental attempts to shape their wards' ethnic socialisation were substantial forecasters of children's ethnic identity in the long term (Umaña-Taylor, O'Donnell, Knight, Roosa, Berkel & Nair, 2014). Ocampo et al. (1997) investigated the influence of cognitive developmental levels on ethnic identity and found that higher cognitive ability was linked to ethnic knowledge, but not to ethnic self-identification or ethnic permanence. Cultural socialisation consisted of the parents' endeavours to inculcate knowledge of cultural history, customs, and group pride in children (French et al., 2013). Tran and Lee (2010, as cited in French et al., 2013) linked cultural socialisation with stronger ethnic identity in Asian-American youths. French et al. (2006) studied ethnic identity paths among African-American, Latino-American, and European-American youths over three years. They found that exploration increased for middle adolescents, while in-group esteem was important for both early and middle adolescents. Pahl and Way (2006) found that the exploration dimension declined in youth after the tenth grade (that is, around 15 years old). The perception of discrimination against Black youths by peers signified a high level of exploration (Pahl & Way, 2006).

Deep ethnic identification with one's ethnic background has been steadily associated with a multitude of positive outcomes such as meaning in life, lower incidence of depression, and 'externalizing behaviours' (Umaña-Taylor et al., 2014, p. 170; see also Tummala-Narra, 2015), superior academic achievement, social competence, and better management of discriminatory conditions (Juang & Syed, 2008; Martinez & Dukes, 1997; Mossakowski, 2003; Umaña-Taylor et al. 2014). Similarly, studies have shown ethnic identification linked to higher self-esteem (Phinney, 1992; Xu, Farver & Pauker, 2015; see also Cruz-Ortega, Gutierrez & Waite, 2015). However, hundreds of studies have gauged a weak relationship among ethnic identity, self-esteem,

¹ Bernal et al. (1990) defined ethnic constancy as knowledge of one's ethnic features that lasted despite the passage of time, changes in location, and personal transformations.

and wellbeing in coloured populations (Smith & Silva, 2011). Yip (2014) found a positive connection between achieved identity statuses and high private regard or in-group attitudes among adolescents who reported the bearing of their ethnic identity across situations. Huang and Stormshak (2011) observed the influence of a high degree of ethnic identity in adolescents with healthier parent-child relations in a four-year longitudinal study. Stein, Kiang, Supple, and Gonzalez (2014) reported that ethnic identity could either defend against or worsen psychological health in youth experiencing financial strain. Strong ethnic identity acted as a bulwark to ethnic minorities facing adversities (Brook, Whiteman, Balka, Win & Gursen, 1998; Neblett, Rivas-Drake & Umaña-Taylor, 2012; Romero, Edwards, Fryberg & Orduña, 2014). It served a dual function as a boost and safeguard for members' psychological functioning (Umaña-Taylor, 2011). According to Juang and Syed (2010), ethnicity should be seen as a 'dynamic and developmental variable' (p. 352) and theorised as including behaviours, practices, and experiences. Dubow, Pargament, Boxer, and Tarakeshwar's (2000) research on minority Jews showed both sides of the coin: ethnic identity amplified sensitivity to ethnic-associated stressors but also served as a buttress to manage those stressors. Religious, ethnic, gender, and status identities could be closely intersecting and not independent as certain theories posit (Juang & Syed, 2008). Cruz-Ortega et al.'s (2015) study of bereaved adults found a link between ethnic identity development and religious coping. However, Bratt's (2015) three-year longitudinal study among adolescents did not find that ethnic identity or national identity had an impact on mental health. Ng Tseung-Wong and Verkuyten (2013) remarked that an overarching Muslim identity prevailed over national identity among Mauritian adolescents.

The state of Mauritius was not thoroughly alienated from concerns of ethnic difference. Mauritian nationhood could not be separated from religious values and cohesions (Eisenlohr, 2006). Ethnicity, considered a 'given' (Burgess, 1978, p. 266) of human kind by some schools of thought and cognitively constructed by cognitive behaviour theorists (Brubaker, 2004), is a complex and sensitive concept. Instrumentalists view ethnicity for the benefits it could impart (Hempel, 2004). Ethnicity was part of Mauritius, a country which strives to promote national identity over and above all. However, ethnic diversity is not a key predictor of national identity (Harttgen & Opfinger, 2014). Georgiadis and Manning (2009) noticed that sticking to a religion

and minority ethnicity are not clearly linked to a lessened sense of belongingness. While Ng Tseung-Wong and Verkuyten (2015) advanced that ethnic group identification could be detrimental in a cordial plural nation because it has a divisive effect on intergroup relationships, Masella (2013) contended that no scientific substantiation of a lesser intensity of national feeling was observed in ethnically divided countries or minority groups. ‘Ethnicity-as-choice’ (p. 95) was not just confined to the White population, but could be applied to any population which typifies the majority in a country or region (Anagnostou, 2009). The Hindu Mauritians who had a miserable start during Indian immigration to the island now benefit from a privileged majority status. The ethnic group serves not as a community group for action, as it did during the harsh period of colonial domination and discrimination, but for gains and power.

Mauritius is part of the Mascareignes Archipelago located 890 kilometers to the east of Madagascar (Government Portal, 2015) in the South West Indian Ocean (Jungers, Gregoire & Slagel, 2009). The island of Mauritius has a ‘cosmopolitan culture’ (Government portal, 2015) and it is usually dubbed the ‘Mauritian rainbow’ (Jungers & Gregoire, 2010, p. 84) for its rich diversity of races, ethnicities, languages, and religions. The Constitution of Mauritius acknowledges four main ethnic categories: Hindus, who represent 52 percent of the population; Muslims, with 16 percent; Sino-Mauritians, who represent only 3 percent; and the general population, which constitutes 29 percent (Carpooran, 2003; Ng Tseung Wong & Verkuyten, 2015). The general population, a ‘catchall category’ (Jungers et al., 2009, p. 302) has a negative connotation and includes any person who does not identify with the three other ethnic groups (Carpooran, 2003), such as the Creoles and the Franco-Mauritians (Addison & Hazareesingh, 1999). The general population is devoid of any religious legacy and is not related to ancestral countries like the other groups (Jungers, et al., 2009). Mauritius has an even wider cultural tapestry, considering the Hindu community is subdivided into Hindu, Tamil, Marathi, and Telegu people (Ng Tseung Wong & Verkuyten, 2015), who have their own temples, languages, dress code,² and food. The dominant group is the Hindu population, who came from the Indian continent to work as indentured labourers under British colonial rule (Addison & Hazareesingh, 1999). The Muslim population was initially counted with the Hindus under one category—the Indo-Mauritians. Most Muslims in Mauritius

² Indian clothing such as saris are worn differently by different ethnic groups.

are Sunni, though a small percentage (approximately 5 percent) are Shi'a (Burrin, 2002). The Muslim community is not a unified population, but is divided across several lines. The recognition of ancestral languages and religious philosophy are the two primary issues on which the Muslim community diverges. The Muslim community is a challenge to the Mauritian cultural policy of 'unity in diversity' (Eisenlohr, 2006, p. 401).

The Mauritian government promotes the valorisation of ethnic identity, despite its polarizing influence on a multi-ethnic society; it does not expect sheer assimilation into a unique main identity (Eriksen, 1998, as cited in Jeffery, 2010). As Ng Tseung-Wong and Verkuyten (2013) aptly put it, dual identity reinforces ethnic group particularity from a perspective of national union and common belonging. The authors added that the concept of biculturalism is not an equal measure of ethnic commitment and national identification. As Benet-Martinez and Haritatos (2005) stated, it depends on the person's perception of the cultural systems as attuned or conflictual (as cited in Ozyurt, 2013). In a recent study by Ng Tseung-Wong and Verkuyten (2015) on the three main ethnic groups, all respondents described robust and harmonious national, ethnic, and religious group identifications. The Sino-Mauritians came from China as traders, and are the main shopkeepers (Addison & Hazareesingh, 1999). The Creoles, who were brought by French colonists from Madagascar and Africa as slaves, are believed to be the least privileged due to their history of slavery (Boswell, 2006), stereotypes, marginalisation, and discrimination (Jungers et al., 2009; Jungers & Gregoire, 2010). Furthermore, Jungers et al. (2009) observed that despite the great number of Creoles on the island, they have neither political power nor social control. Their participation in the national community has yet to be fully acknowledged. The present study is focused on the three main groups: Hindus, Muslims, and Creoles.

1.5 General purpose of the present research

The overall aim of the present research project was to increase knowledge on spiritual intelligence along ethnic profiles in the Mauritian setting.

1.5.1 Statement of the research problem

The problem investigated in this research is whether spiritual intelligence differs across ethnic groups. The rationale for the present study is the dearth of quantitative research on this subject. Many studies on SQ associate it with organisational variables such as leadership and job satisfaction, but few look at ethnic profiles. Furthermore, it was observed that several studies used measures which mixed SQ qualities with dimensions. For instance, Zareh and Ghazanfari (2014) examined the relationships between attachment styles, identity types, and SQ among Isfahan tertiary students and found a significant positive connection between SQ and information identity style. The latter was described as individuals with problem-oriented approaches, with a sense of integration and well-defined and unwavering objectives (Berzonsky et al., 1997, as cited in Zareh & Ghazanfari, 2014). The study's constraint was Naseri's (2013) test, which assessed the four domains of self-awareness, spiritual experiences, patience, and forgiveness, the last two being more qualities of SQ than subscales. Though the research observed the identity variable, there was a lack of information about the ethnic identity style. Tirri and Nokelainen's (2011) study was based on the findings of Hay (1998) and Bradford (1995). Tirri and Nokelainen (2011) viewed spiritual intelligence as part of MI and proposed and validated a spirituality sensitivity scale that measured four aspects: awareness-sensing, mystery-sensing, value-sensing, and community-sensing. Both the value-sensing and community-sensing elements were similar to a quest for meaning construct. Moreover, the awareness-sensing dimension was analogous to a self-awareness construct. However, Tirri and Nokelainen's (2011) measure of SQ was limited to the sensitivity aspect. Furthermore, their test had just 20 items prior to factor analysis, which was an inadequate measure for SQ. Thus, it was a threat to sound psychometric properties of a scale.

Bolghan-Abadi, Ghofrani, and Abde-Khodaei's (2014) study on the positive relationship between spiritual intelligence and quality of life placed limits on the research by using a measure that assessed only two facets of SQ: spiritual life and understanding and interaction with the origin of existence. Spiritual intelligence as described by Zohar and Marshall (2005) has 12 principles or indicators, which were used as guidelines for the present study. Furthermore, Hassan and Shabani (2013) investigated the moderator role of EQ between SQ and mental health among Iranian

students. They used the Integrated Spiritual Intelligence Scale (ISIS), a 45-item short measure developed by Amram and Dryer (2008). They found that both EQ and SQ described mental health issues differently. SQ through EQ had an indirect influence on mental health troubles. Amram and Dryer (2008) developed an SQ scale with five dimensions: consciousness, grace, meaning, transcendence, and truth. Again, both truth and grace were more qualities than a subdomain of SQ. Koohbanani, Dastjerdi, Vahidi, and Far (2013) also probed the association between SQ and EQ among gifted female secondary students. They observed that SQ had a link with life satisfaction only when mediating EQ. The study was also limited by the measure which gauged beliefs, problem-encountering ability, moral virtue, and self-consciousness as aspects of SQ (Badie et al., 2011, as cited in Koohbanani et al., 2013). Amirian and Fazilat-Pour (2015) looked at the simple and multivariate correlations of SQ with general health and happiness among 384 participants. They reported positive and significant relationships among SQ and overall health and happiness. King's (2008) SQ measure was used and it had good psychometric properties. Furthermore, the scale included demographic items such as the gender, age, and educational background of the participant. However, Amirian and Fazilat-Pour's study neglected the ethnic identity aspect, which could be used to check the representativeness of the sample in terms of ethnicity of the Shahid Banohar University students.

To fill the gap in research, the development of an appropriate questionnaire called the Multicultural Spiritual Intelligence Scale (MSIS) formed part of the present study. During the first part of the study, the MSIS-1 was administered together with a number of other questionnaires and the data were used to refine the questionnaire and to investigate the relationships between ethnic identity, religion, and spiritual intelligence. The factor structure of the MSIS-2 was confirmed during the second part of the study.

1.5.2 Research questions

1.5.2.1 Study One

The five main research questions that guided the study were:

- 1 Do Hindu-Mauritians, Muslim-Mauritians, and Creole-Mauritians differ with regard to spiritual intelligence?
- 2 Is there a relationship between level of ethnic identity and spiritual intelligence?
- 3 Are there differences in ethnic identity in the three ethnic groups?
- 4 Do religious groups differ with regard to spiritual intelligence?
- 5 Are the differences in ethnic identity and spiritual intelligence explained by gender?

1.5.2.2 Study Two

The second study had two research questions, which were:

- 1 Does a six-factor model with simple structure fit the data?
- 2 Is there significant covariance among self-awareness, transcendental awareness, level of consciousness, sensitivity, resilience, and existential quest?

1.5.3 Research objectives

The objectives of the thesis were to:

- Investigate the factor structure of spiritual intelligence.

- Determine whether the three ethnic groups differ with regard to spiritual intelligence.
- Establish how ethnic identity relates to spiritual intelligence.
- Determine whether the three ethnic groups differ with regard to ethnic identity.
- Determine how spiritual intelligence differs across religious groups.
- Ascertain the differences in ethnic identity and spiritual intelligence explained by gender.
- Determine the significance of the covariance among the factors.

1.5.4 Hypotheses

The study generated five hypothetical outcomes:

1) Hindu-Mauritians, Muslim-Mauritians, and Creole-Mauritians do not differ with regard to spiritual intelligence.

The Welch ANOVA and the non-parametric Kruskal-Wallis H test were used to measure the differences among ethnic groups in relation to SQ.

2) There is no relationship between ethnic identity and spiritual intelligence.

The Pearson's product-moment and the Spearman rank-order correlation were calculated to measure the strength and direction of the relationship between ethnic identity and spiritual intelligence

3) There is no difference among the ethnic groups on ethnic identification.

A one-way ANOVA and a Kruskal-Wallis H test were run to determine whether the ethnic identity (MEIM score) was different for the diverse ethnic groups in Mauritius. A one-way multivariate analysis was also run to establish the effect of ethnic groups on ethnic identification.

4) There is no difference among the religious groups on spiritual intelligence.

A one-way Welch ANOVA was carried out to establish whether the spiritual intelligence (MSIS score) was different across different religious groups.

5) There is no difference in ethnic identity and spiritual intelligence in males and females.

A one-way multivariate analysis of variance (MANOVA) was run to ascertain the difference in ethnic identity and spiritual intelligence according to gender.

Additional hypotheses were important for the construct and discriminant validity of the MSIS-1 measure. They were as follows:

- a) The quest for meaning dimension of the MSIS-1 was expected to have a significant correlation with the search for meaning of the Meaning in Life Questionnaire (MLQ).
- b) The resilience dimension of the MSIS-1 correlated significantly with the Connor-Davidson Resilience scale (CD-RISC)
- c) There was a significant correlation between the Private Self-Consciousness Subscale (PSC) and the self-awareness dimension of the MSIS-1.
- d) The MSIS-1 was expected to correlate strongly with the New Indices of Religious Orientation (NIRO).
- e) The BIDR was expected to correlate poorly with the MSIS-1.

1.5.5 Methodology used in the thesis

The research used the positivism paradigm and a quantitative approach was required to attend to the various research questions. The cross-sectional survey research design was used to collect data and a combination of paper version and online version ensured a higher response rate. The sample size was 1,177 participants for study 1 and 303 participants for study 2. In the first part of the study, the MSIS-1 was administered together with other questionnaires and the data were used to improve the MSIS-1 and to examine the relationships between ethnic identity, religion and spiritual intelligence. The second study confirmed the MSIS-1's factor structure. Probability sampling was chosen for the representativeness of the sample.

1.6 Operational definition

For the purposes of this research study, spiritual intelligence was defined in terms of six dimensions: self-awareness, transcendental awareness, levels of consciousness, quest for meaning, sensitivity, and resilience, as shown in Table 1.1.

Table 1.1:

Dimensions of the MSIS-1

Dimensions	Number of items	Observed/ Reported behaviours
<i>Self-awareness</i>	16	Awareness of life purpose and weaknesses, reported feeling of presence of a higher being, sense of inner life, inner voice of guidance
<i>Transcendental awareness</i>	21	Connection with other people, other things, and life; awareness of a higher consciousness's guidance; spiritual practices and healing methods involved in transcendental oneness
<i>Level of consciousness</i>	19	Follow intuition, take time to play, reported feeling of guidance of a higher being, ability to see all viewpoints, enter states of consciousness
<i>Quest for meaning</i>	18	Reported meaning in life, search for meaning, inspired by leader(s), contribution to others
<i>Sensitivity</i>	16	Empathy, show compassion, experience joy/pain/feelings of others
<i>Resilience</i>	16	Viewed as an ability rather than a trait. Adaptation to stressful situations, learning from mistakes, bouncing back after problems, connection to a higher being through spiritual practices to overcome difficult situations.

The adapted Multi-group Ethnic Identity Measure-Revised (MEIM-R) (Phinney & Ong, 2007) questionnaire covered two dimensions: Ethnic Identity Exploration and the Ethnic Identity Commitment dimension, as described in Table 1.2.

Table 1.2:

Dimensions of the MEIM-R

Dimensions	Number of items	Observed/ Reported behaviours
Exploration	3	Research on ethnic groups, active in learning about one's own ethnic group, talking about ethnic groups.
Commitment	3	Clear sense of ethnic background, sense of belongingness, and positive feelings associated with ethnic group membership, 'positive in-group attitudes'.

Adapted from 'Conceptualization and Measurement of Ethnic Identity: Current Status and Future Directions,' by J.S. Phinney, and A.D. Ong, 2007, *Journal of Counseling Psychology*, 54(3), p. 276. Copyright 2007 by the American Psychological Association.

1.7 Rationale and significance of the study

- There is practically no research on spiritual intelligence for the 'rainbow nation' (Ng Tseung-Wong & Verkuyten 2010, p. 634) which shows its specificities in terms of culture, tradition, and history. The present study clarifies this issue across the major ethnic groups.
- From the literature review, it was obvious that most studies on ethnicity were based on the diverse US population (Chae, Kelly, Brown & Bolden, 2004; Gillum & Griffith, 2010). Western societies have a different worldview, one which is more 'scientific, analytical and [reductionist]' (Viljoen, 2003, p. 501). Research on ethnic groups is inadequate if the degree of involvement a participant has with regards to his or her ethnic background is not assessed. This study uses Phinney and Ong's (2007) measure to allow the participants to voice their subjective 'identity choice' and 'subjective meanings of identity categories' (Zagefka, 2009, p. 236), in line with the view that ethnicity is subjective and constructed.
- Previous studies focused on designing a spiritual intelligence scale without looking at the role of the participants' ethnic cultural backgrounds. The present study bridges this gap in

knowledge as it examines variables such as ethnicity, ethnic identification, religion, and gender in relation to SQ.

- Many studies used measures that are standardised in other countries. As spiritual intelligence is a sensitive issue, there was a need for an adapted measure which reflects the reality of the Mauritian population. This was the reason for the development of the MSIS-1 with demographic items pertinent to the target population that met the requirements of the study.
- This present research was not only informative; it also helps the Mauritian people to view the diversity of their nation as a force in building a universal perspective of spiritual intelligence.
- As mentioned by Trimble (2000, as cited in Chae et al., 2004), few researchers have investigated the link between ethnic identity and spirituality. Moreover, the significance of spirituality was greatly felt in Asia, Africa, and Latin America (Sue et al., 1999, as cited in Chae et al., 2004). This project meets this gap in the literature.

1.8 Definitions of key terms

Ethnic identity: a feature of social identity which was defined as that branch of an individual's self-concept obtained from their knowledge of their membership in a social group (or groups), along with the value and emotional connotation connected to that membership (Tajfel, 1981).

Ethnicity: 'a social construct' (Zagefka, 2009, p. 231) of a common culture not founded in biological divergences.

Spiritual intelligence: 'defined as the intelligence with which we access our deepest meanings, values, purposes, and highest motivations' (Zohar & Marshall, 2005, p. 5). SQ was 'defined as a set of mental capacities which contribute to the awareness, integration, and adaptive application of the nonmaterial and transcendent aspects of one's existence' (King, 2008, p. 56).

Spirituality: the centre of a human being's connection with God or a higher power (Mauk & Schmidt, 2004, as cited in Delaney, 2005).

Organisation: a ‘structured social system consisting of groups and individuals working together to meet some agreed-upon objectives’ (Greenberg & Baron, 2003, p. 31).

Multicultural: racial and ethnic minorities and groups with unique characteristics such as gender, age, religion, and sexual orientation (Yick-Flanagan, 2007).

Factor Analysis: ‘consists of a number of statistical techniques the aim of which is to simplify complex sets of data’ (Kline, 1993, p. 3).

Exploratory Factor Analysis (EFA): an assessment of the number of factors which exist among a set of variables and the degree of covariation the measured variables have with the factors (Kahn, 2006).

Confirmatory Factor Analysis (CFA): a type of structural equation modelling which permits the investigation of a series of connections between independent and dependent variables (Ullman, 2013).

1.9 Content overview

The first chapter introduces and situates spiritual intelligence within the broader context of intelligence. It also discusses multi-ethnicity in the Mauritian context. The chapter concludes with a description of the research problem and a statement of the research questions and objectives. Chapters 2 to 5 offer reviews of the literature. In Chapter 2, the psychological concept of spirituality is described, including the different definitions and perspectives on spirituality; a brief historical account and theories of spirituality and religion is presented; and the theories of spiritual intelligence and the theoretical framework of this paper are delineated. Spirituality in the workplace is discussed in Chapter 3 and the various definitions and measures of organisational spirituality are given, along with the ethical perspective. Chapter 4 offers a description of spirituality and religion in Mauritius: the spiritual, religious, and cultural aspects of the main religions in Mauritius are discussed. In Chapter 5, the upsurge of interest in ethnicity in psychology is considered, and the definitions, theoretical foundations, and types of ethnicity are discussed, as

are the main identity theories and ethnic identity as applied to the Mauritian context. The three main ethnic groups (Creole-Mauritian, Hindu-Mauritian, and Muslim-Mauritian) are considered, and a distinction is made between multicultural perspective and interculturalism. Chapter 6 focusses on the research methodology, which comprises the research paradigm, research design, research methods, sample strategies, and the ethical part of the study. An overview of the data entry, analysis, and limitations is also given in this chapter. Results are presented in Chapter 7: research questions are answered, particularly with regard to how the objectives were met and the hypotheses were tested. Chapter 8 addresses the discussion and recommendations. The findings are discussed, with the support of previous studies, and recommendations based on new findings are advanced for further research and for implementation. A concluding note is added to summarise the thesis.

Chapter 2: The Spiritual Realm in Psychology

Religion and spirituality (R-S) are positively associated with overall health, including people's psycho-socio-emotional health. Both the African and the Eastern perspectives are taken into consideration in the analysis of R-S for a more comprehensive outlook. A bird's-eye view of the stage-theory of spiritual identity is provided, along with the historical background of R-S. Demarcating the line between spirituality and religion is a herculean task, which is further expanded on here. This challenge is the origin of many controversies. Prior to looking at spiritual intelligence, several aspects of spirituality are explained, such as the theories underlying spiritual development and the types and models of spirituality. Spiritual intelligence is explained through various theories, and a discussion of the subscales of the proposed questionnaire (the MSIS-1) is also provided.

2.1 A panoramic view of spirituality

This chapter looks at spirituality and spiritual intelligence from various angles. Several studies have stated that spirituality or religiosity influences a person's general adaptive functioning or physical health (Smith & Harkness, 2002; Brown et al., 2013). Reeves, Beazley, and Adams (2011) reported that out of more than 700 studies on the link between religion and mental health, almost 500 showed a meaningful relationship between the two variables (Peres, Moreira-Almeida, Nasello & Koenig, 2007; Verno, Cohen & Patrick, 2007; Koenig, 2008; Brown et al., 2013). Correlational studies have illustrated a positive relationship between religious belief and wellbeing, contentment, life satisfaction, hope, optimism, purpose and significance in life, higher self-worth, more social support, less solitude, lower incidence of suicide, and fewer positive opinions towards suicide (Bonelli & Koenig, 2013; Koenig, 2009), less anxiety, less psychosis, and fewer psychotic propensities (Koenig, 2009), lower incidence of substance use and abuse (Bonelli & Koenig, 2013; Koenig, 2009), less delinquency and criminal activity, and more conjugal stability and fulfilment (Reeves, Beazley & Adams, 2011). Inzlicht, McGregor, Hirsh, and Nash (2009) found that religious convictions were linked to decreased activity in the anterior

cingulated cortex (ACC), a cortical system engaged in self-regulation and handling anxiety (as cited in Scarlett & Warren, 2010). Positive religious coping was associated with greater mental wellbeing and lower levels of depression among sexual assault survivors (Ahrens, Abeling, Ahmad & Hinman, 2010). Furthermore, having a religious affiliation and being part of a faith community was viewed as a significant factor of a person's recovery³ (Leamy, Bird, Le Boutillier, Williams & Slade, 2011; Nelson, 2009).

However, Park and Slattery (2013) underlined the restrictions of such studies as correlational, cross-sectional, and tainted by confounding factors (Brown et al., 2013). Nevertheless, Park and Slattery (2013) argued that the prevalence of evidence indicated that some features of religiousness and spirituality were related to some characteristics of mental health. RS is a profoundly embedded construct in various cultures (Hoogestraat & Trammel, 2003; Tyler, 1987, as cited in Nelson, 2009). An etic framework supposes that all religions have similar characteristics which could be analysed as universal traits, while an emic model would look at the uniqueness of each religion in a specific situation (Nelson, 2009). The significance, position, and scope of spirituality seem to have superseded religion as a broader-functioning term (Rovers & Kocum, 2010; Hood, Hill & Spilka, 2009). Tacey (2004) and Woodhead and Heels (2004, as cited in Coyle, 2008) observed that a spiritual revolution marked the swing in interest away from religion and toward spirituality.

The African viewpoint suggests that the human and the divine are connected in some way, and reference is made to spiritual manifestation in the physical human body (Richards, 1990, as cited in Brunal, 2011). Brunal (2011) summed up spirituality in six constituents: it is a lifetime voyage; all beings are divine; a connection with a higher force; the interconnectedness among all humans and also among living and non-living things; and an epistemology which includes body and soul. According to Wheeler, Ampadu, and Wangari (2002), spirituality must be integrated and prioritised in the lifespan development of the people of Africa and the African diaspora for these theories to be relevant and applicable. Spirituality forms a fundamental part of the lives of people

³ Personal recovery is defined as a profoundly personal, unique process of altering one's attitudes, values, feelings, goals, skills and/or roles and includes a style of life that is optimistic and satisfying even with the restrictions caused by illness (Anthony, 1993 as cited in Leamy et al., 2011).

of African descent (Wheeler et al., 2002). For instance, in Afro-Caribbean society, Black women were compared to ‘donkeys’ (p. 75), but through spirituality they were elevated and honoured as the incarnation of the sacred (Hurston, 1990, as cited in Wheeler et al., 2002). Adyanga (2011) espoused an African perspective towards spirituality, defining it as incorporating the ‘connectedness to the land, people, spiritual world, and to the greater community’ (p. 114), together with a profound sense of duty for values and customs. Estanek (2006, as cited in Adyanga, 2011) viewed spirituality as the inner unified self and the connection among all humans. Jagire (2011) portrayed spirituality as an internal life, insight, and generosity of the spirit, being, and soul, which all strive for the welfare and security of the community. African spirituality was constructed on the harmony of Africans. The culture is one of ‘unity, communalism, and hospitality’ (Jagire, 2011, p. 188). African spirituality was upheld through oral stories, dreams, words of wisdom, and the preserving of relations with the ancestors (Jagire, 2011).

The tracks to spirituality were numerous and were supported in different beliefs, such as that in an ultimate reality in Hinduism (Ho & Ho, 2007). The Eastern or Hindu perspective, a spiritually more ‘intuitive and integrating’ (Viljoen, 2003, p. 501) viewpoint, started off from a religious and metaphysical custom. The goal of this standpoint is to gain knowledge of the soul and self-realisation. Contrary to the Western individualised self, the Hindu perspective proposed a ‘familial self’ (p. 501) which emphasises the other and a ‘spiritual self’ (p. 501) which transcends the self (Viljoen, 2003). The immortal soul, or *atman*, is the real self and is part of *brahman*, the ultimate reality, which is different from the ephemeral manifestation of the ego, or *jiva*. It is posited that the ‘cosmic-spiritual’ (p. 319) dimension requires that reincarnations happen until the *atman* realises its oneness with Brahman (Ai, Kastenmüller, Tice, Wink, Dillon & Frey, 2014). Jung (1970) and Ai (2000) noticed that Hinduism, like Buddhism, underscores a more abstract interpretation of the soul’s voyage in an afterlife with an understanding that people’s paths tie the present life and an afterlife through virtuous conduct and practices (as cited in Ai et al., 2014). Viljoen (2003) mentioned that the Vedanta school of thought refers to stages of life similar to religious and psychological stages. Hacker (2006) described the stages as *brahmacārin*, (learning stage), *grhastha* (marriage), *vānaprastha* (preparation to leave worldly activities), and *pārivrājaka*

(renunciation). The focus of the Eastern views is cordial connection with other humans, society, nature, and the cosmos (Brahman).

Jung (1933, as cited in Elkins, 1995) was the first psychologist to underline the significance of the soul and to make it a primary psychological construct. Spirituality is intrinsic to humans' ontological structure, which is manifested through archetypes (Sorajjakool, 1998). Jung (1933) portrayed the goal of life as spiritual in nature (Sorajjakool, 1998). Furthermore, Jung (1933) viewed the spiritual aspect as an invisible factor within the unconscious, which leads people towards the search for God/Gods (Sorajjakool, 1998). Spirituality is described as a 'fuzzy' term (Spilka, 1993, as mentioned in Zinnbauer et al., 1997, p. 549). Dillon and Wink (2003) operationally defined spirituality in terms of the significance of non-institutionalised religion or non-tradition-focused beliefs and practices in the person's life. Multiple definitions of spirituality have proliferated in the increasing number of studies on the subject (Rovers & Kocum, 2010). Scarlett and Warren (2010) restricted the definition of the term to the act of being subservient to something regarded as sacred, a higher power, or something worthy of devotion. Zinnbauer et al. (1997) added that popular spirituality consists of components such as angels, crystal powers, psychic readings, and 'evangelical or Pentecostal religious experiences' (p. 550). Spirituality is a practical, more intrinsic element of religion, while the latter is a more essential, extrinsic aspect (Pargament, 1999, as cited in Marler & Hadaway, 2002). Pargament (1999) defined spirituality as a quest for meaning, for oneness, and as a means to rise above the limits of human existence. Aponte (1996, as cited in Bacchus & Holley, 2005) described spirituality as the core of life choices. Walsh (1998, as cited in Bacchus and Holley, 2005) viewed spirituality with transcendent beliefs and customs. Sutherland (n.d., as cited in Carr, 2000) depicted spirituality as independent of religion and described it as the interaction of people with their personal depths and transpersonal activity with the purpose of unifying with the higher self.

Coffey (2002) claimed that spirituality was neither an affective component nor was it a 'quantitative construct' (p. 32), but it had qualitative demarcation. 'Transformative spirituality' denotes the departure from the personal experience and the move into the realm of a collective consciousness, then into the 'aesthetic or sacred' (Bateson, 1980, as cited in Coffey, 2002, p. 32). Afrocentric scholars have defined spirituality as the vital power which stimulates and links people

to the rhythms of the universe, nature, their ancestors, and their community (Wheeler et al., 2002). Carroll (2001) recognised that spirituality could be seen as the heart and soul of self-development, or as one dimension linked with the quest for meaning and relationship with a Higher Power. Aponte (2002) portrayed spirituality as a ‘universal dimension of life’ (p. 16) which gives sense to existence, lays down an ethical standard of living, and suggests a sense of moral links among people; he also described spirituality as founded on morals and philosophy, or expressed in formal religion in deity adoration. Hyde (2004) argued that the research indicates that spirituality is more ancient than religion. In a meta-analysis of 76 studies on spirituality, McCaroll-Butler (2005) summed up the definitions in eight themes: meaning which acts as a foundation for existential spirituality; links and relationships between the self, others, and the world, where spirituality is expressed in a community; God and a transcendent other; creativity as a ‘vital principle’ (p. 4); an integrative force; a transcendent self; a personal matter; and the power to cope with trials and tribulations (as cited in Rovers & Kocum, 2010). Unruh, Versnel, and Kerr (2002, as cited in Rovers & Kocum, 2010) also categorised their review of studies into three notions: the connection with a higher self; the relationship to and experiences of ties with other human beings, flora, and fauna; and the meaning and purpose of existence.

2.1.1 Towards a spiritual identity

Kiesling, Sorell, Montgomery, and Colwell (2008) defined spiritual identity as a constant sense of self which focuses on ultimate queries about the nature, purpose, and meaning of life, bringing about behaviours which are in agreement with the person’s fundamental values. Kiesling et al. (2008) offered a limited definition of spiritual identity that centres on the spiritual quest, particularly role salience and flexibility in spiritual identity, which was taken from Marcia’s (1966) exploration-commitment identity theory. In contrast, Poll and Smith (2003, as cited in MacDonald, 2011) relied on an ‘integrated theory’ (p. 533) which referred to spiritual identity as a person’s belief in an immortal self and the link with a higher power. The authors also posited four stages of spiritual identity progression across the lifespan, beginning with a pre-awareness which is characterised by a state of ignorance of the connection with the spiritual, followed by an awakening

ephemeral stage triggered by adversities (see also Russo-Netzer & Mayseless, 2014). The third stage, recognition, is a remembering of previous spiritual experiences, paralleled with the awakening phase, which symbolises a more secure sense of identity. Integration, the last phase, is the synthesis of spiritual experiences with one's self identity. Russo-Netzer and Mayseless (2014) pointed out that Poll and Smith's (2003) assumption of a Judeo-Christian view and their stress on religious facets limited the generalisation of the theory.

2.2 The history and nature of spirituality

The term 'spirituality' derives from the Latin word *spiritus* (p. 6), which is translated as the 'breath of life' (Miller 2003, p. 6; see also Karakas, 2010). Sheldrake (n.d.) traced the word spiritual back to the Latin term *spiritualis*, which was taken from Greek *pneumatikos* in Paul's writings to the Romans and Corinthians (as cited in Koenig, 2008; see also Oman, 2013). A spiritual being was viewed as someone imbued with the spirit of the Almighty, normally denoting ordained priests. In the twelfth and thirteenth centuries, a philosophical connotation surfaced which contrasted spirituality with corporeality (Oman, 2013). The author contended that spirituality took on a positive note to refer to a private and affective bond with God. In the seventeenth and eighteenth centuries, spirituality was occasionally negatively compared with other related terms such as 'devotion, perfection, and piety' (Oman, 2013, p. 27). Nelson (2009) noted that the term spirituality was not popular, and 'spiritualism' (p. 8) meant communication with spirits and other psychic occurrences. Before the late nineteenth century and the subsequent influence of Charcot and Freud, religion and mental health were on 'good terms', so to speak (Koenig, 2008; Bonelli & Koenig, 2013). That is both functioned in parallel. The late nineteen century marked the split between religion and mental health. The division persisted for a long time, and religious convictions and traditions were also associated with hysteria, psychoneurosis, and psychosis (Koenig, 2008, 2009; Bonelli & Koenig, 2013).

However, recent research has overturned this perspective, and now religion is viewed as a potential source of mental and social support for stress management (Koenig, 2008). The evolution

of religion has left the dynamic aspect of it to spirituality (Pargament, 1999). The reductionist view of religion has helped in the creation of a positive look on spirituality; spirituality is about building a more ‘authentic identity’ (Tolliver & Tisdell, 2006, as cited in Adyanga, 2011, p. 113). Roof (2003) contended that spirituality may signify ‘the inner life’ (p. 138) rooted in religion, and saw spirituality within the boundaries of religion as involving a personal quest for attaining one’s potential. Roof (1999) asserted that spirituality comprises four elements: the basis of values and ultimate meaning of a purpose which transcends the self, a means of understanding, self-awareness, and self-harmonizing (as cited in Nelson, 2009). Historical figures who associated spirituality with psychology are: James (1985), with the perspective that religion is essential to life; Jung (1953), with the concept of the psyche’s spiritual dimension; Allport (1950), who developed a religiosity scale which differentiated between intrinsic and extrinsic religious orientation; and Fromm (1950), who believed that a more humanistic religion can help people (Miller, 2003, as cited in Shanto, 2010). Jung (1933) and Fowler (1981, as cited in Carroll, 2001) considered spirituality as an individual’s soul or essence, which holds the potential for fulfilment through a developmental course.

Kelly (1995, as cited in Miller, 2003) noted the difference between religion, which is related to institutions and rituals, and spirituality, which is more about a personal relationship with the universe. This is explicitly explained in the following section. According to Huguelet and Koenig (2009, as cited in Shanto, 2010), spirituality is linked to the ultimate queries about life’s meaning, which may or may not originate in religious traditions. The Association for Spiritual, Ethical, and Religious Values in Counselling (ASERVIC) (1998, as cited in Steen, Engel & Thweatt, 2006) views spirituality as comprising experiences, beliefs, and practices. Young, Wiggins-Frame, and Cashwell (2007) cited a 2003 University of Pennsylvania survey which found that 75 percent of Americans felt that R-S was important in their life. The culminating significance of spirituality implies a need for more research on the topic, which in a sense justifies this study.

2.3 Spirituality and religion: The debate and differences

Religion does not exist; it is a ‘modern social construct’ (Bruce, 2011, p. 107) which has negative connotations. This postmodern approach claims that religion emerged from the division between the Church and the state (Fitzgerald, 2000, as cited in Bruce, 2011). However, the source of this idea has no connection with its existence (Bruce, 2011). The differentiation between religion and spirituality has become essential now (Dillon & Wink, 2003). James considered religion as ‘the feelings, acts, and experiences’ (1902, 1961, quoted in Miller & Thoresen, 2003, p. 27) of persons in retreat, to the point that they capture themselves to stand in relation to what they may deem the divine (see also Oman, 2013, p. 27; Zinnbauer et al. 1997, p. 550; Zinnbauer, Pargament & Scott 1999, p. 893). Dillon and Wink (2003) described religiosity as the significance of institutionalised or custom-focused religious beliefs and practices in the person’s life. The belief-institution approach of describing religious development is illustrated in Regnerus and Elder’s (2003) study on high-risk adolescents⁴ religious participation and staying in school. The authors emphasised ‘beliefs and practices that are religious’ (as cited in Scarlett & Warren 2010, p. 633) as opposed to secular which kept the youths in school, but they neglected the internal aspect of religion. Roof (2003) defined religion as arising from scripture, rites, legends, beliefs, practices, principles, communities, and social institutions, which are all external and exteriorised components of a custom.

Conventionally, the word religion is used to denote all facets of the human rapport to the divine or transcendent (Meissner, 1987, as cited in Nelson, 2009). Nelson (2009) stressed religion’s multidimensional aspect, as he referred to it not simply being transcendent but ‘immanent’ (p. 3) in daily life. Glock and Stark (1965) considered religion a ‘social phenomenon’ (p. 6) involving aspects such as ritual, experiential, intellectual, and having repercussions on behaviours and ethics (as cited in Nelson, 2009). Religion was described as a *weltanschauung* (Tillich, 1965, as cited in Nelson, 2009), which implied that every individual was religious. Another perspective of religion was that of ‘a human activity’ (Nelson, 2009, p. 8). These

⁴ High-risk youth involves youth coming from poor neighbourhood with high unemployment rate for males, low socioeconomic status, matriarchal households with no male figure (Regnerus & Elder, 2003).

descriptions of religion comprise ‘thin’ definitions, that is, the definitions are centred on ‘universal’ human values (Nelson, 2009, p. 9). In contrast, a ‘thick’ definition is theistic, with high shared content embracing the experiential, relational, and behavioural elements (Nelson, 2009). Religion is ‘multifaceted’ (Fisher, 2012, p. 2), as portrayed in Smart’s seven dimensions of religion. Smart argued that religion and religious matters are connected to the ‘invisible world’ (Rennie, 1999, p. 64). These dimensions are directly related to the sacred: the ‘practical and ritual’ aspect, which can take the form of public or private rites; the ‘narrative or mythic’ facet, relating to accounts of epics; experiential and expressive actions; ‘social and institutional’ ideas, which comprise common beliefs; ‘ethical and legal’ tenets, which serve as guidelines for human behaviours; dogmatic and philosophical concepts; and finally, the tangible ‘material’ (Rennie, 1999, p. 64) aspect, comprising objects and places associated with the religion (see also Fisher, 2012).

Religion contributes in upholding emotional and mental wellbeing (Hoogestraat & Trammel, 2003), and serves a dual task as a social identity and an unverifiable belief system (Ysseldyk, Matheson & Anisman, 2010). Psychological studies have tackled religion as an interest in the public field, a social tradition, and a person’s claim to experience (Carr, 2000). Pargament (1997, as cited in Zinnbauer et al., 1997) contended that studies have conventionally taken either a functional or substantive approach to religiosity. A functional analysis views religion in relation to its functions or consequences, such as a foundation for security or coping, while substantive analysis looks at elements such as religious beliefs, rites, emotions, and relational aspects (Zinnbauer et al., 1997; Nelson, 2009). Marx (1970, as cited in Bruce, 2011) depicted religion as ‘the opium of the people’ (p. 111), asserting that the upper classes employ religion to suppress the lower classes and the latter utilise it to soothe themselves. Durkheim, on the other hand, stated that religion serves to unify people in a shared consciousness (Davie, 2003; Bruce, 2011). Bruce’s (2011) substantive definition of religion encompasses the ‘beliefs, actions and institutions’ (p. 112) which suppose the existence of supernatural beings with the ability to take action, or ‘impersonal powers’ (p. 112) or processes with the capacity of moral reasoning. Loewenthal (1995) gathered the common beliefs of main religions and suggested several contentions about religion (as cited in Coyle, 2008). It is a belief in the existence of a spiritual authenticity, a belief that the aim of life is

to enhance harmony in the world by virtuous behaviours and avoiding antisocial actions. In monotheistic religions, there is the conviction that the origin of life is the origin of moral directives. Religions entail and rely on the social and institutional establishment for conveying this knowledge. Religion comprises beliefs in entities such as angels, spirits, and demons; established customs and rites connected to the holy such as God or an absolute reality (Koenig, 2008). Religion can be lived privately, but it comes from beliefs shared among people (Koenig, 2008). Bruce (2011) argued that a given religion's definitions are more statements of its roots or of its consequences. The downward trend in religious institutions paved the way for nonconventional forms of spirituality (Marler & Hadaway, 2002). Bailey (2010) coined the term 'implicit religion' (p. 272), which is defined as 'commitments, and integrating foci, and intensive concerns with extensive effects' (p. 272). Bailey (2010) pointed out the fact that many people do not consider themselves religious, even though their feelings and behaviours are in line with religious values. Therefore, a more appropriate term was needed. The term 'secular religion' preceded 'implicit religion' in the course of studies conducted by the author.

Primeaux and Vega (2002) drew attention to Maslow's admonition regarding too basic descriptions of religion or religious experience. Maslow (1970) portrayed the personal adoption of religion as the consequence of two inevitable propensities brought to the extreme: institutionalisation and mysticism. The former denotes doctrines and philosophies which become conformist and blank, while the latter refers to the subjective self-preoccupation with peak experiences which separate people from the rest of the world (as cited in Primeaux & Vega, 2002). Davie (2010) noticed that the majority of British and European people were concerned with neither organised religion nor intentionally disputed it. The unwavering faith that prevailed despite changes in its expression was commonly referred to by Davie (1990) as 'believing without belonging' (cited in Voas & Crockett, 2005, p. 12). Davie (2006, as cited in Bruce & Voas, 2010) reported that vicarious religion assumes that a marginal group of people are religious while the majority are not. However, the majority value the negligible group's endeavour.

Durkheim contended that religion will never die, because of the functions it serves (Nelson, 2009). However, Britain, Europe, and the United States have witnessed a sharp decline in church

attendance, as well as a decreased tendency in the inclusion of religion at turning points in life (Zinnbauer et al., 1997; Bruce, 2006; Bruce & Voas, 2010). Davie (2003) explained this decline in religiosity in Europe as the process of secularisation, which is a consequence of modernisation (Gorski, 2003). In the United States, the rational choice theory (RCT) is used to explain such trends (Davie, 2000). In a society with many religious organisations, people choose the religion that provides for their earnest needs and is assumed to be stable. RCT suggests that with fewer religious institutions, the ability to make choices is limited, and thus there is a decline in religious involvement (Davie, 2000). Saint-Simon (1969) and Comte (1830–42, 1969) argued that modernity and religion do not ‘hang’ together (as cited in Gorski, 2003). Classical modernisation theorists assert that religion and ethnic customs will disappear (Gorski, 2003; Inglehart & Welzel, 2010). Gallup’s research on the importance and prevalence of religion has refuted the secularisation hypothesis (Gallup, 1990, as cited in Haug, 1998; Gallup, 1996, as cited in Hoogestraat & Trammel, 2003; Gallup & Lindsay, 1999, as cited in Miller & Thoresen, 2003; Nelson, 2009; Weaver, Flannelly, Garbarino, Figley & Flannelly, 2003). Nelson (2009) supports the religious transformation hypothesis, which explains the drop in religious manifestations. It is posited that through the expansion in individualised religion and social disintegration, a fall in religious expression was evident, but religious concepts were transformed rather than eradicated.

The decades since World War II have seen a decrease in Christian beliefs and practices in the West (Gorski, 2003; Elkins, 1995). The main religions, such as Protestant Christian denominations, lost their dominance in the United States, while other alternatives to religious institutions such as Eastern religions and New Age practices gained ground (Marler & Hadaway, 2002; Zinnbauer et al., 1999). The main reason for the decline in religion was a blend of ‘egalitarianism, individualism, and diversity’ (Bruce, 2006, p. 37). In the 1960s and 1970s, a major decrease in religious participation was observed among ‘baby boomers’ (Roof, 1993, as cited in Zinnbauer et al., 1999, p. 890). The mushrooming number of sects and cults was prevalent. The decline in cultural manifestations of conventional religious institutions is associated with the rise in ‘deinstitutionalisation, individualisation, and globalisation’ (Marler & Hadaway, 2002, p. 289; see also Scarlett & Warren, 2010). Furthermore, Scarlett and Warren (2010) explained that linking beliefs, faith, or ‘being religious’ (p. 637) with religious participation reduces the value and

significance of religion, and most importantly, it leaves out the core spirituality. Roof (2003) pointed to the ‘individual subjectivity’ (p. 139) in religion as a popular trend in the United States. An age of substantially privatised religion and the need for instrumental roles of faith were partly responsible for the transformation in the United States (Roof, 2003). The inadequacy of past perspectives of religion was also questioned, and the lack of a psychological frame of reference in religious beliefs and practices was evident (Roof, 2003).

The rise of secularism in the twentieth century and a general disenchantment with religious institutions as an obstacle to the individualised perception of sacredness have split religiosity from spirituality (Turner, Lukoff, Barnhouse & Lu, 1995, as mentioned in Zinnbauer et al., 1997). According to Pargament (1999), historically, religion was an umbrella term for both the individual and the institution. Religion had diverse connotations, such as the ‘supernatural...the creedal, the ritual...and the directional’ (Pargament 1999, p. 4). Pargament (1999) also emphasised the fact that the definition of religion has currently been reduced to that of an ‘institutional religion’ (p. 6), whereas spirituality pertains to the individual, the emotional, and the experiential. While religion is just a static institution based on a firm belief, spirituality, which is more dynamic, allows for the search for one’s higher potential. Spirituality refers to individual beliefs and practices that embrace religiosity, while religiousness pertains to a social phenomenon (Miller, 1998, 2003, as cited in Stewart & Mezzich, 2007).

In contrast to Western views, the African perspective highlights the indivisible aspect of religion in all affairs of life, from birth to marriage to death (Olupona, 2014). Olupona (2014) stressed the fact that it is far from ‘fundamentalism’ (p. 2), but is rather a code of conduct both for the individual and for the community. Rituals, which permeate their lives, are a way of tying community with the Spirit (Some, 1999). The troubles hampering one’s successes may arise from bad spirits such as witchcraft or the consequence of negligence of one’s compulsory religious duties to one’s ancestors (Olupona, 2014). In a study by Bacchus and Holley (2005), it was reported that professional Black women made no distinction between spirituality and religion. Furthermore, they use spiritual activities such as meditation for inner tranquillity, strength, and to review stressful occasions at work. The faith-tradition method of explaining religious development overcomes the divided notion of religious versus secular to see religious interactions in all aspects

of an individual's life (Scarlett & Warren, 2010). For Bacchus and Holley (2005), religion is an external expression of faith characterised by worship customs, personal beliefs, and ethical codes of conduct. In contrast, the authors depict spirituality as an existential quest that encompasses a search for personal meaning and one's relationships with the self, others, and the environment. Haug (1998) defined spirituality as 'a personal, internalised set of beliefs and experiences' (p. 182) and asserted that religions arrange these philosophies and experiences into a shared doctrine and customs related to organisational memberships. According to Haug (1998), spirituality has a major effect on an individual's cognitive, affective, behavioural, and developmental dimensions. In other words, the substance of spiritual beliefs relates to the transcendental, which may impact the recollection of one's outlook on the past, the present, and the future. Spirituality also makes people feel loved, which is transformed into a compassionate attitude, and imparts an ethical structure for guiding actions (Haug, 1998). The author stated that with time, there is an evolution in an individual's spiritual beliefs. Hood et al. (2009) referred to spirituality as 'personal and psychological' while religion was allied with the 'institutional and sociological' (p. 9).

Dillon and Wink (2003) differentiated the highly religious and the highly spiritual into 'dwellers' and 'seekers' (p. 180). Dwellers are people who follow rites and rituals, who find meaning and purpose in their religious principles, and who have set boundaries, whereas seekers tend to explore 'new spiritual vistas' (p. 138), are on a quest for meaning, and are open to a variety of possibilities (Roof, 2003). Koenig, McCullough, and Larson (2001) highlighted the differences between religion and spirituality. Firstly, religion is viewed as a community-centred system, whereas spirituality is a more individualistic quest. Secondly, religion is objective and can be observed and quantified, whereas spirituality is subjective, less noticeable, and difficult to measure. Thirdly, religion is perceived as an official, conventional, and structured system. In contrast, spirituality is less formal, less traditional, and less methodical. Fourthly, religion endorses behaviour-oriented and external practices, whereas spirituality recommends more emotional and inwardly directed practices. Fifthly, while religion is authoritarian in terms of behaviours, spirituality tends to be less accountable and less authoritarian. Finally, religion's doctrine splits good from evil. In contrast, spirituality is a more unifying system which is not dogma-oriented. Figure 2.1 illustrates the distinction between spirituality and religion.

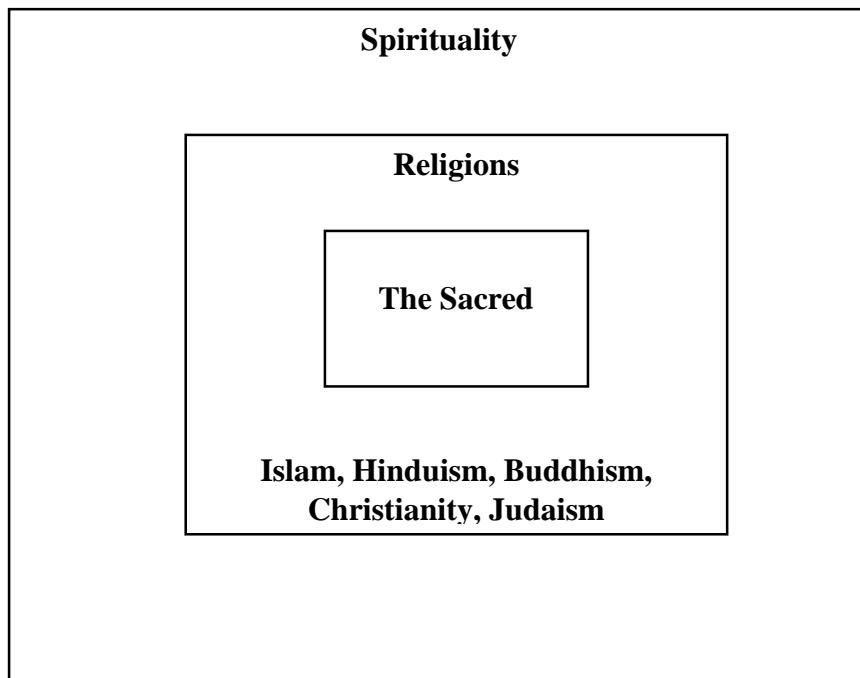


Figure 2.1 Difference between religion and spirituality. Adapted from Koenig, Harold G., McCollough, Michael E. and Larson, David B. (2001). *Handbook of Religion and Health*, New York: Oxford University Press, Inc., p.19. Copyright 2001 by Harold G Koenig, Michael E. McCollough & David B. Larson.

Mitroff and Denton's (1999) study with senior executives, human resource executives, and managers revealed four types of individual orientation towards religion and spirituality. Some were positive towards both religion and spirituality, meaning that they felt the two to be synonymous and to embody common values. Some viewed spirituality positively but religion negatively: in this case, spirituality overshadowed religion and was the origin of fundamental values. In the third instance, individuals held negative views of spirituality but positive ones of religion. In this situation, religion ruled over spirituality and was the cause of essential beliefs or values. The last orientation involved a negative view towards both religion and spirituality: those who felt this way believed that neither religion nor spirituality had a place in the value system.

2.4 Approaches to spirituality

According to Larson, Swyers, and McCullough (1997, as cited in Rovers & Kocum, 2010), every individual may situate him- or herself in spirituality's multidimensional sphere.

2.4.1 Vertical-horizontal model

Carroll (2001) illustrated the models of spiritual growth, from the oldest perspective to the most complex. The first model uses the vertical-horizontal approach, which is based on the 'heaven-earth relationship' (Ellison, 1983, as cited in Carroll, 2001, p. 7). The vertical dimension corresponds to a connection with a higher power, while the horizontal dimension refers to the type of relationships we maintain with ourselves and with others. Figure 2.2 shows the two intersecting lines, which symbolise the two aspects. Moberg (1986, as cited in Rovers & Kocum, 2010) also depicted spirituality as a two-dimensional structure, with the vertical plane representing relationships and faith in a higher power while the horizontal plane represents the meaning of life and relationships with others.

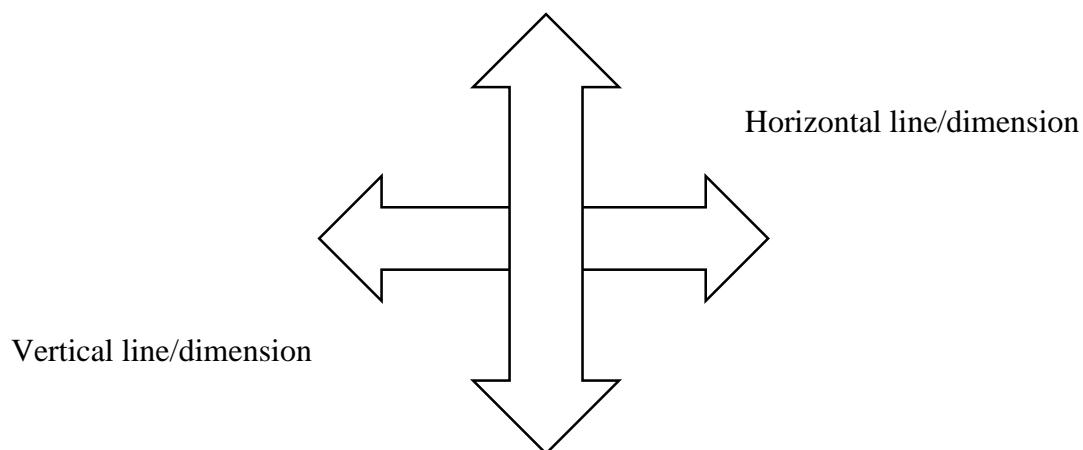


Figure 2.2 Ellison's (1983) model of vertical-horizontal approach. The vertical line represents the relationship between self and Higher Power and the horizontal line denotes the relationship with self and others. Adapted from "Conceptual models of spirituality," by M.M. Carroll, 2001, *Social Thought*, 20, p.8. Copyright 2001 by the Taylor & Francis Group. Used with permission.

2.4.2 Five levels of consciousness

The five levels of consciousness are symbolised by concentric rectangles which start with the physical plane and move outwards to emotional, mental, existential, and spiritual planes. The unlimited space beyond the rectangles corresponds to the ‘Absolute Spirit’ (Carroll, 2001, p. 8). According to Carroll (2001), stability at each level is a prerequisite for increased outward awareness.

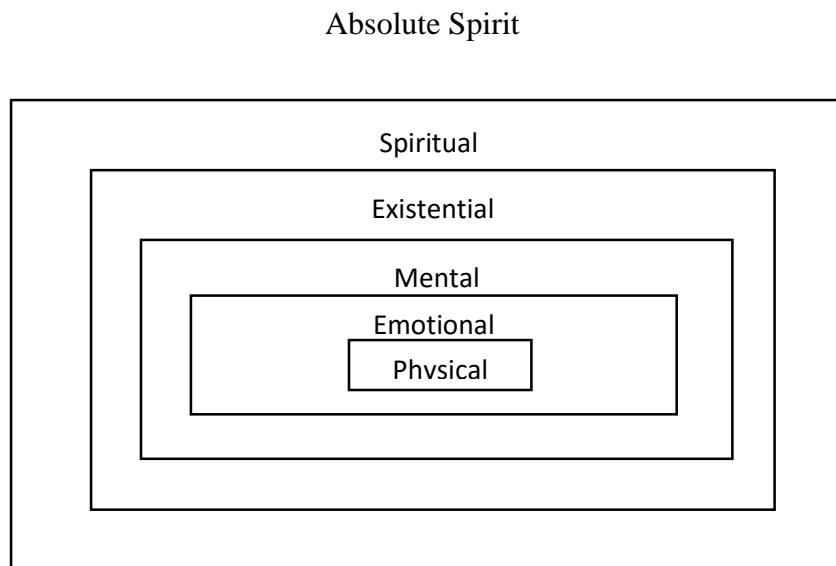


Figure 2.3 Vaughan’s (1985, 1995) model: Five levels of consciousness or awareness. Adapted from “Conceptual models of spirituality,” by M.M. Carroll, 2001, *Social Thought*, 20, p.9. Copyright 2001 by the Taylor & Francis Group. Used with permission.

2.4.3 The integrated approach and the unifying approach

Farran, Fitchett, Quiting-Emblen, and Burck (1989, as cited in Carroll, 2001) proposed opposing integrated and unifying models based on the belief in a transcendental, universal energy. Their perspective on spirituality also concerns an individual's ultimate commitment to search for meaning. The integrated approach, as shown in Figure 2.4, views the spiritual plane as one element equal to other elements such as the physiological, psychological and social (Carroll, 2001). In contrast, the unifying model in Figure 2.5 depicts the spiritual dimension as a complete entity, underlying, incorporating, and combining the other components of the individual.

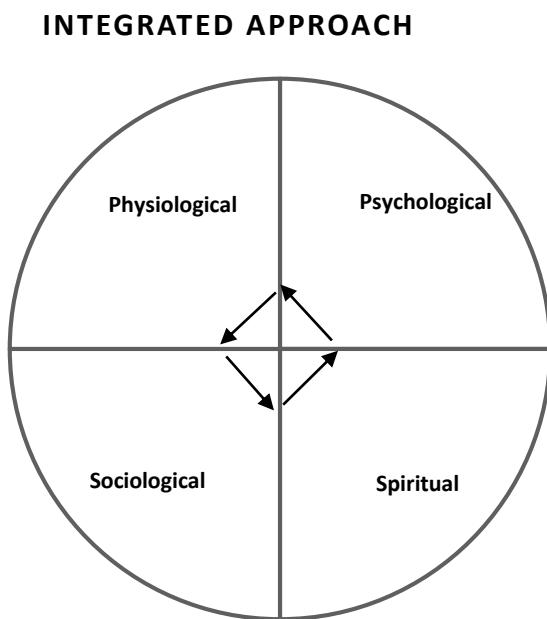
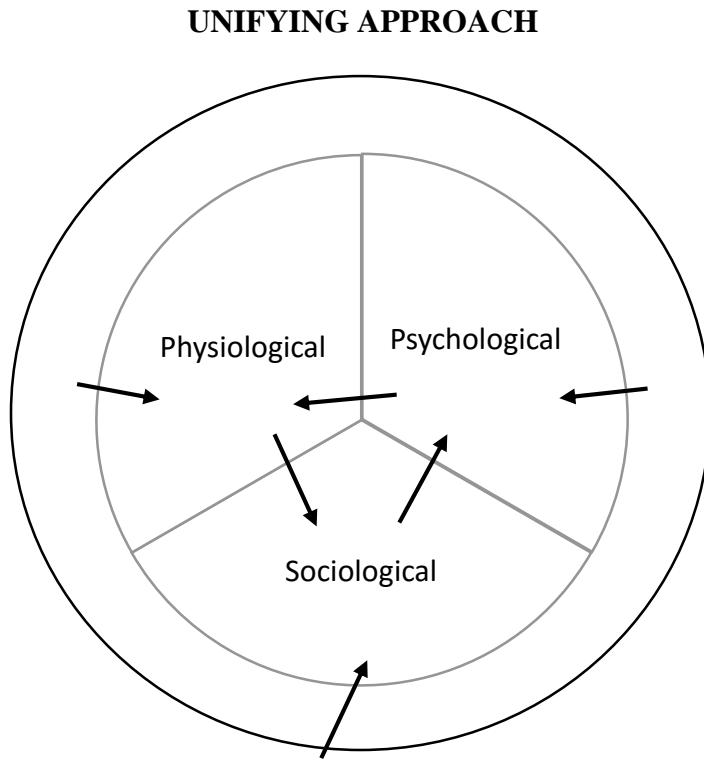


Figure 2.4 Integrated approach a model of looking at spiritual domain. Reprinted from “Conceptual models of spirituality,” by M.M. Carroll, 2001, *Social Thought*, 20, p.10. Copyright 2001 by the Taylor & Francis Group. Used with permission.

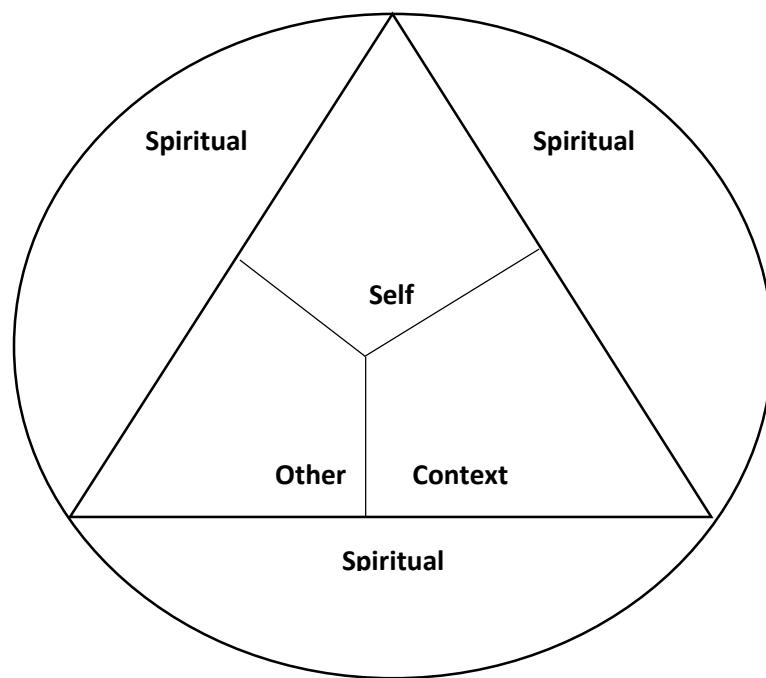


*Figure 2.5 Unifying approach another way of looking at spiritual dimension. Reprinted from “Conceptual models of spirituality,” by M.M. Carroll, 2001, *Social Thought*, 20, p.10. Copyright 2001 by the Taylor & Francis Group. Used with permission.*

2.4.4 The Self-Other-Context-Spiritual (SOCS) Circle

Kilpatrick and Holland (1990 as cited in Caroll, 2001) proposed the Self-Other-Context-Spiritual (SOCS) model, adapted from Bardill (1981), consisting of four spheres that cover all which exists or is experienced, and each sphere needs to be acknowledged for optimal performance. The three planes (the self, the other, and the context) form a triangle in a circle, which represents a spiritual dimension that is all-embracing and pervades all spheres. According

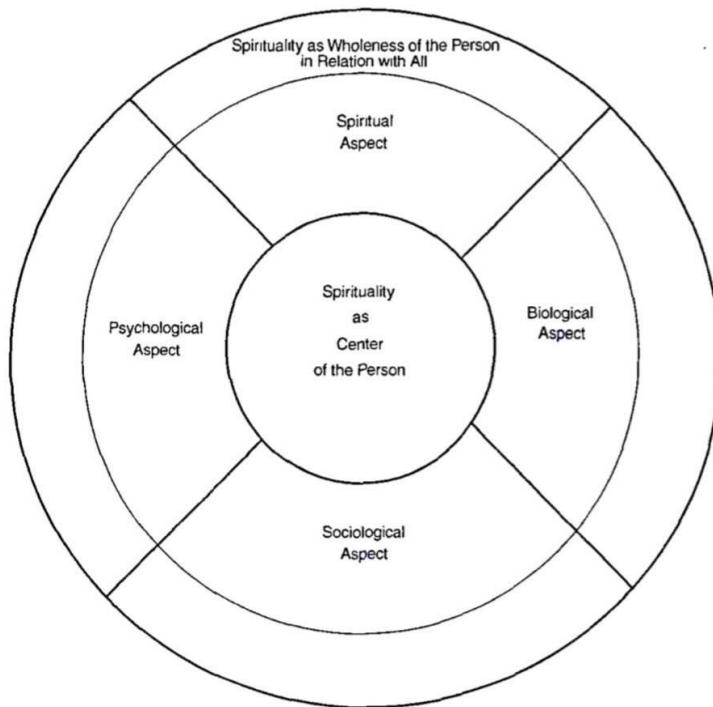
to Kilpatrick and Holland (1991), Bardill (1981) employed a self-other-context (SOC) triangle as an example for measuring individual and interpersonal functioning inside the family system. The self is defined as the personal reality, the other as the outside world of objects and conditions, and the context as the world in the impartial way. The spiritual in this case includes the values that give one meaning and sense of direction, as well as the element of faith (Carroll, 2001). Kilpatrick and Holland (1991) claimed that behaviour and the essence of human existence were the product of an interaction with self, others, the context in which the person lived and the spiritual consciousness. A functional mode would mean that each part is well balanced, while a disequilibrium in any part could result in aggression, submission, or emotional display (Kilpatrick & Holland, 1991).



*Figure 2.6 SOCS model representing four life realities. Reprinted from “Spiritual Dimensions of Practice,” by A.C. Kilpatrick and T.P. Holland, 1991, *The Clinical Supervisor*, 8(2), p.133. Copyright 1991 by the Taylor & Francis Group. Used with permission.*

2.4.5 A holistic model of spirituality

As shown in Figure 2.7, the spirituality dimension is situated at the heart of the individual. The biological, psychological, sociological, and spiritual components are placed in four quadrants. Spirituality is also defined as the ‘wholeness of the person’ (p. 11) in relation to the other components (Carroll, 2001). According to Canda and Furman (1999, as mentioned in Carroll, 2001), spirituality, as placed at the core of the circle, represents the spiritual within an individual that unifies all aspects. Spirituality as one quadrant is viewed as an individual’s spiritual element that is in harmony with all other elements. Furthermore, spirituality as a whole denotes its transcending impact, which covers all four planes (Carroll, 2001).



*Figure 2.7 A holistic paradigm of spirituality. Reprinted from “Conceptual models of spirituality,” by M.M. Carroll, 2001, *Social Thought*, 20, p.11. Copyright 2001 by the Taylor & Francis Group. Used with permission.*

2.4.6 The whole person: A model

The three-dimensional model of the whole person situates spirituality at the top, incorporating the affective, behavioural, and cognitive features (Ellor, Netting & Thibault, 1999, as cited in Carroll, 2001). The bottom plane symbolises the conventional clinical aspects, comprising the physical, emotional, and social spheres. The interface between the spiritual sphere and the conventional sphere is called the integrative dimension (Carroll, 2001).

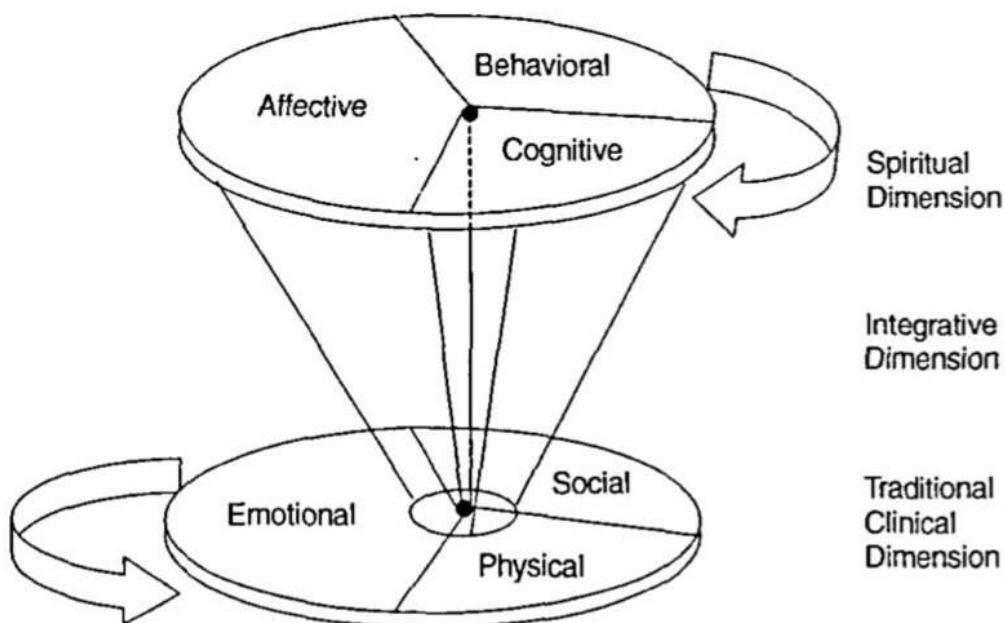


Figure 2.8 Three-dimensional model of the whole person. Reprinted from “Conceptual models of spirituality,” by M.M. Carroll, 2001, *Social Thought*, 20, p.12. Copyright 2001 by the Taylor & Francis Group. Used with permission.

2.5 Spirituality: Its developmental theories

Spirituality is a developmental mission, not a natural component of the ageing process (Snodgrass & Sorajakool, 2011). Developing adults described a belief that spirituality plays a vital part in their development (Sinnott, 2002), and older adulthood is a time of heightened spirituality (Jung, 1971 as cited in Snodgrass & Sorajakool, 2011; see also Neugarten, 1968; Brunal, 2011). McFadden (1996) posited that spirituality in late life may be linked to variations in older adults' cognitive style, that considered to be wise and integrative (as cited in Verno et al., 2007). Studies on adolescents have drawn attention to an area of spiritual development (King, Clardy & Ramos, 2014). King et al. (2014) quoted research on youth development as related to a quest for meaning, enquiring about ultimate concerns in life and experiencing a bond with something higher. Within the literature on R-S development, most studies now espouse a 'functional-adaptation meaning of development' (p. 639)—that is, they depict development as acquiring the knowledge, skills, and ways of acting necessary to adapt and function well in one or more areas (Scarlett & Warren, 2010). A second way of defining development is in terms of the stage-structure of faith (Scarlett & Warren, 2010). The following subsections will consider several theories of R-S development.

2.5.1 James' experiential theory of R-S development

Faith is a 'transformative experiential encounter' of the person (Helsel, 2010, p. 315). James regarded faith as the resolution of a fragmented self through self-surrender and an ultimate source of happiness and bliss (Helsel, 2010). James (1958 [1902], as cited in Scarlett & Warren, 2010) distinguished between the 'healthy mind' and the 'sick soul' (p. 643), which are two different types of religiosity. The healthy minded are those people who are positive about life despite pitfalls. They are also called the 'once-born' (Scarlett & Warren, 2010, p. 643) and they accept their fate with optimism. On the other hand, the sick soul experiences feelings of fear, sorrow, and hopelessness at times. The sick soul has the attitude and condition that provide greater opportunity for spiritual progress. James mentioned that individuals become 'twice-born' (Hart, 2010, p. 317) by going through the deeper self. The second birth of the formerly sick soul is a

spiritual one that paves the way towards saintliness (Scarlett & Warren, 2010). The state of maturation and perfection, which leads to saintliness, involves interrelating factors such as strength of the soul through appropriating noble aims, asceticism, sacrifice, purifying life from sensual touches, and charity towards others. According to James (1958 [1902]), religious and spiritual feelings are essential; the ethical principle or conduct comes afterwards (as cited in Scarlett & Warren, 2010).

2.5.2 Psychodynamic perspective: Jung's theory of R-S development

Helsel (2010) noted that Freud (1921, 1961) viewed the belief in divinity as sustaining the need for a projected father-figure, operating on cultural principles of control and manipulation. Furthermore, Freud claimed that faith could be used as a defence mechanism, similar to denial and 'divine escapism' (Helsel 2010, p. 315). Object relations theorists altered Freud's theories about projection and suggested faith as coming from the liminal space between the mother and child, in which the child constructs and is seized by transitional objects (Helsel, 2010). Erikson argued that the early period of a child's life sets the platform for a constructive experience of religious faith in adult life (Helsel, 2010). Jung (1961) affirmed that the soul (*anima* in Latin and *psyche* in Greek) is feminine, and is an 'archetype of the collective unconscious' (as cited in Elkins, 1995, p. 88). Jung (1961) posited that all humans are 'psychologically bisexual' (Feist & Feist, 2002, p.102) and have both masculine and feminine aspects. The feminine side of man is the anima while women's masculine archetype is the animus- which are the unconscious feminine and masculine tendencies of the respective sexes and elements of the collective unconscious (Feist & Feist, 2002). Spiritual growth involves an inward voyage to become an individuated self (Jung & von Franz, 1964, as cited in King & Nicol, 1999). The person is a node with a certain degree of consciousness and unconsciousness (Stein, 2005). Jung's individuation theory posits that a person struggles to become whole and distinct from the collective, which involves transmuting consciousness into a mirror with no set content or identifying characteristics (Stein, 2005). Jung (1916) added that inner work involved uprooting the contradictions of the psyche into consciousness and distinguishing between qualities, values, and beliefs which individuals are attached to and the individual

himself/herself (as cited in Stein, 2005). The principle of individuation, as Jung advocated, implied making the unconscious conscious and ‘peeling away’ (Stein, 2005, p. 5) from one’s individual sense of self with the aim of developing the individual personality. The process of individuation, a ‘religious impulse’, is a person’s inborn faculty to become conscious of him- or herself (Ponte & Schäfer, 2013, p. 606). Jung added that it is a spiritual archetype that guides and harmonises the stream of human life (Ponte & Schäfer, 2013). The transcendent function originates from the combination of conscious and unconscious materials, which facilitates representations of the person’s wholeness. Stein (2005) stated that the process of individuation is profoundly spiritual, as the substances that surface from the unconscious are mostly mystical.

2.5.3 Maslow’s Hierarchy of Needs

Maslow’s initial hypothesis stipulated that having one’s basic needs met is a necessary criterion to follow a fulfilled life (Henwood, Derejko, Couture & Padgett, 2015); he also argued that an individual’s ability and longing to grow are linked to his or her unmet needs (Henwood et al. 2015), and that human beings are in continuous need (Ramadan, 2012). Maslow’s cross-cultural (Harper, Harper & Stills, 2003) hierarchy of needs, which is referred to as conative development (Haymes & Green, 1977), is usually represented as a pyramid which includes the physiological needs of food, water, air, clothing, and shelter as the foundation, followed by security/safety, loving/belonging, esteem needs, and self-actualisation on the upper levels of the pyramid (Frame, 1996; Harper et al., 2003; Haymes & Green, 1977; Kenrick et al. 2010, as cited in Henwood et al., 2015; Lollar, 1974; Lomas, 2013). At the top of the pyramid is self-actualisation, which is depicted as an individual’s yearning to grow beyond what he or she is and to develop into one’s full potential (Frame, 1996; Maslow, 1943, as cited in Henwood et al., 2015). It envisages a sequence of ‘prepotent needs’ (Frame, 1996, p. 1), each of which must be gratified before the subsequent higher need arises in the person’s consciousness. Lomas (2013) stated that Maslow proposed that a percentage of the adult population capture each need level. However, research has not been able to prove that people strictly advance through the hierarchy—that is, lower-level needs must be completely gratified before the subsequent levels can act as a driving force (O’Connor & Yballe,

2007). Furthermore, Maslow (1943, cited in O'Connor & Yballe, 2007) asserted that individuals may be motivated by several needs at one time. DeHoff (1998) described the works of Maslow as categorised into five sections. The first is on human quandary, which Maslow viewed as the gap between the potential and the present and the need for spirituality to activate self-actualisation and humanity. The second part is about self-actualisers, individuals with 'B-values' (Feist & Feist 2002, p. 506; see also DeHoff, 1998). 'Being' values are those 'metaneeds' (Feist & Feist, 2002, p. 506) which motivate self-actualising people, including truth, autonomy, perfection, and goodness, to name a few. The third part is the dynamic, that is, the drive to satisfy needs which acts as a channel or energy source for psychological growth. The next segment deals with the process of psychospiritual expansion, which involves self-awareness, know-how, and transcendence. The final part is maturity, which results from psychospiritual development.

Self-actualisation is not an end result, but a continuing process comprising little growth selections which encompass both threat and bravery (O'Connor & Yballe, 2007). Among the components of self-actualisation are 'spirituality and meaning' (O'Connor & Yballe, 2007, p. 5) and above all self-transcendence. Maslow's hierarchy of needs clashes with the African-centred mindset, which stresses social harmony and spiritual interdependency as the utmost realisation (Wheeler et al., 2002). For the African, an optimal level of development would be in terms of his or her relationships with others of the community (Hanks, 2008). According to Harper et al. (2003), folk healers in West Africa deal with the medical, physiological, psychological, and spiritual apprehensions of the clients. Hanley and Abell (2002) criticised Maslow's hierarchy of needs as too individualistic and suggested an altered interpersonal model of self-actualisation which stresses the salience of relatedness as an ingredient of personal growth.

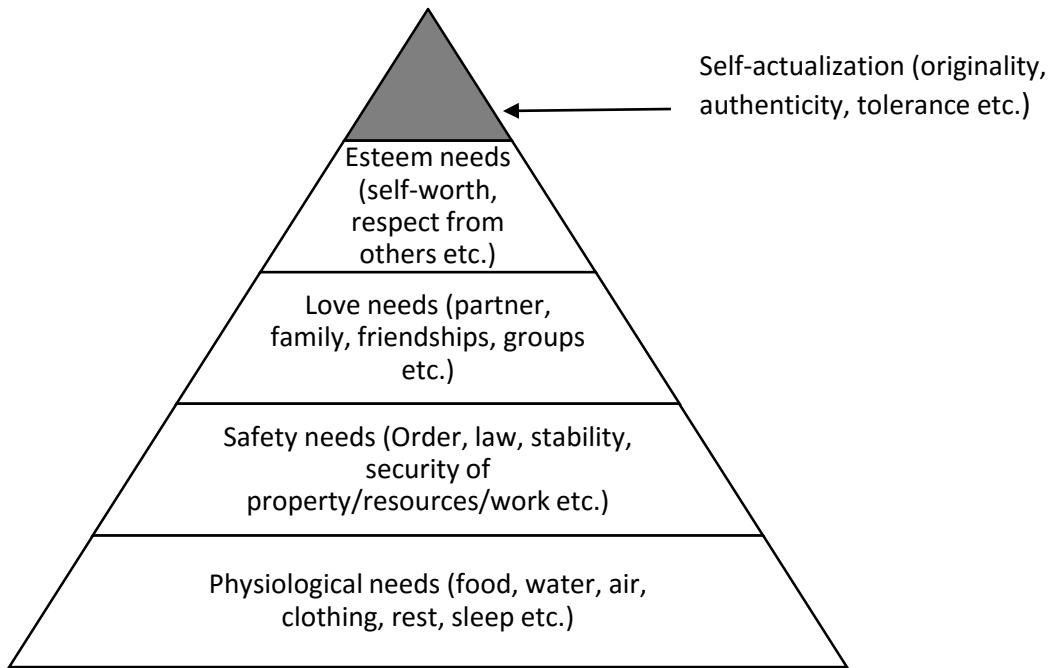


Figure 2.9. Maslow’s pyramid of the hierarchy. Adapted from “Climbing the Needs Pyramids,” by J.C. Lomas, 2013, Sage Open, p.3. Copyright 2013 by Creative Commons.

2.5.4 Fowler’s Constructivist stage theory of faith development

‘Faith’, which comes from the Latin *fides* and the Greek *pistis*, is claimed to be within a spectrum ranging from the content of a specific collection of beliefs to the act of trust in a certain community, dogma, or divinity (Helsel, 2010). The simple meanings of the original Latin and Greek terms are ‘confidence, reliance, and trust’ (Stein, 2011, p. 397). As a noetic quality and rigid within its limits, faith in fundamentalist religions connotes fixed beliefs. On the other side of the spectrum, faith is considered identical to trust—a way of believing—and thus signifies more the act of trusting than the particular content of beliefs (Helsel, 2010). Stein (2011) described faith as a type of awareness of the invisible, of a mystical and supreme power or powers, which work behind the scenes and are in charge of everything. The ‘Age of Faith’ occurred in the Middle Ages, and is regarded as pre-modern, while the ‘Age of Enlightenment’ is considered rational and scientific, and casts off faith as religious (Stein, 2011, p. 399).

Scarlett and Warren (2010) cited Smith's (1998) definition of faith as:

a quality of the person...an orientation of the personality, to oneself, to one's neighbour, to the universe; a total response; a way of seeing whatever one sees and of handling whatever one handles; a capacity to live at a more than mundane level; to see, to feel, to act in terms of a transcendent dimension. (pp. 633–634)

Faith is ‘fundamental...universal...infinitely varied’ (Fowler, 1995, p. xiii). Fowler also mentioned Tillich (1950) on his views of faith as related to our ‘ultimate concern’ (Fowler, 1995, p. 4), that is, towards our main occupations instead of associating faith with religion. Faith as a condition of being ultimately concerned in our ego or its extensions may or may not be manifested in institutional or cultic religious customs (Fowler, 1995). Fowler’s faith development theory (FDT) is a developmental model for appreciating spiritual and religious transformations (Parker, 2011). FDT represents universal structures which belong to all faiths and offers a standard, non-sectarian map for diagnosing and gauging the nature and role of an individual’s faith, apart from its particular contents (Parker, 2011). Moreover, FDT is a ‘growth-oriented approach’ (Parker, 2009, p. 40) to R-S. The following structures are utilised to define the various stages of faith (Parker 2011, p 113; Parker 2009, p. 50):

- One’s practice of logic

This is taken from Piaget’s (1970) theory of cognitive development, which involves the movement from pre-logic to more ‘abstract, hypothetical logic’ along a four-stage route delineated by Piaget.

- One’s level of moral reasoning

Kohlberg’s (1976) level-based theory of moral reasoning comprises a shift from pre-conventional reasoning to post-conventional reasoning.

- One's type of perspective

Selman's (1976) theory of frames of reference, which implies that an individual progresses from a singular to multiple frames of reference.

- One's view of world coherence

An individual makes sense of his or her world by progressing towards a more deliberate and thoughtful explanation of it.

- One's locus of power

Maturation in this domain pertains to the shift from exterior to interior evaluation in determining whether one's beliefs and actions are appropriate.

- The limits of social awareness

Maturation implies that a person is more inclusive in the production of meaning.

- The task of symbolic function

Symbols of the transcendent take on complex forms as a person matures.

Fowler (1995) proposed six stages in the FDT. The first formal stage is preceded by a pre-stage. He remarked that the emergence of thought and language during infancy gives rise to symbols and ritual play that set the transition to stage one. Fowler's (1995) theory of faith development was influenced by Piaget's theoretical observations concerning cognitive tasks and progress, Erikson's epigenetic principle, and Kohlberg's theory of moral development (Hart, 2010; Scarlett & Warren, 2010). According to Scarlett and Warren (2010), Fowler felt that the main challenge for individuals was to be true to their beliefs and feelings in parallel to building and sustaining ethical, constructive relationships in growingly diverse societies. Prior to stage one, the pre-stage known as 'undifferentiated faith' (Hart, 2010, p. 317) was based on Rizzuto's explanation of how self-identification, initially lived in infancy, moulds the formation of consciousness and awareness of the other. Several authors have described the stages in detail (Fowler, 1995; Hart, 2010; Miller, 2003; Santrock, 1998; Scarlett & Warren, 2010).

- **Pre-stage:** the undifferentiated faith or primal faith occurs in infancy, that is, from birth to one year. Faith is characterised by the basic trust between the infant and the caregiver. It is a psychological bond established through mutuality (Scarlett & Warren, 2010), and is

mostly pre-conceptual and pre-linguist (Hart, 2010). Failure to instil this primal faith could lead to narcissism or feelings of neglect, which could subject the infant to patterns of isolation (Fowler, 1995).

- **Intuitive-projective stage:** the onset of this stage starts at two years and ends around seven years old. During this phase, a child can associate bits and pieces of stories and images imparted by his or her culture to his or her own clusters of substantial information regarding God and the sacred. Children from non-religious homes show the same tendencies, although their sources of images and symbols are more restricted (Fowler, 1995). In this phase, the emphasis is on the imagination of the child, who is mainly influenced by the faith of significant others (Miller, 2003). Images may convey a supreme power as both threatening and protective (Scarlett & Warren, 2010). It is a stage characterised by initial self-awareness and concrete operational thinking.
- **Mythic-literal stage:** this stage lasts from seven years old until puberty and is characterised by an increased cognitive capacity on the part of the child, who can now make inferences regarding cause-and-effect relationships, have a perspective on the other, and perform reverse operations (Fowler, 1995). The child is more logical, is able to use concrete thinking, and literally adopts the symbols, stories, and beliefs of his or her community. In this phase, the power of myth to convey coherence to experience is emphasised. Furthermore, in this period a child tends to believe in mutual fairness and immanent justice founded on reciprocity (Fowler, 1995). The shortcomings of literalness and an excessive dependence on reciprocity as a standard for constructing an ultimate surrounding can end as an over-controlling perfectionism or, in the case of neglect by significant others, a demeaning sense of badness (Fowler, 1995).
- **Synthetic-conventional stage:** this is the stage between puberty to adulthood. With an increased cognitive capacity, the adolescent can perform formal operational thinking and metacognition. It is a conformist stage marked by an outlook which matches one's religious, ethnic, and spiritual group, and is marked by an ideology which has been built unconsciously. Faith provides a foundation for an identity and a coherent structure of the key spheres of life, such as family, peers, school, and work. Faith is defined by the expansion of a worldview that conforms to accepted standards (Scarlett & Warren, 2010).

The risks in this phase arise when the expectations of others are forcefully internalised, thus threatening one's autonomy of judgement and actions (Fowler, 1995). Another danger may arise if there is betrayal in relationships, which may possibly lead to 'nihilistic despair' (Fowler, 1995, p. 173) or to a compensatory intimacy with God unrelated to everyday relations. Hart (2010) remarked that some people may be stuck at this stage.

- **Individuative-reflective stage:** the period between late adolescence to young adulthood. It is mostly young adults who go through this fourth stage, the 'demythologizing stage' (Fowler 1995, p. 182). Faith is a self-conscious, explicit inspection of commitment, beliefs, and values, which result in a critical analysis of the person's faith legacy. Possible tensions and dilemmas may emerge like in the definition of oneself as an individual or member of an ethnic group, striving for self-actualisation or for community wellbeing among others (Fowler, 1995). The individual deliberately chooses one's faith and a community to belong to, and deepens his or her self-knowledge, defining his or her identity, abilities, and limitations. In this phase, individuals assume entire responsibility for their religious beliefs and lifestyles (Santrock, 1998). Hart (2010) contended that individuals may take others' perspectives with respect to spiritual customs or ethical practices. Thus, it would be beneficial for Mauritian society to support the development of adolescents' individuative-reflective phase to go beyond their narrow or group perspective. The pitfall in this phase is overconfidence in the critical mind, which may result in a narcissistic attitude.
- **Conjunctive faith:** this stage occurs around the age of 30. Faith is a deliberate analysis of the commitment to ethical practice founded on fully internalised principles (Scarlett & Warren, 2010). In this stage, individuals accept and bring to consciousness what was initially suppressed. This stage requires the individual to actively work on his or her past (Fowler, 1995). The inner voice is given more space and is acknowledged. Life is seen as a paradox. A person who is in this stage understands the meaning behind his or her ethnic group membership. However, he or she is aware that it is not the whole truth, and that the boundaries dividing people create different aspects of an absolute reality.
- **Universalising faith:** this stage begins around 40 years old. It is the highest stage, which is characterised by overcoming the paradoxes of the previous stage (Fowler, 1995; see also

Santrock, 1998). Rarely does a person reach this stage. Examples of ‘universalisers’ (Hart, 2010, p. 317) are Martin Luther King and Mahatma Gandhi. There are no more hesitations experienced at stage five regarding the love for all and justice at a universal level (Fowler, 1995; Miller, 2003; Santrock, 1998). Such people are unconcerned with the risks to self or to their religious/ethnic/social groups when they embrace such a selfless path (Fowler, 1995).

2.6 Types of spirituality

This short section briefly describes the types of spirituality suggested by some authors. The types of spirituality a person adheres to may reflect his or her culture, as in the case of African spirituality. As has been observed, these can also be viewed as dimensions of spirituality.

2.6.1 Theistic spirituality

Theistic spirituality implies the philosophy of the image of god(s) or the soul, which every individual possesses and makes each human ‘a thinking, feeling, moral and creative being’ (Rovers & Kocum, 2010, p. 6), with the capacity to communicate significantly to the transcendent (Highfield & Cason, 1983; Labun, 1988; Leggieri, 1986; Robbins, 1991, as cited in Rovers & Kocum, 2010).

2.6.2 Existential spirituality

Spirituality is revealed as the meaning of life or in meaning-making definitions (Rovers & Kocum, 2010). Canda (1990) contended that spirituality is manifested in the spiritual forces necessary to reach meaning, purpose, and morally rewarding connections (as cited in Rovers & Kocum, 2010).

2.6.3 Community spirituality

The conceptualisation of spirituality as a matter of ‘relationships and connectedness’ (Rovers & Kocum, 2010, p. 6) pertains to community spirituality. These relationships may be self-relationships, with significant others, with the Higher Self, or with animals and nature.

2.7 The plausibility of spiritual intelligence: Concepts and theories

Selman et al. (2005, as cited in Collins, 2010) portrayed spiritual intelligence as the aptitude to employ a multi-sensory style in problem-solving. Collins (2010) posited that spiritual intelligence is indispensable in the process of increasing ecological actualisation and the likelihood of producing a better future. Laszlo (2003, as cited in Collins, 2010) introduced the concept of the Akashic field, which is a transpersonal view of humanity that propels an individual outside the confines of self-centred behaviours. Laszlo (2009) noted that *Akasha* in Sanskrit denotes the ‘cosmic sky’ (p. 3), and defined the Akashic experience as a genuine and lived experience not conveyed through our senses in the present lifetime. Laszlo (2009) also claimed that scientists’ classical theory of the universe was imperfect and they had revealed a greater aspect of the cosmos called ‘hyperspace’ or the ‘holofield’ (p. 2), which was connected to an unexplained virtual-energy sea which is currently termed the ‘quantum vacuum’ (p. 3). Csikszentmihalyi (2003) claimed that an improved future depends upon the setting up of transcendental goals (as cited in Collins, 2010). Furthermore, Collins (2010) argued that transpersonal experiences could trigger profound questioning and commitment in a person’s life.

2.7.1 Existing theoretical underpinnings of spiritual intelligence

2.7.1.1 Emmons’ theories of spiritual intelligence

Emmons (2000a) stated that three inflexible criteria must be met for a construct to be defined as intelligence. These are:

- It must reflect a mental performance, not a preference;
- It should define a set of abilities which are correlated; and
- It increases with age or experience.

Spiritual intelligence, according to Emmons (2000a), is age-related and is the adaptive use of spiritual data to facilitate daily problems and goal achievement. He suggested five core abilities of spiritually intelligent people: the capacity for transcendence, the ability to move into spiritual states of consciousness, the capacity to incorporate the divine into daily living, the capacity to tap spiritual resources to solve problems, and the capacity to engage in virtuous behaviour (Emmons, 2000a). This last ability was later discarded as it is more related to a preferred behaviour (Emmons, 2000b; King & DeCicco, 2009).

2.7.1.2 Levin and spiritual intelligence

Levin (2000) claimed that spirituality, as an intrinsic aspect of the self, has to be experienced for the successful practice of spiritual principles in one's life (as cited in Nasel, 2004). The development of SQ demands a change in perception and behaviour (Levin, 2000 as cited in Nasel, 2004). In simple words, the integration of spirituality in our life is in the application of spiritual principles. Levin (2000) suggested that the recognition of SQ is in the acceptance of 'our interconnection to all life' and in our capacity to use our 'perceptual powers' (Amram & Dryer, 2008, p.6) at a different level of consciousness.

2.7.1.3 Wolman and the PsychoMatrix Spirituality Inventory (PSI)

Wolman (2001) defined SQ as 'the human capacity to ask ultimate questions about the meaning of life, and to simultaneously experience the seamless connection between each of us and the world in which we live' (pp. 83–84). He developed a measure named the PsychoMatrix Spirituality Inventory (PSI), which encompasses seven dimensions: divinity, mindfulness, extrasensory perception, community, intellectuality, trauma, and childhood spirituality. However, he failed to build a scientific scale with face and discriminant validity (Amram & Dryer, 2008). The inclusion of childhood spirituality and trauma in the measure of SQ is debatable.

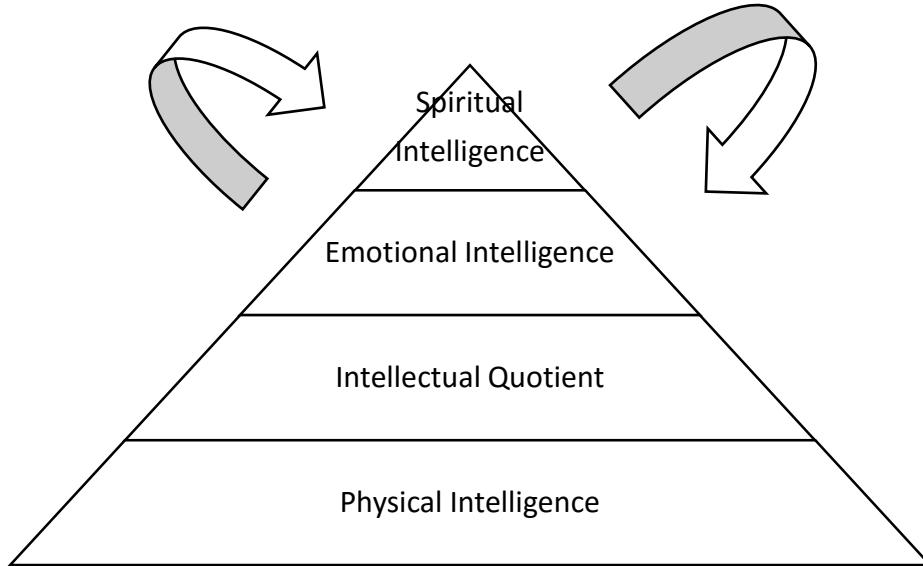
2.7.1.4 Nasel and the Spiritual Intelligence Scale (SIS)

Nasel (2003, as cited in Nasel, 2004) defined SQ as our ability to use our spiritual abilities and assets to find meaning and sort out existential, spiritual, and practical problems. Nasel's doctoral thesis on spiritual orientation with regard to spiritual intelligence was aimed at traditional Christians and New Age spirituality. The author developed three questionnaires, namely the spiritual intelligence scale, the spiritual and religious dimensions scale and the personal well-being index to assess the expression of SQ and its correlation with well-being. The author conceptualised the SQ scale in terms of two factors, namely the awareness of divine presence and existential questioning. The study was conducted in Australia and several samples of the population were taken from patrons of bookshops to students of the University of South Australia. The author found that the expression of SQ diverged between the two groups. The traditional Christians had a preference for personal attunement to a divine presence, while New Age supporters preferred an active search and an inner guidance. By focussing on two specific groups, it restrained the interpretation of the study. Furthermore, Nasel's (2004) spiritual intelligence scale consisted of only 17 items prior to factor analysis, which threatened the psychometric properties of the measure.

2.7.1.5 Wigglesworth's (2006) Simple Model of Four Intelligences

Wigglesworth (2006) illustrated the development of intelligences as forming a pyramid refer to Figure 2.10. The first intelligence to develop is physical intelligence. By discovering one's physical body, one becomes aware of its possibilities and limits. Therefore, one aims to control one's body. Afterwards, a person builds up his or her intelligence quotient (IQ), which is manifested in attending institutions such as schools or training centres. The next stage is engaging in romantic and work relationships, which form part of emotional intelligence (EQ). According to Wigglesworth (2006), spiritual intelligence comes after all the other intelligences are developed. However, both EQ and SQ are related to each other. Goleman and Boyatzis (2002, as cited in Wigglesworth, 2006) grouped the skills necessary to develop EQ in several quadrants, and self-awareness is in the very first quadrant. Wigglesworth (2006) also included self-awareness as one

of the skills required to develop SQ. The need to develop a certain emotional control and awareness is essential for spiritual growth. Thus, self-awareness is an element of both EQ and SQ, and the proposition of self-awareness as a factor of the SQ scale in this study is justified.



*Figure 2.10 Hierarchy model of intelligences. Adapted from Wigglesworth, Cindy (2012). *SQ21: The twenty-one skills of spiritual intelligence* (1st ed.), New York: Selectbooks, Inc., p. 22. Copyright 2012 Cindy Wigglesworth. Used with permission.*

2.7.1.6 Vaughan's (2002) views on SQ

Vaughan (2002) depicted SQ as one of the many intelligences which exist and which can be developed independently. She suggested that there are three ways to foster SQ: questing, inquiry, and practices such as meditation. Vaughan (2002) described spiritual intelligence as an insight into the various levels of consciousness, a connection between the self and the transcendent, and as associated with sensitivity and questing. The thesis has included these four main factors of SQ. A prerequisite for SQ is the presence of emotional intelligence (Esmaili, Zareh & Golverdi, 2014). Esmaili, Zareh, and Golverdi (2014) explained that Vaughan (2002) viewed self-regulation and self-understanding as features of SQ. According to Vaughan (2002), self-awareness is

fundamental to cultivate spiritual maturity, which in turn is the expression of SQ. In this thesis, the various theories were compared and the most common factors were grouped to form a six-factor model. The reasoning behind this step is that as many studies have been conducted with participants from different religious backgrounds, the most common factors can be seen as universal aspects of spiritual intelligence.

2.7.1.7 Zohar and Marshall's 12 features of SQ

Zohar and Marshall (2005) proposed 12 features of SQ, as mentioned above. These are not abilities per se as such, but a blend of abilities, attitudes, and preferences. The authors recommended that the list of qualities described be subjected to scientific studies to actually arrive to specific components of SQ (Zohar & Marshal, 2001). Some of the characteristics were grouped and fall under the main factors proposed in this thesis. Zohar and Marshall (2005) have pioneered this new dimension, which is termed resilience and is scientifically tested in this study.

2.7.1.8 Amram's (2007) seven dimensions of spiritual intelligence

Amram (2007) initially used grounded theory of spiritual intelligence and interviewed 71 participants from main religions who were described as spiritually intelligent by their colleagues. He identified seven dimensions, namely consciousness, grace, meaning, transcendence, truth, peaceful surrender to self, and inner-directedness. Furthermore, Amram and Dryer (2008) developed an Integrated Spiritual Intelligence Scale (ISIS) which consisted of 22 subscales based on the themes which came up in the previous research, such as beauty, discernment, egolessness, equanimity, freedom, gratitude, higher-self, holism, immanence, inner-wholeness, intuition, joy, mindfulness, openness, practice, presence, purpose, relatedness, sacredness, service, synthesis, and trust. The ISIS was answered by 263 participants, namely US students enrolled in Masters in Business Administration. The study validated five main dimensions: consciousness, grace, meaning, transcendence, and truth (Amram & Dryer, 2008). When the theories of the different researchers and thinkers are compared, there are three abilities which appear as fundamental: transcendence, consciousness, and meaning. Amram (2007) failed

to differentiate among the abilities, experiences, and behaviour (King, 2008). This theory is therefore limited by definition. Further, the author failed to look at the differences in SQ that emerged in relation to the ethnicity and social economic status of the participants.

2.7.1.9 King's viable model of spiritual intelligence

King & DeCicco (2009) developed a questionnaire for SQ in Canada. The respondents were undergraduate students from the Trent University. King (2008) suggested four components of SQ: conscious state expansion, personal meaning production, transcendental awareness, and critical existential thinking. His 24-item measure was subjected to factor analysis and validated against other similar scales. However, although King and DeCicco (2009) included ethnicity in their demographics, there was no mention of the participants' ethnic profiles in the paper. Their principal aim was to develop a scientific SQ scale, but they overlooked ethnic cultural background in their analysis of participants' demographic data. Thus, King (2008) neglected the ethnic differences of spiritual intelligence in his theories.

2.7.2 A proposed theory of spiritual intelligence

The researcher proposes a scientific and universal definition of spiritual intelligence across six dimensions: self-awareness, transcendental awareness, level of consciousness, quest for meaning, sensitivity, and resilience. These dimensions have emerged in several studies, as discussed above. The qualities highlighted by Zohar and Marshall (2005) for the SQ development were instrumental in the scale development of this research. Among others, there were the self-awareness qualities, the search for meaning (quest for meaning), compassion (sensitivity) and the positive use of adversity (resilience). King (2008) also contributed in his proposition of transcendental awareness and conscious state expansion (levels of consciousness) in the definition of SQ in this study (See also Amram & Dryer, 2008). Wigglesworth's (2006) suggestion of self-awareness as a major dimension with several stages of SQ development added to this research. Nasel (2004) and King (2008) also viewed SQ as partly a capacity for meaning production. The

element of quest and practical aspects of spiritual intelligence were developed by Vaughan (2002). Wolman (2001) highlighted the existential capacity of the individual to seek meaning.

In addition to the proposed factors of SQ, an analysis of the ethnic profile of the participants is also provided. A person's intelligence is partly influenced by his or her external environment. In an attempt to assess the SQ of Mauritians, it was interesting to look at their ethnic background. Other pertinent aspects such as gender and religion are also observed in this study. The logic behind the inclusion of these variables is that spiritual intelligence is assumed to be influenced by a person's psycho-socio-emotional experiences. For instance, a person with greater experiences is supposed to have a higher SQ, as suggested by Emmons (2000a). In the construction of a suitable and comprehensive scale, a large pool of 106 items has been designed and analysed to measure SQ. A description of each dimension is provided below.

2.7.2.1 Subscales of the MSIS-1

The Multicultural Spiritual Intelligence Scale (MSIS-1) is a 106-item questionnaire designed to measure the spiritual intelligence of the Mauritian people. The MSIS-1 takes into consideration the multicultural background of the participants in the item construction. It is composed of six dimensions: self-awareness, sensitivity, transcendental awareness, quest for meaning, level of consciousness, and resilience.

2.7.2.1.1 Self-awareness and sensitivity

Self-awareness is a multifaceted notion with four general levels of organisation, specifically biogenetic, personal, social, and cultural-linguistic (Mascolo & Fischer, n.d., as cited in Ferrari, 1998). A high degree of self-awareness is a sign of spiritual intelligence (Zohar & Marshall, 2001). According to Zohar and Marshall (2005), self-awareness differs from self-obsession. The former is more about understanding the deepest self and recognizing our motivations and values. Goleman (1996) also highlighted self-awareness as an indicator of emotional intelligence. Self-awareness in SQ relates to an awareness of life's purposes (Zohar & Marshall, 2001). In emotional intelligence, self-awareness relates to identifying and naming one's

own emotions, appreciating the causes of emotions and marking the differences between feelings and actions (Goleman, 1996). Self-awareness, according to Maslow (1971), refers to self-knowledge arising from needs, pleasures, and competences to fears, qualms, and abnormalities (as cited in DeHoff, 1998). Tillich (1963) added that inner awareness renders humans aware that they have a self which differentiates them from animals and causes them to be structurally aligned (as cited in DeHoff, 1998). Self-awareness is accomplished in a relational context that is manifested as a more profound relationship with the divine Spirit and with other humans (DeHoff, 1998). Self-awareness is inclusive of mindfulness: it is a mental state marked by intense awareness (Holas & Jankowski, 2013) of one's thoughts, actions, or stimuli (Appel & Appel, 2009). Without mindfulness, people are easily influenced by their emotions (Zohar & Marshall, 2005). Mindfulness connotes to paying attention in a specific way—on purpose, in the current moment, and non-judgementally (Appel & Appel, 2009; Bishop et al., 2004, as cited in Beitel, Bogus, Hutz, Green, Cecero & Barry, 2014; Kabat-Zinn, 1994, as cited in Purser & Milillo, 2014). It occurs out of deliberately attending in a sincere and discerning way whatever is surfacing in the current instant (Shapiro, 2009). The origin of mindfulness comes from Buddhism, which contains a range of cognitive (Beitel et al., 2014), ethical, and emotional aspects (Grossman, 2010, as cited in Holas & Jankowski, 2013). However, it is also rooted in Western philosophical and psychological perspectives, and spiritual practices as a form of meditation *is* present in many spiritual and religious customs, such as those of Christianity and Islam (Appel & Appel, 2009; Shapiro, 2009). Shapiro (2009) noted that mindfulness is both a product, which is referred to as ‘freedom of mind’ (Purser & Milillo, 2014, p. 556), and a process called ‘mindfulness-as-process’ (p. 1) as in methodical mindfulness practice. Mindfulness has three main elements: intention, attention, and attitude (Shapiro, 2009). The attention is engaged intentionally and the object of attention happens in the current moment with an attitude of acceptance (Holas & Jankowski, 2013). SQ is described as ‘a deep self-awareness’ (Sisk, 2002, p. 209). Genuine mindfulness is to be conscientiously aware, mindful, and alert to the activities of the body, the impressions or feelings, the goings-on of the mind, and the thoughts and ideas of things (Rahula, 1959, as cited in Nash, 2010). It involves the recall of both clever and graceless acts and words (Purser & Milillo, 2014). Vaughan (2002) clearly stated that self-awareness is critical for the unleashing of spiritual maturity.

In a study on children's spiritual capacity, the link between sensitivity and self-awareness was made (Scott, 2003). Hay and Nye's (1998) relational consciousness model of children's spirituality found three types of sensitivities, namely: awareness-sensing, mystery-sensing, and value-sensing (as cited in Scott, 2003). Children's ability to be in the present moment is a spiritual quality. Vialle's (2007) focus group study observed that children had features of spiritual intelligence such as a capacity for flexibility, a high level of self-awareness, an unwillingness to cause harm, a tendency to see the interconnections of things, and a propensity to question and seek ultimate answers. Their natural mindfulness can be explained by their lack of experiences, which can be a rich source of imagination. Both dimensions were included in the MSIS-1.

2.7.2.1.2 Transcendental awareness

The third dimension denotes the capacity to perceive transcendent aspects of the self, of others, and of the physical world during the normal waking state of consciousness (King & DeCicco, 2009). Transcendence denotes an appreciation of or link to something beyond the self, which may or may not involve God or a transcendent attribute, but must include the characteristics of life which are filled with divine-like qualities such as 'immanence, boundlessness and ultimacy' (Pargament, 2013, as cited in King, Clardy & Ramos, 2014, p. 188). SQ implies an awareness of the transcendent (Vaughan, 2002). Vitale, Shaffer, and Fenton (2014) identified two aspects of self-transcendence: first, an external awareness of other persons and the environment, and second, the development of insight into the person's views, values, and ambitions. Cloninger, Pryzbeck, Svrakic, and Wetzel (1994) stated that self-transcendence, which is an acquired skill and which usually occurs in adulthood, controls a person's personal and social effectiveness (as cited in Greenway, Phelan, Turnbull, and Milne, 2007). Piedmont (1999, as cited in Greenway et al., 2007) suggested that self-transcendence is a capacity to go through life beyond the normal limits of space and time, and to be susceptible to a unity beneath the multiple endeavours of nature and human relations. Greenway et al. (2007) found that self-transcendence was forecast by the perception that God cares for one and by both positive and negative coping styles. Rich and Cinamon (2007) described a qualitative study on Israeli and Jewish youth which disclosed that spirituality was

about transcendence and a feeling of union with the divine (as cited in King, Clardy & Ramos, 2014). Frankl's existential theory depicted the mature person as one who is outward-looking and who goes beyond the self to achieve fulfilling relations with the world, and thus giving his or her life meaning (Shantall, 2003). In other words, Frankl's vision of optimal development includes the element of self-transcendence. Furthermore, Frankl believed that the meaning of life was found in the creative things one does, uplifting experiences, and the attitudes one has towards inescapable suffering (Shantall, 2003).

Self-transcendence is the inward extension of one's boundaries in a variety of introspective ways, outwardly through concern for others, and also momentarily, where the past and future perception magnifies the present (Reed, 1991, as cited in Nygren et al., 2005). Self-transcendence is associated with increased self-worth and feelings of spiritual connectedness (Coward, 1990; Bauer & Barron, 1995, as cited in Nygren et al., 2005). The primary neuropsychological basis for spiritual transcendence is that the frontal-parietal circuit is linked to spiritual/religious experiences, and particularly that a lesser focus on the self is associated with decreased right parietal lobe (RPL) functioning (Johnstone et al., 2012). In simpler words, transcendence is related to the neuropsychological process of selflessness, which is associated with the cerebral structure.

2.7.2.1.3 Quest for meaning

The interrogation 'Why?' (p. 4), according to Ramadan (2012), sets off the quest for meaning and a consciousness of our needs, limits, and power. Ramadan (2012) was eloquent in describing the 'universal experience' (p. 3) of maturity, which is marked by ancient customs of rites of passage, initiations, and symbolic trial which facilitate the ability of the consciousness and the intellect to create or comprehend the realm of meaning. Ramadan (2012) observed that possible answers to existential questions were available either within the family or society or through an inward journey. For Ramadan (2012), R-S's purpose is exactly at this stage of questioning. R-S cannot invalidate the queries of reason or those of the heart. He was clear that the search for meaning was a trip through time and across the world, with the eventual destination being the self, which is the primary and ultimate stage of all human experience. The tendency to search for meaning is a characteristic of the spiritual human being (Zohar & Marshall, 2001). According to

Zohar and Marshall (2001), anthropologists and neurobiologists claim that the desire for meaning forms symbolic thoughts, initiates language development, and results in the brain's growth. Batson and Schoenrade (1991, as cited in Greenway et al., 2007) suggested that 'quest motivation' (p. 326) was a critical element for easing spiritual growth. Young et al. (1998, as cited in Rich & Cinamon, 2007) showed that positive moral development and a sense of meaning in life are linked to adolescent spirituality. According to Greenway et al. (2007), the act of questing gives the person a perspective for a more challenging spiritual experience and confronts existential questions without diminishing their complexity. The authors posited that questing individuals tend to view self-criticism and religious doubt as constructive experiences.

Amram's (2007) third dimension of spiritual intelligence was meaning; the importance of finding meaning in the activities we did and the sense of purpose it gave to us. King and DeCicco (2009) suggested that this facet of spirituality implied the ability to form meaning and purpose in mental and physical occurrences. Myss (2001, as cited in Nasel, 2004) proposed that spirituality as a skill involves the reflection on the symbolic meaning of life experiences in view of finding meaning and purpose. Paloutzian and Ellison (1982, as cited in Delaney, 2005) incorporated the existential aspect of spirituality in their assessment of spiritual tendency, which was similar to the dimension proposed in this study. The quest for meaning is a 'universal singularity' (Ramadan, 2012, p. 7): it is common to all human beings and at the same time unique to the person.

2.7.2.1.4 Level of consciousness

The main function of the mental body is consciousness (Searle, 1998). Searle (1998) defines consciousness as 'subjective states of awareness' (p. 4) which start when one wakes from a dreamless sleep and carry on until one falls asleep, goes into a coma, dies, or otherwise becomes unconscious. Consciousness represents the 'loss of innocence' (p. 272), the deviation from nature; it surfaces from the quest for the divine (Sorajjakool, 1998). Consciousness is a process which occurs and goes away (Olendzki, 2011). It is a state initiated by processes in the brain, such as lower-level elements, neurons, and synapses at particular times (Searle, 1998). Consciousness occurs as the self relates to the surrounding world. James (1890/1950, as cited in Natsoulas, 1998) described the likely substances of consciousness as psychological aspects of the 'spiritual self' (p.

24) or as mental or behavioural manifestations which show one's features. According to Pettis (2010), self-fulfilment comes from the ability to enter into advanced states of consciousness, that is, to sever the identification with the physical body. According to the Jungian perspective, consciousness gives rise to the ego, which in turn uses logic to dissociate self from ego. Logic cannot enclose opposites. Consciousness, therefore, guides people to search for the divine and work towards the marriage of opposites (Sorajjakool, 1998). Furthermore, Velmans (2009) observed that the term consciousness had various definitions. Descartes viewed consciousness as a 'substance that thinks' (Velmans, 2009, p. 142). Consciousness is often referred to as self-consciousness, in some instances as a state of awareness, and in other cases as knowledge of something. Olendzki (2011) listed the modalities of consciousness as the five organs and the mind, and claimed that the basis of all experience is an incident of cognition in any of the six means denoted as the 'stream of consciousness' (p. 3). The currently prevailing epiphenomenal model of consciousness seems a rather reductionist and incomplete model from the spiritual perspective. It is based on the premise that consciousness is material and is the result of the brain processes. In other words, it is believed a human is simply 'a pack of neurons' (Sharif et al., 2008, as cited in Forman, 2011, p. 280). On the other hand, the consciousness field model is increasingly being accepted as a plausible model in various disciplines (Forman, 2011). Some of the hypotheses are given as follows: Consciousness is an essential component of reality, which is found in 'its own brane'⁵ (Schooler, 2008, as cited in Forman, 2011, p. 281). Furthermore, it is suggested that consciousness is independent of the brain. Many studies on Near Death Experiences (NDEs) have reported participants' memory capacity and consciousness in the absence of brain activity (Van Lommel, 2011, as cited in Forman, 2011). Vaitl et al. (2005) put forward the neurophysiological approach of the varied states of consciousness, which happens due to the 'compromised brain structure, transient changes in brain dynamics...and neurochemical and metabolic processes' (p. 98). Furthermore, the authors claimed that through practice of self-control, conscious experiences can be altered accordingly.

⁵ A brane is a dimension in string theory in physics (Forman, 2011).

Wilber (1993) advocated six main levels of consciousness: the shadow, the ego, the biosocial, the existential, the transpersonal, and the level of mind. He viewed the variety of techniques to the study of consciousness as unified into one spectrum, which he described as a rainbow with three main levels: the ego, the existential, and the level of mind. Wilber (1993) argued that the East and the West operated on separate vibratory levels: the West focused on ego strengthening, while the East worked on ego transcendence. Wilber (1993) explained that the ego included a person's role and his or her sense of worth; the existential comprised the psycho-soma which is the psychological part and the physical part; and the mind symbolised the spiritual consciousness which is the feeling of oneness with the cosmos. Wilber (1993) differentiated between the West's emphasis on the ego and existential, which is to be a self-focused and independent person, while the East stresses the level of mind and transcendence, omitting the ego level.

Tart (1975, as cited in King, 2008) differentiated between transcendental awareness and level of consciousness, asserting that transcendental awareness happens in normal waking state while levels of consciousness involve entering higher or spiritual states. Amram (2007) described consciousness in terms of self-awareness, trans-rational knowing, and practice. In the sub-theme of trans-rational knowing, Amram (2007) covered the different modes of consciousness as one aspect of spiritual intelligence. Emmons (2000) concurred that moving in different states of consciousness is an ability to be recognised as a characteristic of SQ. The 'peak experiences' (p. 510) described by Maslow (1964, as cited in Feist & Feist, 2002) involve the movement in consciousness such that people tend to feel a 'disorientation in time and space, a loss of self-consciousness, an unselfish attitude' (p. 511) and have the possibility to transcend daily divergences.

2.7.2.1.5 Resilience

Resilience originates from the Latin word *resilire*, which means 'to spring back' (Davoudi, 2013, p. 4). The concept of resilience has its roots in the fields of physics and mathematics, and initially was used to explain the capacity of a material or system to revert to equilibrium after a displacement (Norris et al., 2008, as cited in Reid & Botterill, 2013). The American Psychological

Association (2010, as cited in Konvisser, 2013) defined resilience as the process of adjusting well in the face of hardship, trauma, disaster, threat, or even important causes of threat. Rutter et al. (2001, as cited in Atkinson, Martin & Rankin, 2009) classified resilience as the opposite end of the continuum of vulnerability, wherein protective and risk elements work simultaneously. Resilience emanates from within the human soul or collective unconscious of the person, and from the external ecological and spiritual bases of strength (Richardson, 2002). The concept of the positive use of adversity advanced by Zohar and Marshall (2001, 2005) as an aspect of SQ is termed in this project as resilience. It is ‘the capacity to withstand adversity or resist liability’ (Kasen, Wickramaratne, Gamaroff & Weissman, 2012, p. 509), as well as the potential possessed by individuals to prosper even after facing harsh situations (Dillen, 2012). Benard (1995, as cited in Raftopoulos & Bates, 2011) defined resilience as the ‘achievement of successful adaptation despite challenging or threatening circumstances’ (p. 152), which includes both internal and outward adaptations, such as psychological wellbeing and achievement respectively (see also Theron, Theron & Malindi, 2013). Benard (1995, as cited in Raftopoulos & Bates, 2011) linked resilience with the manifestation of social competence, problem-solving, critical consciousness, independence, and sense of purpose. The components of resilience are similar to spiritual qualities, as detailed in Table 2.1. Resilience is defined as ‘a personal characteristic’ (p. 355) which impacts the ability to recuperate from unfavourable experiences (Dyer & McGuinness, 1996; Wagnild & Young, 1990, as cited in Nygren et al., 2005). It also refers to a ‘protective strength’ (Dyer & McGuinness, 1996, as cited in Nygren et al., 2005, p. 355). It is the ability to bear troubles and recover a reasonable quality of life (Peres et al., 2007; Theron et al., 2013). However, Theron et al. (2013) observed that resilience cannot be conceptualised in a standardised way, as it is culturally specific. Clinton’s (2008, as cited in Lipscomb & Gersch, 2012) paper on children who underwent traumatic experiences found that participants with a higher level of spiritual consciousness displayed more adaptive behaviours, which ensured a range of successful coping strategies and resilience. Atkinson, Martin, and Rankin (2009) stated that resilience is the ability to get over the experiences of distress, deprivation, and danger.

Table 2.1

Link between components of resilience and spirituality

Resilience	Spiritual Qualities
Social competence	Sense of connectedness
Problem-solving	Attention to the inner world
Critical consciousness	Self-awareness
Autonomy	Strong sense of identity; knowledge of self
Sense of purpose: sense of coherence, structure and generation of meaning	Quest for meaning

Adapted from “‘It’s that knowing that you are not alone’: the role of spirituality in adolescent resilience,” by M. Raftopoulos and G. Bates, 2011, *International Journal of Children’s Spirituality*, 16, p.152. Copyright 2011 by Taylor & Francis group.

Wagnild and Young (1990, as cited in Nygren et al., 2005) identified five elements of resilience: equanimity, which is a stable view of one’s existence and experience; determination, a readiness to carry on rebuilding one’s life and to stay absorbed; autonomy; purposeful life; and ‘existential aloneness’ (p. 355), an understanding that everyone has a distinctive pathway. Antonovsky’s ‘sense of coherence’ (p. 346) (SOC) concept helped to understand the mechanism behind resilience (as cited in Peres et al., 2007). SOC is grounded on three factors: comprehensibility (an ability to grasp the situation as a whole), meaningfulness (meaning in life), and manageability (the appropriate exploitation of resources to handle trials and tribulations in life). Richardson (2002) described the resiliency theory, referred to as ‘quanta, chi, spirit, God’ (p. 315), as the drive force inside every person that motivates him or her for the sake of survival to follow wisdom, self-actualisation, altruism, and to be in congruence with a spiritual source of strength (Dillen, 2012). Richardson (2002) depicted the evolution of resilience in the field of clinical psychology in three waves: the qualities of resilience, the process of reaching resilient attributes, and the notion of resilience (Reid & Botterill, 2013; Richardson, 2002). Richardson

(2002) cited several authors regarding resilient attributes, such as faith (Myers, 2000), self-mastery, wisdom (Baltes & Staudinger, 2000), and morality (Baumeister & Exlin, 2000). Resilient qualities are achieved through a principle of ‘disruption and reintegration’ and through spiritual practices such as prayer and meditation (Flach, 1988, 1997, as cited in Richardson, 2002, p. 310). Reintegration necessitates the development of amplified energy based on a spiritual source or inherent resilience (Richardson, 2002).

Research has shown that religion and spirituality are invaluable to many people in times of crisis, trauma, and grief (Weaver et al., 2003). Pargament, Smith, Koenig, and Perez (1998, as cited in Greenway et al., 2007, p. 325) described how the importance of religion in a person’s life leads him or her to build religious strategies for dealing with negative life events, thus creating meaning and purpose in life and ‘grow[ing] spiritually’. As Bacchus and Holley (2005) reported, spirituality is consistently identified as the core element of African American women’s ability to deal with life struggles and adversity. Studies by Kasen et al. (2012) and Koenig (1995, 2009) on religion and resilience in people with a high risk of depression have shown that high religiosity is linked to the development of resilience in this group of participants. Resnick et al. (1993, as cited by Raftopoulos & Bates, 2011) quoted a US study which identified spiritual connectedness as one of the protective factors against social morbidities and as positively related to adolescents’ wellbeing. Spirituality as a source of resilience in adolescents’ lives is now receiving attention (Kim & Esquivel, 2011). Smith, Webber, and DeFrain (2013) observed the connection between spiritual wellbeing and resilience in a small purposive sample study. Lewis et al. (2007) found that African-Americans’ faith helps them maintain their equilibrium in moments of crisis moments. Banerjee and Pyles (2004) conducted in-depth interviews with eight African-American women, who confirmed that spirituality was a critical generator of resilience for them.

The link between coping with trauma and the application of different spiritual and religious beliefs has been settled (Koenig, 1995; Weaver et al., 2003). Miller and Thoresen (2003) mentioned religious resources as means of stress and illness management. Ahmadian, Hakimzadeh, and Kordestani (2013) found a negative significant association between spiritual intelligence and occupational stress. Walsh (1999) stated that genuinely spiritual beings have a heightened sense of self stability and concern for others, which also serves as a spiritual source for

healing and resilience (as cited in Hoogestraat & Trammel, 2003). Southwick and Charney (2012) noted that R-S is among the factors which help people cope with stress and trauma and at the same time adds to stress endurance (as cited in Konvisser, 2013). Spiritual intelligence could therefore be assumed to be related to resilience. Following this reasoning, it could also be assumed that resilience is a function or dimension of SQ. This thesis tried to verify this assumption, as few studies assessed the relationship between spiritual intelligence and resilience.

2.8 Conclusion

The benefits of spirituality and religions have been evidenced through several correlational studies. However, there has been no consensus on the definition of spirituality and on its separation from religion. Some scholars view spirituality as different from religion, while others consider it part of religion. A brief look at history and the evolution of the dominance of religions have helped in understanding the current importance of spirituality in peoples' lives. There are different types of spirituality, and the various theories of spirituality and spiritual development have been assessed to better understand the subject. The theories on the development of spirituality pertain to a more inclusive definition that comprises faith, religion, spirituality and self-actualisation needs. Spiritual intelligence, equally crucial as IQ, has important theoretical underpinnings covered in depth in this chapter. A theory of SQ is proposed, and six dimensions of spiritual intelligence are also suggested in this study. The literature on the pertinence of the dimensions was mentioned in the last section.

Chapter 3: Spirituality in the Workplace

The previous chapter dealt with spirituality in general, considering the various definitions of, approaches to, and developmental theories of spirituality and spiritual intelligence. In this chapter, the focus will be on workplace spirituality, its definitions, and a brief history of the subject. Spiritual leadership is also addressed, as it has a bearing on organisational outcomes and employee wellbeing. The influence of traditional religions on organisational spirituality is highlighted, as it gives another view of religion in business. Business ethics and its relationship to workplace spirituality are also addressed in this chapter. The inclusion of spirituality at work entails certain ethical dilemmas that have to be considered thoroughly. Several studies have been done on spirituality at work, which has necessitated the development of adequate measures of spirituality at work. These measures are briefly mentioned in the subsections. Historically, traditional religions like Christianity, Hinduism and Islam put work as an essential element in a person's life. However, in modern times, it was more acceptable to include spirituality in organisations. The thesis considered workplace spirituality for it was an asset to any organisation and the target group was working age adult in Mauritius. Studies demonstrated the benefits of workplace spirituality since more than a decade. Workplace spirituality was linked to organisational commitment, performance and connectedness at the employee level (Garcia-Zamor 2003; Rozuel, 2013). Workplace spirituality eventually lead to ethical behaviour (McGhee & Grant, 2008). The various definitions of spirituality in the organisation included some of dimensions in the present study such as meaningful work (Pardasani et al., 2014; Sheep, 2006), self-knowledge (Dehler & Welsh, 2003), and transcendence (Giacalone & Jurkiewicz, 2003; Sheep, 2006). The shortcomings in the measurement of SQ in the workplace required a reliable and valid measure that was applied to the local reality. Thus the need for the MSIS at work.

Organisations are formed and handled in agreement with a sense of order based in the Cartesian-Newtonian system of thought (Capra, 1982, as cited in Gull & Doh, 2004). The Cartesian split generated a false division between body and mind (Rego & Pina e Cunha, 2008). In this system of thought, the 'logical, the empirical and the rational' (Gull & Doh, 2004, p. 129) mattered most—that is, the objective and material facets of things. In parallel, Mauritius has

witnessed a generalised change in its family structure, from an extended family to a nuclear family structure. The decline in conventional sources of community such as membership in a religious institution has also been observed in the last decade. These reasons have led people to look for community at work, for a sense of ‘wholeness and connectedness’ (Duchon & Plowman 2005, p. 822). The escalating interest in spirituality at work paved the way to a ‘spirituality movement’ (Karakas, 2010, p. 90; see also Crossman, 2015), not just a craze (Miller & Ewest, 2013). The spirituality movement can be manifested either as ‘employee pull’ or ‘organisation push’ (Singhal & Chatterjee, 2006, p. 167). The former refers to the demands of the employees for spirituality at work because of stressful situations, while the latter refers to the inclusion of spirituality in the workplace by the organisation for accrued benefits. It has been nearly two decades since workplace spirituality, organisational spirituality, or spirituality at work caught the interest of researchers and practitioners (Rozuel, 2013). The phenomenon is regarded as ‘applied spirituality’ (Rozuel, 2013, p. 682), which is how a person reconciles his or her personal spirituality with his or her external environment.

Fry (2003) claimed that workplace spirituality must be understood within a holistic background of intertwined cultural and personal values. Mohamed et al. (2001, as cited in Oliveira, n.d.) asserted that organisational theories and models which disregarded the spiritual aspect would stay deficient. Spirituality in the workplace embraces a wide range of phenomena and is lived both within and outside of formal religious customs focussed on the private experience of the sacred and one’s connection to it, to others, and to life itself contextualised in the workplace (Gockel, 2004). Rozuel (2013) reported the advantages of a spiritual outlook at work included amplified intuition and imagination, righteousness and trust, individual contentment, and greater organisational commitment and performance (Jurkiewicz & Giacalone, 2004; Duchon & Plowman, 2005). Garcia-Zamor (2003) reviewed several studies on workplace spirituality and reported that fostering spirituality at work meant that spiritual values had to be inculcated in the organisational culture and spiritual such as interconnectedness had to be fulfilled for employees’ overall development.

The contemporary perspective views spirituality as positively impacting various organisational outcomes (McGhee & Grant, 2008). Moore and Casper (2006) indicated that

workplace spirituality could benefit organisations at three levels: the societal, the organisational, and the employee level. At the societal level, workplace spirituality enhanced trust and competence in people's integrity (Miller, 2001, as cited in Moore & Casper, 2006). Pardasani, Sharma, and Bindlish (2014) remarked that organisations that bore a certain responsibility towards the nation and society participate in good practices such as corporate social responsibility, corporate governance, and ethical business operations, all of which uphold spirituality at the workplace. The inclusion of spirituality in the work sphere could generate sustainable performance and a competitive edge (Fry & Matherly, 2006). Consider the following example of corporate social responsibility: many organisations such as private banking institutions and telephone companies in Mauritius sponsor special schools and offer training for special needs students in special programmes designed to help the deprived population. Conversely, a recent fraud scandal involving 1 billion Mauritian rupees, a well-known insurance company, and a banking institution had an adverse effect on the morale and trust of the Mauritian population. Workplace spirituality raises the perception of wellbeing, morale, and employees' organisational commitment (Karakas, 2010; Chawla & Guda, 2010; Rego & Pina e Cunha, 2008; Jurkiewicz & Giacalone, 2004). Organisational spirituality is positively correlated with job involvement, organisational identification, and work rewards satisfaction, and negatively correlated with organisational frustration (Kolodinsky, Giacalone & Jurkiewicz, 2008). According to Karakas (2010), extensive research has shown that spirituality is beneficial to employees in terms of wellbeing and quality of life; in offering a sense of purpose and significance in their jobs; and in engendering a feeling of 'interconnectedness and community' (p. 89). Spiritual growth commences inside a person, and the expression of spirituality in the workplace begins with a transformation in an individual employee; subsequently the organisational context is positively stimulated by these spiritual changes (Pawar, 2009).

Sprung, Sliter, and Jex (2012) also found that spirituality in the workplace was related to higher job satisfaction (Altaf & Awan, 2011; Chawla & Guda, 2010) and lower stress. Organisational cultures that demonstrate high levels of workplace spirituality are assumed to have a positive outcome on organisational members' motivation and adaptability (Jurkiewicz & Giacalone, 2004). Spirituality is a buffer against tough situations. Koszycki, Bilodeau, Raab-

Mayo, and Bradwejn (2013) noted that the positive relationships between religion, spirituality, and mental wellbeing was seen in social, cognitive, behavioural, and biological pathways. This was expressed explicitly in social relatedness, in giving meaning to life, in the averting of highly hazardous behaviours, and in variations in ‘neurobiological, neurohormonal, neuroimmunologic and cardiovascular functioning’ (Koszycki et al., 2013, p. 490). Sprung et al. (2012) observed that spirituality played a significant part in the manner in which employees responded to aggression in the workplace. Highly spiritual participants had a negative reaction to aggression in the workplace. However, the benefits of spirituality were felt when the working milieu and a person’s belief system were aligned (Sprung et al., 2012). According to Paloutzian, Emmons, and Keortge (2003), spiritual intelligence contains all the spiritually related ideas needed for a healthy working environment.

3.1 Definitions of workplace spirituality

Pardasani et al. (2014) observed five components of workplace spirituality recurrent through the literature: meaningful work, transcendence of self, interconnectedness, holistic growth and development, and alignment with organisational values. Ashmos and Duchon (2000) claimed that workplace spirituality was about the appreciation of an inner life nurtured and sustained by meaningful work occurring in the context of community. Saks (2011) used the dimensions of organisational spirituality proposed by Ashmos and Duchon (2000) to explain how workplace spirituality was both directly and indirectly correlated with employee engagement, through psychological conditions like meaningfulness in work and at work. Neck and Milliman (1994) noted that spirituality has its contribution at work. According to Neck and Milliman (1994), the authors Block (1993) and Ray (1992) claimed that workplace spirituality was a demonstration of human needs to find meaning and purpose in their lives and was also a process of following one’s set of genuinely held individual values. Although not every individual feels spirituality, every human has that potential (Neck & Milliman, 1994). Vaughan (1989, as cited in Neck & Milliman, 1994) suggested that spirituality could influence the deep consciousness level, and hence a person’s intuitive skills. Furthermore, the ‘spirituality-based intuition’ (p. 10) enables employees

to build up a more meaningful and captivating organisational vision (Neck & Milliman, 1994). Hawley (1993, as cited in Neck & Milliman, 1994) also added that workplace spirituality offers the chance for employees to feel a higher sense of service and greater personal advancement. Finally, spirituality in an organisation could boost teamwork and employee commitment (Hawley, 1993; Brown, 1992; Rosen, 1992, as cited in Neck & Milliman, 1994). Neck and Milliman (1994) proposed a cognitive approach to the inclusion and acceptability of workplace spirituality. Their first three steps involved an observation/record, analysis, and the deconstruction and reconstruction of held beliefs and assumptions, self-talk, and mental imagery. Following from this, the new positive thinking would boost the person's work perception, which could result in more expansive thinking and greater spirituality at work. Ultimate consequence was hypothesised to impact on the individual and his or her work performance.

Mitroff and Denton (1999, as cited in Pardasani et al., 2014) defined workplace spirituality from an individual's point of view and stated that it entailed the presence of meaning in life, an interconnection with others, and corresponded to organisational values. Mitroff and Denton (1999) conducted a study with senior executives, human resource executives, and managers, and reported four orientations towards religion and spirituality, as mentioned in the previous chapter. Based on these findings, Mitroff and Denton (1999) developed five organisational models of spirituality and religion. Organisations that implemented a positive vision of both spirituality and religion or a positive view of religion but a negative view of spirituality were called religious-based organisations; organisations that espoused a positive view towards spirituality but a negative view of religion were either evolutionary organisations, recovering organisations, or socially responsible organisations. Evolutionary organisations initially started with a strong identification with a certain religion, but this lapsed over time (Mitroff & Denton, 1999). One recovering organisation in Mauritius is the 'Centre de Solidarite' for alcoholics and drug addicts: it is a values-based organisation that embraces a negative perspective of both religion and spirituality (Mitroff & Denton, 1999). An example of a values-based organisation is the Mauritius Commercial Bank Limited (MCB Ltd), which promotes an eco-friendly environment through advertisements and

special programs on the effective use of scarce resources. It was also a major sponsor of the *Jeux des Iles de l'Océan Indien*⁶ (Indian Ocean Island Games) of 2015.

Pina e Cunha, Rego, and D’Oliveira (2006) claimed that there were two types of individuals, dependent and independent employees. The authors also stated that there were two types of organisations—the spiritually informed and the spiritually ignorant. The combination led to four categories of organisational spirituality: the soulful organisation, the holistic organisation, the ascetic organisation, and the professional organisation. A soulful organisation, defined as spiritually conversant management with dependent employees, aligned organisational vision with employees’ aims and objectives (Pina e Cunha et al., 2006). An ascetic organisation merged the view of management as a spiritually uninformed practice with dependent employees, where the focus was on ‘rationality and technique’ (Pina e Cunha et al., 2006, p. 225) to the detriment of spirituality. A holistic organisation was described as a spiritually informed practice within a business with independent employees: it was employee-focused and promoted employees’ self-development. Finally, the professional organisation was portrayed as spiritually ignorant with independent employees—the spiritual aspect was left outside the business sphere and the instrumental feature of the organisation was emphasised (Pina e Cunha et al., 2006). Although all such organisations follow ethical codes, the spiritual is left to individual employees to pursue. The authors explained that all four types of organisational spirituality had their downfall due to the possibility of dictatorship by management regarding spiritual matters and complete alienation regarding employees’ sense of purpose and self-growth. Thus management must be careful in their inclusion, non-inclusion, or maintenance of spirituality in the workplace.

Dehler and Welsh (2003) defined spirituality as the ‘expression of spirit’ (p. 114) outwardly (as in a behaviour) or cognitively. The authors remarked that when employees’ values were harmonious with organisational values, they could more easily add work into their lives. Kouzes and Posner (1995, as cited in Dehler & Welsh, 2003) posited that the clarity of both individual and work values positively influence organisational commitment. The main factor contributing to organisational commitment is the self-knowledge of individuals, even in the

⁶ The Jeux des Iles de L’Ocean Indien regroups several islands every four years for sports competitions. It includes countries like Mauritius, Reunion Island, Madagascar, the Seychelles, Mayotte, the Maldives, and Comoros.

absence of clear organisational values (Dehler & Welsh, 2003). Therefore, it was a prerequisite for an organisation to help an employee develop self-awareness to gain self-knowledge. Self-awareness—an ability rather than a value—was a dimension of the MSIS-1. Simply including spirituality in the workplace is not sufficient, because every individual has different ways of expression. Prior to fulfilling the spiritual needs of an employee, assessments have to be made at various levels. Assessing spiritual intelligence, in this case, is beneficial to the individual and organisation. Workplace spirituality would therefore entail the recognition of the power of spiritual intelligence over organisational outcomes.

Sheep (2006) stated that workplace spirituality was contextualised and theorised as lived experiences and manifestations of a person's spirituality in the working environment and workplace. Sheep reviewed a decade of literature on the subject and proposed a definition of workplace spirituality which encompassed self-workplace integration, meaning in work, transcendence of self, and growth/development. The first concept, self-workplace integration, meant that an employee brought his or her whole self, including the physical, psychological, emotional, and spiritual facets, to the workplace. Organisations should strive to fulfil all of these needs. Sheep (2006) viewed dimensions of workplace spirituality as a possible solution to the problems of life disintegration, meaningless work, individual self-absorption, and personal sluggishness and frustration. Regarding the meaning in life concept, which is the quest for a higher meaning of one's work and a transcendence of self and the connection with others as a community are both similar to the two dimensions of spiritual intelligence proposed in this thesis.

Milliman, Czaplewski, and Ferguson (2003) took three dimensions from the study of Ashmos and Duchon (2000) and used the level of analysis proposed by Neal and Bennett (2000) to identify three levels of workplace spirituality. These levels were the individual level (including meaningful work), the group level (to embrace a sense of community); and the organisational level (to comprise of alignment with organisation values). Dimensions of spirituality were positively related to organisational commitment. However, regarding the other outcome variables like intention to quit, intrinsic work satisfaction, job involvement and organisation based self-esteem, their relationships to the dimensions of spirituality produced mixed results. Milliman et al.'s (2003) study was based on US participants, and spiritual values were considered with no mention of the

ethnic profile of the participants. The application of the research in a different working environment and in another culture could prove problematic. Different cultures emphasise different values; assessing spiritual values is a daunting task because of the inexhaustible list of values which a culture can generate.

Kinjerski and Skrypnek (2004) conducted a small-scale study with 16 participants from the United States, Canada, and England and proposed a definition of ‘spirit at work’ (p. 37) as a holistic experience which included the physical, affective, cognitive, interpersonal, spiritual, and mystical dimensions. Kinjerski and Skrypnek (2004) reported that spirit at work (p. 31) involved a positive state of arousal, a deep feeling of joy and wellbeing, an awareness of the congruence between beliefs, behaviours, and the presence of meaning, an interconnection with others and a higher power, and a sense of transcendence. Kinjerski and Skrypnek (2004; see also Gotsis & Kortezi, 2008) advanced the argument that the concept underpinning workplace spirituality was the ability to carry one’s whole self to work. Moore and Casper (2006) reviewed existing literature and proposed three dimensions of spirituality relevant to the work environment. The first was self-work immersion, or in business terms, perceived organisational support, defined as the ability to take one’s spirituality into the workplace. The second dimension was interconnectedness or affective organisational commitment, defined as the sentiment of belonging to something bigger than oneself. The third was self-actualisation, or the more professionally adapted term, the intrinsic job satisfaction taken from Maslow’s research on motivation. The authors mentioned that their study lacked an important dimension, namely meaningful work. As they took an ability perspective towards spirituality, it would be more appropriate to look at spiritual intelligence and assess the ability using an assessment tool which does not overlook key dimensions. The benefits being immense, such a tool would be suitable to the ethno-cultural population.

Kolodinsky et al. (2008) defined workplace spirituality at the individual level to embrace the person’s spiritual ideals and values in the work milieu. Thus, workplace spirituality is the application of ‘personal spirituality’ (Kolodinsky et al., 2008, p. 466), as well as the impact of the spiritual values which an individual brought to the workplace in terms of employee interactions and outcomes. At the macro-level, workplace spirituality is organisational spirituality, defined as mirroring a person’s perception of spiritual values within an organisational environment

(Kolodinsky et al., 2008). The authors mentioned an interactive level of workplace spirituality, which was an interaction between a person's private spiritual values and the organisation's spiritual principles. This concept is equivalent to the concept of person-environment fit (P-O fit), a perceptual construct which concerns feelings of equivalence between an employee's values and an organisation's culture (Caplan & Harrison, 1993; Cable & DeRue, 2002, as cited in Kolodinsky et al., 2008). Kolodinsky et al. (2008) claimed that a solid correspondence between employees' values and their view of organisational spiritual values could result in more positive attitudinal outcomes. Another useful concept suggested by Kolodinsky et al. (2008) to appreciate the impact of spiritual values on attitudinal consequences is the spill-over theory. In the case of vertical spill-over, this means that happiness in one dimension, such as a spiritual being, could spread general life happiness. With regard to horizontal spill-over, satisfaction in one domain, such as the spiritual domain, could influence other domains, such as occupation or family life.

Giacalone and Jurkiewicz (2003) defined workplace spirituality as a structure of organisational values, supported by a culture which endorses employees' experience of transcendence (as cited in Giacalone & Jurkiewicz, 2015; Pardasani et al., 2014). Validating transcendence through the work process smoothens the sense of being connected to others in an approach that imparts feelings of completeness and joy. Giacalone and Jurkiewicz (2003) stated that culture was a causal variable in the evolution and expansion of an organisation, as well as a determining factor of labour productivity. Based on the work of Buchanan (1994), Becker (1998) presented the notion of culture as an explicit constituent of social capital which affected utility (as cited in Giacalone & Jurkiewicz, 2015). Buchanan's (1994) work confirmed culture as a facilitator or obstacle to the quantity and quality of work effort. Giacalone and Jurkiewicz (2015) remarked that the authors Altman (2001) and Becker (1998) observed that cultural factors linked to workplace spirituality were found to overrule the economic-political setting. According to Giacalone & Jurkiewicz (2015), the dimensions of spirituality could be viewed as trait-like qualities: fixed, passive, and including rites and customs, or it could be taken as a set of skills or abilities which changes, grows, and interacts with the outside environment. Giacalone and Jurkiewicz (2015) showed spiritual intelligence as part of the dimensionality of spirituality—specifically, the dynamic part of spirituality.

3.2 A brief history of workplace spirituality

Benefiel, Fry, and Geigle (2014) reviewed the historical incorporation of spirituality in the workplace dating from the sixth century, during which Saint Benedict accentuated the integration of work and prayer to discipline the body and soul. The authors remarked that the industrial revolution was also influenced by the Protestant work ethic, which aspired to spiritualise the working environment. However, this work ethic has a negative connotation, in the belief that humans are fundamentally sinful and must practice self-restraint in order to deny the tendency toward hedonism. According to Benefiel et al. (2014), the recent emphasis on workplace spirituality has its roots in the ‘Faith at Work’ (p. 176) movement, which dates back to the nineteenth century. This movement had three eras: the social gospel era, from the 1890s to 1945, which advocated gospel within the business sphere; the laity era (or Miller’s second era) from 1946 to 1985, with the emphasis being on laity’s work being equally important as prayer; and the third era known as Miller’s (2007, as cited in Benefiel et al., 2014) third era, which was from 1986 to the present). Miller’s third era corresponds to the current interest in the physical, cognitive, emotional, and spiritual aspects of the individual. Hicks (2003, as cited in Gotsis & Kortezi, 2008) claimed that the appeal for workplace spirituality started in the late 1980s in the United States.

3.2.1 Organisational spirituality and traditional religions

According to Quattro (2004), understanding and realising the classical, theoretical, and conventional religious foundations of the modern organisational spirituality movement were imperative prior to introducing such concepts into the organisation. The author advanced that traditional religions contributed immensely in making the integration of spirituality at work a standard practice in organisations. Paradoxically, it was precisely these main organised religions which methodically taught and celebrated the qualities which allegedly only spirituality accepted (Quattro, 2004). For example, Quattro (2004) noted that in Islam, *tawheed* (p. 243) is dominant in all the teachings which refer to the oneness, superiority, and distinctiveness of Allah as compared

to any mortal. This is the foundation of Islam and the basis of ethics (Badawi, 2001, as cited in Quattro, 2004). Humans are entrusted to act as *khalifah* (p. 243) of Allah, that is, all Muslims should carry out economic activities in the image of Allah, thus endeavouring for accord and unity among all of creation (Quattro, 2004). The Hindu religion has the karma yoga path, that is, striving one's way back to God through work. Karma yoga enjoins individuals to find God in selfless work and to be unattached to worldly rewards; its adherents develop self-transcendence in their work, and thus work becomes an altruistic manifestation of love and union with Brahman. The Christian faith contributed the traditional belief to love one's neighbour, in transforming work into a vocation or a calling to affirm God and in emphasizing peace and harmonious relationships at work (Quattro, 2004). These concepts are similar to the contemporary interconnectedness and meaning at work aspects of workplace spirituality.

3.3 Spiritual leadership in organisations

Vandenbergh (2011) proposed a model whereby spiritual leadership has a direct influence on organisational outcomes and employee wellbeing. The exercise of spiritual leadership was believed to create two psychological states. To start with, employees came to feel a sense of calling, wherein their work has a sense of meaning and they can contribute to making a difference. Second, employees are left with a feeling of belonging in their work community. The model also presented mediating factors, such as a sense of calling and a sense of membership in the impact of spiritual leadership on employees' affective, normative, and continuance commitments (Vandenbergh, 2011). Vandenbergh (2011) maintained that a climate for spirituality, founded on the assumption that spiritual values were well established within an organisation, made the sense of calling produced by spiritual leadership more conducive to impact on individuals' affective commitment. Vandenbergh (2011) suggested that the climate for spirituality and personal spirituality served to moderate spiritual leadership on commitment and resultant organisational outcomes. Given that employees' senses of meaning at work and of interconnection have a bearing on commitment and organisational outcomes, it would be beneficial to both employees and organisations to look at the spiritual intelligence level of the employees prior to

any spiritually oriented changes. The development of self-awareness and metacognition precedes the inclusion of spiritual values within the organisation. According to Pardasani et al. (2014), the facilitation of spirituality in the workplace necessitated that organisations construct an effective work culture in search of its goals and objectives. Vallabh and Singhal (2014) offered a person-organisation (P-O) fit model to explain the insertion of spirituality at work. P-O fit establishes how properly a person fits in an organisational context (Kilmann et al., 1986, as cited in Vallabh & Singhal, 2014). Vallabh and Singhal (2014) suggested four possible ways of spiritual integration. Kristof (1996) defined P-O fit as a ‘supplementary fit’ (p. 198) which occurs when a person finds similar basic characteristics such as that of the organisation, and ‘complementary fit’ (p. 198) occurs when individual needs are fulfilled by organisational resources (as cited in Vallabh & Singhal, 2014). In the first situation, where there is low individual and organisational spirituality, Vallabh and Singhal (2014) suggested that external stimuli may be needed to introduce the spiritual aspect at work. In the second case, where only organisational spirituality was high, the latter would act as a ‘catalyst’ (p.199) to support spirituality (Vallabh & Singhal, 2014). In the third situation, when incongruence occurred between high individual spirituality and low organisational spirituality, one probable way to induce change in the organisation was through spiritual leadership. In the last case, when congruence occurred between both high individual and organisational spirituality, there is fertile ground to motivate the maintenance of spirituality.

3.4 Ethics and workplace spirituality

Ethics and spirituality are core attributes of what it means to be human (Rozuel, 2013). Furthermore, workplace spirituality and business ethics are connected in many respects (Corner, 2009). Spirituality partly covers ethics to offer a framework for human development (Rozuel, 2013), and a spiritually oriented organisation has a greater probability of avoiding circumstances which promote ethical misconduct (Gull & Doh, 2004; Weitz, Vardi & Setter, 2012). Spirituality brings a deeper level of understanding, which enhances a greater sense of morality (Jackson, 1999, as cited in Gull & Doh, 2004). However, Ayoun, Rowe, and Yassine (2015) used Piedmont’s (1999) Spiritual Transcendence Scale (STS) and did not find a correlation between workplace

spirituality and business ethics in the hotel industry. Sheep (2006) observed two ethical dilemmas in the inclusion of spirituality in the workplace. According to Sheep (2006), ethical dilemmas cropped up in that individual predilections for certain dimensions could vary broadly both within and between workgroups. Firstly, there was the ‘quiet desperation’ (p. 366) which occurred when individuals’ inclinations for certain features of spirituality placed them in a vulnerable position. The management side could use employees’ preferences to guide investment in low-cost spiritual motivations and neglect extrinsic motivations (Sheep, 2006). Kruger (1999, as cited in Dehler & Welsh, 2003) described how many people, especially women, felt deceived by letting their work become too personal. There was also the danger of being excluded if the corporate culture adopted a religious or spiritual philosophy which was not universal (Gockel, 2004). The spiritual need may not be felt by every individual or may not be expressed the same way. An employee-employer collaboration would be the most welcomed in an organisation implementing spirituality at work (Rozuel, 2013).

Dehler and Welsh (2003) talked of the ‘darker side’ (p. 115) in which managers could be tempted to abuse the emotional aspect of work through the adoption of spirituality, not for the employees’ development but because of spirituality’s impact, by turning it into just another tool to improve management. As Rozuel (2013, as cited in Dehler & Welsh, 2003) put it, the incorporation of spirituality should not be a management fad. Welsh (1998) warned against the blurring of the boundary between the personal and the professional without due thought. The dilemma resulted from a problem of prioritizing individual versus organisational progress. The suggested positive relationship between workplace spirituality and individual/organisational performance was regarded by some theorists as the wrong basis for researching spirituality in the workplace. The instrumentality dilemma regarded whether the theory and practice of spirituality in the workplace should be researched, because it was good for the ‘bottom line’ (p. 364) or because it was morally right for individual and society (Sheep, 2006). Lips-Wiersma, Dean, and Fornaciari (2009) explored the darker organisational dimensions of workplace spirituality, namely control over employees and instrumentality to reach organisational goals. The authors suggested four organisational practices: seduction, evangelisation, manipulation, and subjugation. Seduction occurs when organisations practice low control and instrumentality in spiritual inclusion, which

can also lead to cultural fragmentation (Lips-Wiersma et al., 2009). High control but low instrumentality in the application of spiritual practices results in evangelisation. The supremacy of an institution's beliefs and values fashions its work milieu; low control of spirituality at work but high use of instrumentality leads to manipulation for the company's sole interests. Subjugation happens when organisations practice high control and high instrumentality on spiritual inclusiveness (Lips-Wiersma et al., 2009). These four practices are the harmful influences an organisation can have on the spiritual needs of employees. The assessment and development of spiritual intelligence can be one means of combatting the detrimental powers of the organisation, as employees will know where they stand on the spiritual measure and thus strive to develop their personal ability.

McGhee and Grant (2008) maintained that the inclusion of spirituality in the workplace led to enhanced ethical behaviour at a personal level and an enriched ethical climate at the organisational level. Victor and Cullen (1988) claimed that the ethical work climates were complex and depended upon the ethical criteria employed for organisational decision-making, and the locus of analysis was utilised as a referent in ethical decisions (see Table 3.1). Ethical climates were conceptualised as 'general and pervasive characteristics of organisations' (Victor & Cullen, 1988, p. 101) influencing a wide scope of decisions, based on Kohlberg's psychological theory of moral development. The ethical criterion dimension (on the y-axis of Table 3.1) was classified into three main classes of ethical theory: egoism, benevolence, and principle—that is, exploiting self-interest, capitalizing on joint interests, or adhesion to principle, respectively (Victor & Cullen, 1988). The locus of analysis (on the x-axis of Table 3.1) was a referent group detecting the source of moral reasoning employed for applying ethical criteria to organisational decisions and/or the parameters of what would be regarded in ethical analyses of organisational decisions. These three referent groups were individual (such as private ethics), local (organisational ethics), and cosmopolitan (ethics spawned outside the organisation, such as social standards) (Sheep, 2006).

Referring to Table 3.1 for the egoism criterion, the locus or loci of analysis (LOA) are used to detect the entity in whose interests it is anticipated to be used. In the case of an individual LOA, it is personal private interests which will be ensured. In the case of a local LOA, the organisation's interest will be the priority, whereas for a cosmopolitan LOA the social economic system interests

will be the main concern (Victor & Cullen, 1988). Regarding the benevolence criterion, the LOA both identify organisational members and set the limits. In an individual LOA, the benevolence criterion is described as a concern of other people without allusion to organisational membership. For a local LOA, it refers to the organisational collective, such as team play, and for the cosmopolitan LOA, it is respect for other areas external to the organisation such as social responsibility (Victor & Cullen, 1988). In the case of the principle criterion, the LOA outlined sources of principles anticipated to be employed in the organisation. At the individual level, it is freedom of choice, that is, the person is led by his or her private ethics. At the local LOA, it is the rules and procedures within the company or institution which are the sources of principles. Finally, at the cosmopolitan LOA, it is the principles outside the organisations, such as the legal system, which are the frame of reference (Victor & Cullen, 1988).

Table 3.1

Different types of ethical climates

	Locus of analysis (LOA)		
	Individual	Local	Cosmopolitan
Egoism	Self-interest	Company profit	Efficiency
Benevolence	Friendship	Team interest	Social Responsibility
Principle	Personal Morality	Company rules and procedures	Law and professional codes

Reprinted from “The Organizational Bases of Ethical Work Climates,” by B. Victor and J.B. Cullen, 1988, *Administrative Science Quarterly*, 33, p. 104. Copyright 1988 by JSTOR. Used with permission.

Parboteeah and Cullen (2003) studied the contribution of ethical climates, as proposed by Victor and Cullen (1988), to workplace spirituality as defined by Ashmos and Duchon (2000). Spirituality, as noted before, was defined along three dimensions: the conditions for community, meaning at work, and inner life (Parboteeah & Cullen, 2003). The authors used the first two levels

of references, the individual and the local, along the two relevant ethical criteria: the benevolence and principled as sources of moral decisions. For instance, the authors proposed that a benevolent individual work climate could encourage individuals working in an organisation to develop a sense of community, meaning at work, and an inner life—all facets of spirituality (Parboteeah & Cullen, 2003). At the local level, the norms, values, and beliefs linked with benevolent-local work climates could also promote the spiritual dimensions within individuals. Egotism was not appropriate for the different spiritual dimensions (Parboteeah & Cullen, 2003; Sheep, 2006). Sheep (2006) disapproved of the neglected cosmopolitan locus of analysis in Parboteeah and Cullen's (2003) study as a theoretical weakness, and highlighted that societal norms and values made a significant contribution to an organisation as an external environment.

According to Gotsis and Kortezi (2008), a main cause for warranting workplace spirituality should be identified as the function of the latter in increasing concerns over organisational ethicality. Gotsis and Kortezi (2008) described workplace spirituality ‘as an experience of transcendence, interconnectedness, personal completeness and joy’ (p. 579). The authors classified the approaches to workplace spirituality as exploratory or consequential. While exploratory frameworks largely target relating workplace spirituality to a particular theoretical paradigm or cultural and religious traditions, consequential models look at the relationship between spirituality in the workplace and different organisational and individual-based outcomes. Jurkiewicz and Giacalone (2004) proposed a value framework consisting of a list of values along a continuum selected from the theoretical structure on workplace spirituality: benevolence, generativity, humanism, integrity, justice, mutuality, receptivity, respect, responsibility, and trust. Gotsis and Kortezi (2008) compared the value framework proposed by Jurkiewicz and Giacalone (2004) to an ethical model including deontological-Kantian, utilitarian, right-based, and virtue ethics. The virtue ethics framework was found to apply to all the spiritual values and to the dimensions of workplace spirituality suggested by Gotsis and Kortezi (2008). The authors added that virtue ethics incorporated character at the individual level as well as wellbeing, which allowed for a non-instrumentalist understanding of the term and its suitability to and performance in organisational backgrounds. Virtue-ethics were neither contextual nor consequential.

McGhee and Grant (2008) explained the process whereby spirituality transformed into ethical behaviour within the organisation, describing the role of spirituality as a ‘regulative ideal’ (p. 64) and as an internalised normative tendency which guided a person’s action and changed his or her motivation in particular ways (Oakley & Cocking, 2001, as cited in McGhee & Grant, 2008). According to McGhee and Grant (2008), as an ideal, spirituality produced an enclosed network of precise moral values that meets a person’s idea of excellence with regard to his or her perception of his or her roles and duties. These values correspond to an internalised inclination to behave in certain ways. The regulative ideal then delivers a standard of enlightened judgment and helps to rule moral choices made in the milieu of daily working practice (McGhee & Grant, 2008). Spiritual people have a regulative ideal generated from spiritual domains such as self-transcendence, interconnectedness, a sense of higher meaning, and a belief in an ultimate concern (McGhee & Grant, 2008). These dimensions can be used to guide a spiritual person in his or her perceptions, motivations, and deeds. Subsequently, the values associated with such dimensions become part of the schema of the spiritual person. Spiritual values are moral values to the degree that they look like the objective moral goods of human nature (McGhee & Grant, 2008). Aristotelian virtue ethics dictate that a virtuous individual perceives that it is valuable, in order to live in a way which is consistent with moral values, and a spiritual person’s mind is similar to that of a virtuous person. Their regulative ideal thus leads an individual to live in keeping with moral values which respect themselves and others (McGhee & Grant, 2008). In the case of the present study, the dimensions of spiritual intelligence can make up a regulative ideal, and thus guide and motivate perceptions and behaviour at work. For instance, a spiritually intelligent individual demonstrates a set of spiritual values, such as empathy, humility, and meaningfulness. Behaviour consistent with moral and spiritual values leads to the acquisition of virtue, and the development of virtue makes one wise in a practical sense (McGhee & Grant, 2008).

3.5 Measures of workplace spirituality

Tombaugh, Mayfield, and Durand (2011) claimed that the acknowledgement and accomplishment of employees’ spiritual needs and values was merely one facet of workplace

spirituality. The authors noted that having spiritual needs and values is passive, while the exercising of one's spirituality is an active quality. Tombaugh et al. (2011) developed a five-item measure of spiritual expression at work (SEW) which gauged the impact individual spirituality had on daily thoughts, behaviours, and social interaction within an organisation. Though the authors overcame the limitation of just measuring the congruence of employees' spirituality with organisational values, their measure was limited as to the number of items included prior to a factor analysis. Tombaugh et al. (2011) subjected only five items to an EFA, and only looked at spiritual expression; they did not consider the ability versus trait aspect of spirituality. In considering spiritual intelligence as an ability, it would be more beneficial to look at the personal abilities of employees in a measure of SQ. Furthermore, the nature of the population should be taken into account, as was done in the construction of the measure of spiritual intelligence, the MSIS-1 developed for the current study.

Piedmont (1999) developed the spiritual transcendence scale (STS), a 24-item measure with three dimensions: universality, prayer fulfilment, and connectedness. The universality dimension was a combination of meaning of life, interconnection of all lives, and a common duty. Prayer fulfilment measured the experienced sentiment of great happiness and contentment which stemmed from prayer. The connectedness dimension gauged the individual responsibility to others such as ancestors, future generations, and commitment to the community. The reliability of the last dimension was 0.65, lower than the minimum of 0.70 suggested by Kline (2000). Piedmont (1999) strived to show the independence of his scale from personality variables such as the Five-Factor Model of Personality. Mohamed, Wisnieski, Askar, and Syed (2004) reported that Piedmont (2000, 1999) and MacDonald (2000) found that spirituality could be a sixth personality factor. Although Piedmont (1999) compiled a scale which theoretically took into consideration both Eastern and Western views, the author overlooked key distinct dimensions related to the spiritual realm of an individual. For instance, in the literature, the quest or presence of meaning was a distinct dimension important in spirituality as well as in an individual's spiritual intelligence, and was therefore included in the scale developed in the present study. Piedmont (1999) found only two items that measured the meaning of life in the universality dimension, and so added observer ratings of spirituality. This was a questionable action, as he measured experiences, feelings, and thoughts

that were all private to an individual. The Assessment of Spirituality and Religious Sentiments (ASPIRES), which originated in the STS, is believed to cover all features of spirituality shared in all religious faiths (Piedmont, 2012). However, the scale was developed for the US population, with most respondents being Caucasian and Christian. Because the concept of spirituality is sensitive and subjective, certain terms are not appropriate to the Mauritian context. Furthermore, organisations were more reluctant to include religion rather than spirituality. As spirituality refers to experience and preference, while spiritual intelligence is an ability, organisations should include a component which provides an avenue for training and developing the ability.

Ashmos and Duchon's (2000) 66-item measure of workplace spirituality measured three main dimensions (conditions for community, meaning at work, and inner life) and four other dimensions (blocks to spirituality, personal responsibility, positive connections with other individuals, and contemplation). Ashmos and Duchon (2000) retained reversed-coded items and items which loaded on two factors, including factors five and seven, which had only two items. These aspects affect the psychometric properties of the scale. More than 70 percent of the participants were female, and the scale was developed in the United States with no reference to the ethnic backgrounds of the participants. All these shortcomings make the measure questionable in terms of its reliability and validity for other populations.

Gupta, Kumar, and Singh (2014) studied workplace spirituality in the insurance sector in India and found a positive correlation between job satisfaction and workplace spirituality. The authors developed a questionnaire for measuring spirituality in the workplace which had dimensions such as meaningful work, sense of community, organisational values, and compassion. Gupta et al. (2014) did not follow strict psychometric rules for the development of a measure, and their initial pool had only 35 items. Furthermore, Gupta et al. (2014) did not differentiate between spiritual values and spirituality in their study. In this era, with diversity in organisations, there is a need for a universally valid measure. A review of other studies on spiritual intelligence assessment revealed that most of them were based on the Western perspective. The MSIS was created to meet this gap in knowledge by taking into consideration both the Eastern and African viewpoints.

3.6 Conclusion

Workplace spirituality is not a new phenomenon. In this chapter, various definitions were proposed for organisational spirituality. The dimensions which reoccur most often are summarised as meaningful work, interconnection, and sense of community. The facilitation of workplace spirituality was viewed in terms of a P-O fit model, concerning the congruence between employees' values and the organisation's vision and mission. The benefits of workplace spirituality were considered at the individual, organisational, and societal level. The positive outcomes of spirituality range from individual satisfaction and positive organisational outcomes to society's trust in the organisation. Ethics and workplace spirituality are similar in many ways, but the latter extends beyond ethics. Several measures were developed to gauge the spirit at work, but many have psychometrics flaws or are inadequate in terms of the dimensions they measure.

Chapter 4: Spirituality and Religion in Mauritius

In this chapter, the focus is on the main religions, cultural practices, and philosophical perspectives in Mauritian society. An overview of these aspects is crucial in understanding both Mauritian society and the motivation for this study. Mauritius, being a ‘rainbow nation’ (Ng Tseung Wong, 2010, p. 634) harbours diverse religious groups and institutions. However, the three core religions in Mauritius are Hinduism, Roman Catholicism, and Islam (Owodally, 2011; Burrin, 2002), and public holidays in Mauritius mostly represent the various festival celebrations of these three religious groups. As Ramadan (2012) wrote, the main religions have a common message and a universal experience: one has to progress towards the horizon to return to the source, which is to ‘be born anew’ (p. 6). Eck (1993, as cited in Rambachan, 2000) distinguished religious diversity from religious pluralism: the former involves various religious institutions living together in a community while ignorant of, apprehensive of, and isolated from each other, while the latter is the antithesis of indifference in that it compels individuals to look for, comprehend, and interact with people of other faiths. The next section describes the main religions, and the following chapter portrays the various ethnic groups in an attempt to situate Mauritian society in terms of religious diversity and pluralism.

4.1 Hinduism

In Mauritius, Hinduism is analogous to a tree. The main religion is the stem, and its several branches characterise the many cultural groups, such as the Hindus, Tamils, Telegus, and Marathis. Each cultural and religious subgroup has its own customs and temples, and uses its own language, literature, and philosophy in prayers and religious practices. For example, the Tamil cultural group performs rituals and prayers in an architecturally complex place of worship known as a *kovil*, which displays sculptures of the different deities in vivid colours. They emphasise extreme penance and rituals. For instance, the day of Cavadee is a dedication to the God Murugan during the months of *Sittirèye* (April and May) and *Tai* (January and February) (Sooriamoorthy, 2013). There is also the *timethy*, a walk on fire, dedicated to the goddesses Mariamen, Kaliamen, and

Draubadai Ammen (Sooriamoorthy, 2013). The Tamil cultural group uses its ancestral language, Tamil, in prayers and cultural activities. Men's cultural dress is known as *vesti*, a traditional South Indian outfit. Women wear churidhars or saris in a different manner as compared to the other cultural groups. Food preparation and ingredients are also different—Tamils favour very spicy food. The Hindus' place of worship is called a *mandir* or a *shivala*, which has simpler architectural design than *kovils*. The main deity worshipped in mandirs is Shiva, represented as Shiva Lingam. In the name of Shiva, for the Mahashivaratri⁷, during the months of February and March, Hindus do a pilgrimage to the sacred lake, Ganga Talao at Grand Bassin. The main deity worshipped in Telegu temples is Sri Venkateshwarya, the son of Shiva. Their temples are architecturally similar to *kovils*. Marathis' temples are architecturally simpler, with the main deity worshipped being Ganesha. The Indo-Mauritians' traditional dresses for men are kurtas or *sherwanis*—long straight dresses with pants—while women wear saris and churidhars.

In this study, participants mentioned their religious affiliations to subgroups within the Hindu community, such as the Sri Sathya Sai Baba, the Mata Amritanandamayi Society, the Rama Krishna Mission, the International Society for Krishna Consciousness (ISKCON), and the Maharishi Mahesh Yogi group, to name a few, the underlying philosophy being that a Hindu has to be guided by a guru or an enlightened person to reach the higher goals of life, such as the liberation from the cycle of life and death. Members of a subgroup gather for regular prayers, spiritual practices, and readings of their sacred books. The commonalities among the subgroups are fasting based on one's birth chart and dedication to a chosen god or goddesses; offerings of vegetarian food to a god and to other people; the practice of religious prayers/meditation at home and in temples; and services to humanity. Similar gods and goddesses can be found in most of the subgroups' places of worship, the key differences being the devotees' preference for a particular god or goddess. Some temples are visited by all Indo-Mauritians, irrespective of their religious subgroup, such as the Kalimaye, which is dedicated to the glory of the Universal Mother. In Mauritius, most religious festival celebrations are carried out nationally to accentuate the unity of the diverse groups and to blur the dividing lines. For example, Diwali, a Hindu celebration of light

⁷ There is no fixed date for the celebration of the Mahashivaratri as it depends on the Hindu calendar.

over darkness and the victory of good over evil, has become a national celebration. Diwali is characterised by the lighting of small lamps (electric lights in modern times), the preparation of various sweets, and sharing with family, friends, and neighbours.

The geneeses of the word *Hindu* were cultural, political, and geographical (BBC, 2009). The term Hindu originated from the river or river complex of the northwest, the Sindhu, which was a Sanskrit term employed by occupants of the area, the Aryans in the second millennium BCE (BBC, 2009; Rambachan, 2000). Following that, travellers and attackers such as the Persians in the sixth century BCE, the Greeks from the fourth century BCE, and the Muslims from the eighth century CE, employed the appellation of the river in their personal vernaculars for the land and its communities (BBC, 2009). The word Hindu was utilised to distinguish adherents of specific rites and culture around the fifteenth and sixteenth centuries (BBC, 2009). The label ‘Hinduism’ is a false notion- the term is the conception of scholars of a certain period, not a name used by the people to whom it was first applied (Sweetman, 2001). Smith (1991) claimed that though there were Hindu people, Hinduism did not exist (as cited in Sweetman, 2001). Stietencron (1997, as cited in Sweetman, 2001) recognised *Vaiṣnavism*, *Śaivism*, and *Śāktism* as religions instead of a combined Hinduism. In the eighteenth century, European Christians viewed India’s diverse religions as heathenism (Sweetman, 2001), which was a comprehensive category until the nineteenth century. The BBC (2009) and Hacker (2006) noted that the word Hinduism appeared in the nineteenth century in the period of British colonialism and the missionary movement. Hinduism, as an Eastern religion with 900 million devotees, is the third-most prevalent religion after Christianity and Islam (BBC, 2009; Sahoo, 2005). Hinduism is thought to stress immanence (Nelson, 2009). It has its origins in the union of two ancient cultures, the Aryans and the people of the Indus Valley, which gave rise to the creation of the Indian civilisation in the second millennium BCE (Pettis, 2010). The merging involved the popularisation of Aryan nature deities such as Agni (fire and bringing sacrifices to the gods), Indra (storms and warriors), Vayu (wind), Ratri (night), and Surya (sun) (Pettis, 2010). In Eastern perspectives such as Hinduism, spatial time was cyclical, and people had to capture and flee from it in spirit, as dictated in the purpose of the Hindu *samsâra* (Ramadan, 2012).

Hinduism encompasses several different perspectives of the world, and posits an ultimate reality composed of Brahman or God, soul(s), and matter/world (*samsâra*) (Sharma, 2007). The purpose of *ishtadeva*, the choice of the individual for a specific form or manifestation of the divine, is to focus that individual's attention in his or her quest for the divine (Rambachan, 2000). For instance, a Hindu could have for *ishtadeva* Lord Krishna or Lord Ganesha, who are believed to guide people towards liberation and to erase all obstacles respectively. A first approach to Hinduism is materialism, which defines reality as matter. Materialism acknowledges consciousness but relegates it to a secondary position (Sharma, 2006). The second approach to Hinduism is dualism, which views both matter and spirit as being of equal significance. Sharma (2006) explained that *Sâṅkhya*, a Hindu school of thought, endorses this point of view. The final prominent approach is spiritualism, which validates consciousness as the 'ultimate reality' (p. 6) and views matter as a consequence of the spirit (Sharma, 2006). The main Hindu scripture or philosophy is the Vedas. The last part of the Vedas, the Vedânta, advocates Brahman as the supreme spiritual reality or *saccidânanda* (Sharma, 2006, p. 7). The two main beliefs about spirituality in Hinduism could be classified as theistic and absolutistic philosophy (Sharma, 2006). Sharma (2007) observed that theistic philosophy emphasises the presence of Brahman with a specific attribute, while absolutistic spirituality, on the other hand, views the 'non-dual Brahman' (Sharma, 2006, p. 7) as not having any attributes. Advaita Vedanta supports the assumption that the essence of a spiritual quest is in the experiential attainment of the undifferentiated reality—that is, Brahman and the Atman (soul) were the same reality (Sharma, 2006). According to the Vedas, the Indian school of thought could be categorised as non-orthodox (*nâstika*) or orthodox (*âstika*), as shown in Table 4.1. All the orthodox views were theistic viewpoints (Sharma, 2007).

Table 4.1

Indian philosophy of spirituality

Non-orthodox	Orthodox	View of Ultimate reality
Lokāyata or Cārvāka	-	Materialism
Buddha	-	
Jaina	-	
	Nyāya	Dualism
	Vaiśeṣika	
	Sāṅkhya	
	Yoga	
	Mīmāṃsā	
	Vedānta	Spiritualism

Adapted from Sharma, Arvind (2006). *A guide to Hindu Spirituality*, Indiana: World Wisdom, Inc., p. 19. Copyright 2006 by World Wisdom Inc. Used with permission.

According to Rambachan (2000), the three main traditions of Hinduism are dualism, qualified non-dualism, and non-dualism. Rambachan (2000) argued that non-dualists view the self (*atman*) as similar to the Absolute, and qualified non-dualists perceive the self as connected to and dependent on the Absolute ‘as part [of the] whole’ (p. 66), whereas dualists perceive the self as completely dissimilar to the Absolute. The philosophy which connects all three schools of thought are self-knowledge and knowledge of the absolute, which are thought to be essential for *moksha* (Rambachan, 2000): the universe is thought to be limitless and the ultimate reality (*brahman*) can neither be described nor defined in the limited language available. The proper understanding of *atman*, the supreme, and the world could ease suffering and bring *moksha* (Rambachan, 2000). Several yoga paths can lead to the liberation of the soul: *jnana* yoga, or the knowledge way; *karma* yoga, or the path of service to others; *bhakti* yoga, which is the route of devotion; and *dhyana* yoga, the path of concentration (Cenkner, 1975).

In Hinduism, the sound AUM (OM) represents the ‘supreme Reality’ (p. 405), the primordial sound, and a symbol of the Higher Power and of all times (Pettis, 2010). The Veda, in Sanskrit *vid*, means ‘to know’. It is comprised of four parts, the *Rig Veda*, the *Sama Veda*, the *Yajur Veda*, and the *Atharva Veda* (Khan, 2012; Pettis, 2010). The Rig Veda is the oldest, and consists of statements praising God. Yajur Veda defines the sacrificial formulae, or *yagna*. The Sama Veda, a collection of verses, depicts religious wisdom and prayers. The Atharva Veda is a condensation of all the verses in poems and prose which concern magic, evil souls, prayer ceremonies, and socio-political laws (Khan, 2012). The four authentic aims of human life, according to Hinduism, are wealth (*artha*), pleasure (*kama*), right duty (*dharma*) and liberation (*moksha*) (Rambachan, 2000). In brief, the pursuit of affluence and hedonism should be guided by *dharma*, which means that the welfare of others should also be considered at the same time. The last goal, considered to be the highest aim of life, brought the individual to reflect on his or her life’s meaning. According to the Hindu philosophy, ignorance (*avidya*) of the nature of the self creates selfish goals which in turn build up certain consequences which the individual must bear in his or her present and future life. The law of karma, that all action has a reaction, is a core belief in Hinduism and underpins the belief in reincarnation (Rambachan, 2000; Viljoen, 2003). Furthermore, Hinduism elaborates a societal caste system consisting of: *Brahmins*, the priests; *Kṣatriyas*, the warriors and monarchs; *Vaiśyas*, the farmers and merchants; and *Śūdras*, the servants (Hacker, 2006).

4.2 Christianity

Mauritians of the Christian faith increased following British colonisation, which introduced the Anglican Church to the country (Burrun, 2002). Many more Christian denominations were then imported to the country, such as the Presbyterian Church, the Adventist Church, the Sino-Mauritian Evangelical Church, and the Chinese Christian Assembly, among others (Burrun, 2002). Many more subgroups have emerged in the last decade. Participants in this study reported being affiliated to groups such as the God Assembly, *Témoins de Jehovah*, *Eglise de Jesus Christ des Saints des Derniers Jours*, *Église Chrétienne*, and the Full Gospel Church of

God, to name a few. Christianity is the leading English religious tradition (Bates, 1994). Christianity has over two billion followers around the world (BBC, 2011), and is often referred to as a ‘religion of grace’ (Howard, 2013, p. 173). Christianity underlines transcendence and the immanence which is the Higher Self as simultaneously beyond and yet part of daily life (Nelson, 2009). Christian values call for and promote tolerance, altruism, brotherhood, and hope, and accept other cultures and customs (Andreassen, 2014). Brown (1992) observed that original sin is highly emphasised in some Christian sects and denominations. Christianity and its various denominations, such as the Roman Catholic Church and Protestant sects such as the Anglican Church are based on a belief in Jesus as the Messiah or Saviour (BBC, 2011; Miller, 2003). They believe that Jesus Christ was born to the Virgin Mary and that Joseph was his father on earth. Christians have faith in Jesus as the Son of God on earth to save humankind from its sins. Christians believe in one God, the Creator, who has three components: the Father, the Son, and the Holy Spirit, which comprise the trinity (BBC, 2011; Miller, 2003). The sacred text is the Bible, comprising the Old Testament and the New Testament. Miller (2003) held that God’s judgement of a person’s life determines whether he or she goes to heaven or to hell upon his or her death. Protestant Christians believe in justification by faith alone—that is, through their trust in Jesus as the Son of God, and in his death on the Cross and resurrection, they can have a true connection with God, whose clemency was secured forever through the death of Jesus Christ (BBC, 2011). The act of baptism symbolises an external sign of dedication to the teachings of Jesus.

4.2.1 The Roman Catholic Church

The Catholic Church is the most ancient institution in the West, and believes in Jesus the Saviour and in the Pope as successor to Saint Peter, whom Christ appointed as the first leader of His church (BBC, 2011). The Catholic Church has an important place in the lives of converted Mauritians. In the Catholic Church, only male celibate priests can be ordained, as Jesus is the example they follow. It is a pyramidal structure with the Pope at the summit, followed by cardinals, archbishops, bishops, priests, deacons, and laity (BBC, 2011). The distinctive elements of

Catholicism are the adoration of saints, the use of a crucifix, and the practice of reciting prayers using rosary beads (ReligionFacts, 2015). Jungers and Gregoire's (2010) qualitative study on Creoles observed the swing from a discriminatory Church approach which transformed the marginalisation and oppression of the Creoles to a more inclusive and healthy relationship with the Creole community. Mauritian Creoles practice the Catholic sacraments, such as baptism, first communion, and confirmation. During the sacred month of fasting, Christians visit churches all over Mauritius for the 'Quarante-Heures'. The Sunday morning prayer is also very important for Christian people.

4.2.2 The development of African-centred spirituality

The Creole-Mauritians are of African descent. This rich heritage still influences their current spirituality. According to Wheeler et al. (2002), spirituality plays a central role in helping to surmount concerns of negative self-esteem among Africans and the African diaspora. The degrading experience of slavery and racism affected the self-esteem and self-identity of the Black people. Wheeler et al. (2002) also mentioned that Africans were thought to suffer from 'drapetomania', which was defined as a mental illness that caused Black slaves to run away from captivity. Black Africans were often treated as children, as this was thought to be 'correct'. Africans were further oppressed in the scientific arena in the systematic measurement of blackness in terms of their hair texture, degrees of skin colour, the thickness of their lips, and the form of their skulls, which are all indicators of race (García Coll, et al. 1996; Gould, 1993, as cited in Wheeler et al., 2002). African descent calls for a supernatural power to reinforce positive self-concepts (Wheeler et al., 2002). Wheeler et al. summarised African rituals practiced in various countries, such as Haiti's *voudoun* spirituality; the *candomblé* in Brazil; and Black Church in North America. The notable similarities in all these African rites are rhythmic drumming, dancing, the practice of trance as cleansing, and the call-response that inspires active membership in worship. Spirituality is not limited to rituals or any form of adoration, but is expressed differently in all people (Adyanga, 2011). African spirituality highlights the connections of mind, body, and soul

(Dei, 2002). Native African people view humans as having an aim and mission to be completed on earth, and a spiritual crisis is expected to happen if a new-born is not blessed by togetherness (Some, 1999).

According to Manyimo (2011), Afrocentricity is a perspective which puts forth and validates the culture, history, and spirituality of those of African descent and thus gives them an authentic self. Africans are social beings who cannot be split from the community to which they adhere (Hanks, 2008). *Ubuntu*, or *menslikheid* in Afrikaans, is a Zulu word for ‘humanness’ or ‘personhood’, and is the essence of African philosophy (Broodryk, 2006, pp. 2–3; Hanks, 2008, p. 127; Battle, 2009, p. 1; Bennett, 2011, p. 30; Magesa, 2013, p. 13). Ubuntu originates from a linguistic category of Sub-Saharan languages identified as Bantu, and the *-ntu* in Bantu and Ubuntu means ‘human’ (Battle, 2009, p. 2). Ubuntu is two words: *ubu-*, which suggests the notion of being, that is in state of becoming *-ntu* (Ramos, 2003a; 2003b). Ubuntu accentuates the communal and spiritual element of human identity (Battle, 2009; Theron, Theron & Malindi, 2013). Human accomplishment is found in community through cooperation and respect towards elders (Magesa, 2013). As Boswell (2006) wrote, the Creole-Mauritians lived in communities mostly in regions such as Roche Bois, River Camp, Le Morne, and Chamarel. It is a key principle of the African perspective which kept communities united (Hanks, 2008). Ubuntu means that each member of a society has a ‘symbiotic and cooperative’ exchange which is not individual-focussed, unlike the Western view (Battle, 2009, p. 2). Tutu (1995, as cited in Roux, 2006, p. 158) described the African worldview as one which discards widespread separations between the holy and the worldly, the substantial, and the mystical, as all life is religious and sanctified. According to some authors (Broodryk, 2002, as cited in Broodryk, 2006; Hanks, 2008), Ubuntu is centred on an inexhaustive list of values such as deep humaneness, kind-heartedness, patience, understanding, interdependence, sharing, brotherhood, respect, and consideration, which are prerequisites for a favourable community life.

Afrocentricity is a lens through which African people can truly ‘reconnect with dignity’ (p. 172) to their past, their communities, and their true self, which is the onset of ‘healing through spirituality’ (Brunal, 2011). Hanks (2008) explained that the African self is an ‘extended self’ (p. 126) which contains the whole community and the ancestors. According to Mazama (2002, as cited

in Jaggire, 2011), one attribute of the African struggle is to regain confidence in spirituality through Afrocentricity. African spirituality stresses African mysticism and the union of all beings in creation (Roux, 2006). Lewis, Hankin, Reynolds, and Ogedegbe (2007) reported a focus-group study involving 12 African-Americans and their definitions of spirituality, which were summarised in three components: ‘love in action, relationships and connections, and unconditional love’ (p. 18). Adyanga’s (2011) recollection of memories of Uganda’s war emphasised the importance and power of dreams for people of African descent, which is a means by which the ancestors’ spirits communicate and guide people in their daily lives. Traditional healers master the realm of the spirits (Adyanga, 2011), who dwell in the otherworld and are known as *Kontombili* (Somé, 1995). Dreams have also an essential place in the lives of Mauritian people, irrespective of their religious background. When slaves were brought to Mauritius they were separated, and thus the sense of community, the ‘collective and unified existence’ (p. 5), was annihilated by colonialism (Dei, 2002).

4.3 Islam

In Mauritius, there are many subgroups within the Muslim community. In the study, participants mentioned affiliations to religious groups such as Ahmadiyya (a Shi‘a community), Hizbullah (radical group), Mohammedian, Tawheed (reformed movement), and Sufi Muriddiyya. Each subgroup has its own mosques. Azād (1964) emphasised the Qur'an's verses which highlight the diversity and unity of the fundamental nature of religion (as cited in Vahiduddin, 1990). Muslim Mauritians initially lived in areas on the periphery of the capital, such as Plaine Verte or Vallée des Prêtres. Muslim Mauritians are mostly Sunni, but a minority formed a Shi‘a community, a distinction which is explained in the following paragraphs. The main food associated with this community is biryani, a dish of seasoned rice; alouda, a milk drink; and vermicelli, a special dessert. Muslim Mauritians have many religious practices, such as the *Isra and Mi'raj* and the *Shab-e-barat* (Burrun, 2002). The *Isra and Mi'raj* is the Prophet Muhammad's last nocturnal spiritual trip. Believers are recommended to conduct prayers such as the *Nawafils* (p. 278) and *Salat-ul-Tasbih* (p. 278) and to recite the *Shahada* (p. 278) to commemorate this day (Burrun,

2002). The Shab-e-baraat is a celebration to honour deceased relatives which occurs on the fifteenth night of the eighth lunar month. Muslim Mauritians visit their late parents at the cemetery, the *Kabrastan* (Burrun, 2002, p. 278). One of the pillars of Islam is the daily fast during the month Ramadan which culminates with the celebration known as *Eid-ul-Fitr*. This is a day of celebration, sharing, and family get-togethers for Muslim Mauritians, and is also celebrated at the national level as a public holiday.

Islam, the world's second largest religion, is a monotheistic religion and is one of the 'Abrahamic family' (Marranci, 2010, p. 365), which means that Muslims, like Christians and Jews, believe in the same God (see also Esposito, 1999, as cited in Ho & Ho, 2007). It is a 'prescriptive religion' (p. 10) as it compels its adherents to follow a universal moral law and to shun those things universally recognised as prohibited (Vahiduddin, 1990). Howard (2013) called it a 'religion of law' (p. 173). Islam is the belief that Muhammad is the Messenger of the one God (Hall & Livingston, 2006). The persecution of an influential tribe, the Quraysh, led to the Great Emigration, the departure of Muhammad and all Muslims from Mecca to Yathrib, which was termed the *Hijra* (Miller, 2003, Marranci, 2010). This created the 'constitution of Medina' (Watt 1956, as cited in Marranci, 2010, p. 365), which implied that the politics and civilisation of Medina was under Muhammad's leadership (Howard, 2013). Divine revelation is fundamental to Islam and, similar to Christianity, it is embodied in a written 'sacred' (p. 366) text known as the Qur'an, which Allah, the only God, disclosed to Muhammad (c. 570–632) (Marranci, 2010; see also Hall & Livingston, 2006). Khan (2012) further explained that archangel Gabriel was the messenger of God, through which the message was orally delivered to his Prophet over the course of 23 years. Khan (2012) noted that the holy Qur'an was revealed in Saudi Arabia to Arabs. Islam is believed to stress transcendence (Nelson, 2009). Islam in Arabic is a noun which means 'to surrender oneself', or obedience to the Almighty as revealed through the message and life of his Prophet Muhammad (Khan, 2012; Ruthven, 2012). For believers, the prophet is a flawless example of the definition of a Muslim (Marranci, 2010). Islam is related to the word *salaam*, which means 'peace' (Ruthven, 2012, p. 2). A Muslim is a person who surrenders himself or herself (Ruthven, 2012, pp. 6–7). Ruthven (2012) noted that being a Muslim may simply indicate one's ethnicity, without the religious beliefs and practices. According to Kamble, Watson, Marigoudar, and Chen (2014),

studies have shown a relationship between Muslim religious commitments and mental wellbeing in Iran and Pakistan.

The conflict over the successor of Prophet Muhammad as a leader or Caliph (*khalīfa*) split the Muslim community (Marranci, 2010). Caliphs were the representatives of heavenly authority on earth and were referred to *khalīfat Allāh* (Howard, 2013). After the Prophet's death, the community was divided into two groups: the Shi'a and the Sunni. The Shi'a represented the kinship of Muhammad, namely his son-in-law Alī, who claimed direct succession. The majority group, the Sunni, rejected this claim as going against the *Sunna* and Muhammad's preference not to name his successor among his own family. This disagreement led to a great deal of bloodshed (Marranci, 2010). There were 11 Shi'I imams; the twelfth is thought to have hidden himself and will return on the Judgement Day. According to Marranci (2010), Shi'a Islam developed a separate Islamic school of jurisprudence founded on the teaching of Jafar al-Sadiq, which emphasises human reasoning. Islamic scholars have split the Sunna—the life and teachings of the Prophet—in two core collections: the *sīrahs* and the *hadīths*. The *sīrahs* are narratives about the life and accomplishments of the Prophet, and the *hadīths* are accounts of what the Prophet said or did in certain circumstances. The *hadīths* have multiplied irrepressibly and have often been falsified by Muslims to justify their deeds. The spreads of sects in Islam have created several movements, described as 'diversity...within their own household' (Vahiduddin, 1990, p. 5).

According to Khan (2012), Allah commanded prayer, or *namaz*, and the Prophet explained and taught it to the masses. Islamic communities value the memorisation of texts and oral recitation, known as the *tawātur* principle (Howard, 2013). There are five fundamental tenets of Islam. The first one is the *Shahada*, the profession of faith, which is said as follows 'There is no God but Allah, and Muhammad is His Prophet' (Pedersen, Draguns, Lonner & Trimble, 2008, as cited in Shanto, 2010, p. 18). The second tenet is *Siyam*, which is abstaining from food, drink, and sensual pleasures during the holy month of Ramadan. The third one is *Salah*, that is, namaz has to be performed five times per day. The fourth tenet is *Zakah*, a tax given to help the poor economically. The last one is *Haj*, which is a pilgrimage to Mecca. Burrun (2002) mentioned that these five tenets govern Islam, irrespective of its subgroups.

Mauritians of Muslim faith believe in angels and bad spirits; in messengers; in the day of resurrection; and in the fate which Allah has decided for each person. Muslim Mauritians believe in the Prophet Mohammed as the last messenger. They also believe in the four sacred books, namely the *Torah* (Moses' Law), the *Zabur* (the Psalms of David), the *Injil* (the teachings of Jesus), and the *Quran* (Burrun, 2002). According to Hall and Livingston (2006), the Quran describes core spiritual values which guide family life, such as respect for elders and parents, humility, parity of all human beings, and hospitality and charity, to name a few. Ai et al. (2014) observed that an afterlife was conditional upon submission to God as a medium of salvation. It is 'divine judgement' (p. 318) which decides whether a person will be punished for his or her deeds and/or beliefs or will reach heaven.

4.4 Conclusion

The three main religions in Mauritius are Hinduism, Christianity, and Islam, which were imported from India and Europe. Ethnicity is usually associated with religions. Thus, the main ethnic groups are the Hindu Mauritians, the Creole Mauritians, and the Muslim Mauritians. It would be deceptive to believe that each of these groups is homogenous. As explained above, there are definite differences within them which add to the diversity of the population in terms of religion, spirituality, and cultural inputs and practices. Each culture and subculture forms a part of the rich tapestry of the Mauritian nation.

Chapter 5: The Upsurge of Interest in Ethnicity in Psychology

This chapter starts with the origins of ethnicity, and a few authors will be cited for the way they define ethnicity. In general, the definition of ethnicity is determined by its objective-subjective duality. From the objective stance, ethnicity is thought to be shaped by race, culture, or religion. From a subjective view, ethnic membership is developed from the psychosocial need for group formation. It is important to draw a line between ethnicity and race. Ethnicity is different from race. While the latter is biological, the former is more cultural. For a better understanding, the theories of ethnicity development are also covered in this unit. This thesis is based on the constructivist perspective, which is founded on the belief that an ethnic identity is socially built through sociocultural and historical processes. It is important to explore the identity development theories before expanding on ethnic identity development. The rich tapestry of ethnicity in Mauritius has a history which is important to elaborate on. The main local ethnic identities are also addressed, such as the Creole Mauritians, the Hindu Mauritians, and the Muslim Mauritians. This chapter ends with a brief discussion on the adoption of multiculturalism versus interculturalism and on the situation in Mauritius.

5.1 A broad view of ethnicity

Many factors influence a person's ethnicity, such as religion, social class, oppression, racism, and gender (McGoldrick, Giordano & Garcia-Preto, 2005). It is a vital psychological need for human beings to feel a 'sense of belonging, of historical continuity' (McGoldrick et al., 2005, p. 2). According to Chapman et al. (1989), in the 1950s, ethnicity meant the core of an ethnic group or it implied 'belonging to an ethnic community or group' (as cited in Hutchinson & Smith, 1996, p. 4). Ethnicity also referred to the study of categorizing other people who were minorities (Eriksen, 1993 as cited in Hutchinson & Smith, 1996). In 1972, the term was entered into the Oxford English Dictionary (Eriksen, 2010). However, Hutchinson and Smith (1996) argued that ethnicity was first included in the Oxford English Dictionary in 1953 (as cited in Baumann, 2004; see also Hutchinson & Smith, 1996). The word 'ethnic', an older term, is derived from the ancient Greek expression *ethnos*, taken from *ethnikos* (Eriksen, 2010, p. 4), which was used to mean

heathen or pagan, that is, non-Christians or non-Jews between 1350s and 1850s. Its Greek origins dated back to Homer's time (750–650 BC), when *ethnos* (p. 86) was an umbrella term applied to undifferentiated groups such as warriors, bees, and birds (meaning literally ““thong” or “swarm””) (Gabbert, 2006, p. 86). Aristotle (384–322 BC) used the term ‘ethnic’ (Gabbert, 2006, p. 86) to refer to alien or savage groups who were not part of Hellenic civilisation.

‘Ethnic’ (p. 16) denotes others, that which is not ‘us’ (Just, 1989; Oxford University Press 1993; Petersen, 1981, as cited Cornell & Hartmann, 2007, p. 16). The term is widely used in many instances (Hutchinson & Smith, 1996). The connotations of the word can be summarised as other groups of people or animals who share biological and cultural features and who act and stick together. Eriksen (2010) remarked that the expression ‘ethnics’ (p. 4) was used to refer to other people considered substandard to the dominant group. Hutchinson and Smith (1996) even pointed out the fact that the word ‘nation’ (p. 5) was reserved for the English and American- the White Anglo-Saxon Protestants (the dominant group), while the term ‘ethnic’ (p. 5) was used for immigrants. The sociological theorist Weber (1968, as cited in Cornell & Hartmann, 2007, p. 17) defined ethnic groups as ‘human groups that entertain a subjective belief in their common descent because of similarities of physical type or of customs or both, or because of memories of colonisation and migraion’. Barth (1969, as cited in Gabbert, 2006, p. 88) described ethnicity as a way of social categorisation in terms of ‘origin and background’. Berreman (1972, 1981, as cited in Baumann, 2004) referred to ethnicity as a system of social stratification comprising race, class, kinship, age, estate, caste, and gender.

5.1.1 Current definitions of ethnicity

The definition of ethnicity is influenced by the objective-subjective dichotomy. The objective aspect of ethnicity relates to one’s ‘character, quality, or condition’ (Burgess, 1978, p. 268). Ethnicity is believed to arise from religion, race, nationality, and geographical location (Greesley, 1974, as cited in Burgess, 1978). On the other hand, the subjective view highlights the psychosocial aspect of ethnicity. Subjective proponents advocate that group formation is linked to the need for categorisation founded on ethnic identity. It is a ‘consciousness of belonging’

(Burgess, 1978, p. 270). The debate over the subjective and the objective definitions relates to the debate on the constructed and the ascribed ethnic identity. Not all individuals identify with an ethnic group or to the identity society assigns him or her. This thesis looked at the degree of ethnic identification along two dimensions such as the degree of exploration and commitment. Barth (1969) contended that ethnicity was not about common traits, but refers to the practices of sorting and cataloguing done by the self or by others (Brubaker, Loveman & Stamatov, 2004). Brubaker et al. (2004) pointed at the different levels of ethnic sorting (individual, interactional, and institutional), which can also be official and unofficial. Ethnic identity is a felt and subjective process. Jones (1998, as cited in Johannesen, 2004) defined ethnicity as ‘culturally ascribed identity groups’ (p. 162), founded on the manifestation of an existing or supposed common culture and shared descent. Hutchinson and Smith (1996, as cited in Baumann, 2004) proposed six features that define an ethnic group. These are a common proper name, a myth of shared ancestry, common historical memories, one or more aspects of common culture (such as religion or language), a connection with a homeland, and an impression of solidarity. Ethnicity is ‘a group’s commonality of ancestry and history, through which people have evolved shared values and customs over centuries’ (McGoldrick et al., 2005, p. 2). It is the perception of shared origins, past memories, and individual ties (Chazan et al., 1992, as cited in Hameso, 2001). It is founded on joint memories of past experience and similar ambitions, principles, norms, and prospects. Ethnicity is a blend of race, religion, and cultural history (McGoldrick et al., 2005). In Weber’s (1968) definition, the notion of a ‘shared culture’ (p. 17) is retained, and thus an ethnic group is a group of people who are distinguished mainly by common culture, typically including language, religion, or other patterns of behaviour and belief (Cornell & Hartmann, 2007; see also Chávez & Guido-DíBrito, 1999). Gabbert (2006) viewed ethnicity as a particular form of social demarcation where individuals apply cultural or phenotypic markers to differentiate themselves from others. Fenton (2010) defined ethnicity, based on descent and culture, as ‘social identities’ (p. 3) socially constructed and socially mobilised. Fenton (2010) observed that ethnicity is not just about sharing a common culture or ancestry, but people think and elaborate upon these notions to form communities based on such features. Jaspal and Cinnirella (2012) noted that ethnicity is a social construction based on beliefs of common descent which have to be validated by others in the group.

5.1.2 Distinctions between ethnicity and race

Many authors have advocated for more transparency and accuracy in the application of the terms race and ethnicity in scientific publications (Sankar, Cho & Mountain, 2007). The term race was first used between the thirteenth and fifteenth centuries, with an initial connotation of pedigree of noble families (Gabbert, 2006). Race was also associated with ‘people of land’ (Gabbert, 2006, p. 86) and, by the end of the eighteenth century, the term had come to mean the division of humans into categories. According to Baumann (2004), race is a ‘birth-ascribed status’ (p. 12) defined by physical, visible, and cultural attributes as viewed by outside groups. Ethnicity, on the other hand, though a birth-ascribed status, is only defined by cultural features. Furthermore, Baumann (2004) warned that when outside groups define ethnicity, it can be over-generalised, biased, and stereotyped. The view that race is biological while ethnicity is cultural was widespread in the 1920s. Wacquant (1997) affirmed that due to the weak support for the biological aspects of race, it was redefined as a way of separating and ranking people according to chosen embodied attributes so as to subordinate, exclude, and take advantage of them (as cited in Brubaker et al., 2004). Fenton (2010) proposed that race denotes ‘descent and culture communities’, although he added that native groups are examples of divisions of human race, and that he felt that race stood for physical or observable differences as the ‘primary marker of difference and inequality’ (p. 22). Ethnic groups, on the other hand, represent ‘descent and culture communities’ (Fenton, 2010, p. 22). Fenton (2010) also noted that first, the categories are subsets within a nation, second, the difference among groups is based on cultures, and third, ethnic groups refer to minority groups. Race is also defined as a construct that implies and typifies social conflicts and interests by referring to various sorts of human bodies (Omi & Winant, 1994). The definition is coloured by its volatile nature, political influence, and the loaded social significance of race.

5.2 The foundations of ethnicity and its theoretical development

The bulk of information on ethnicity cuts across various disciplines (Jaspal & Cinnirella, 2012). Levine (1999) denounced the anthropologists’ attitude towards ethnicity. They contended

that ethnicity is ‘invented’ and needs to be ‘decentre[d]’ (Hanson, 1989, as cited in Levine, 1999, p. 165). Ethnicity is a complex construct and, like other concepts such as marriage and kinship, it is superfluous; thus scholars are avoiding this subject and moving to other pertinent issues, a change which D’Andrade (1995) called ‘agenda-hopping’ (as cited in Levine, 1999, p. 165). According to Levine (1999), ethnicity has three main components: social, cultural, and psychological. However, anthropologists’ perspectives have been flawed due to their neglect of the psychological aspect—there is a meeting point with the ‘mind, society, and culture’ (Valera, 1991, as cited in Levine, 1999, p. 166). Although the propensity is towards an ethnicity which is constructed, the lens through which researchers look at the subject will influence their judgements.

The origins of ethnicity are related to both rational and non-rational debates. Burgess (1978) touches on the non-rational views which depict ethnicity as natural, inherited, and ‘primordial, innate...“instinctive”’ (p. 266). In simple words, ethnicity is in the blood ties of the people. Shils (1957, as cited in Burgess, 1978) talked about the involuntary ‘givens’ (p. 266) of society. Rational views, on the other hand, portray ethnicity as more voluntary, practical, and adaptable to situations or events. The notion that social pressures bring people together to form allegiances for common gain is prominent (Burgess, 1978). Marxists and liberals had convergent ideas about the dissolution of ethnic groups during the process of industrialisation and mechanisation (Seol, 2008). While Marxists viewed ethnic adherences as ‘archaic, ephemeral’, and typical of ‘false consciousness’, and felt that they would end when people acknowledge their common class interest, liberals contended that ethnic groups are ‘anachronistic’ (Seol, 2008, p. 334) and would be gradually weakened by more rational trends of modernisation. The reasons for the continued importance or revival of ethnicity can be explained as a primordial predisposition and/or circumstantial requirement.

5.2.1 Assimilation theory

Between the 1850s and early 1900s, race and ethnicity were blurrily defined and considered as biological and fixed (Cornell & Hartmann, 2007). The belief of a superior gene dominated the literature (Cornell & Hartmann, 2007). Cornell and Hartmann (2007) argued that Boas (1940) dismantled these theories through his research on biological inheritance and intelligence of

immigrants to the United States. The assimilation theory was based on the principle that ethnic differences are based on culture rather than biology, and is thus malleable and fluid. This theory was popular in the United States from the 1920s to the 1960s (Anderson, 2001). It is ‘a process of interpenetration and fusion’ whereby individuals acquire the recollections, feelings, and mind set of other groups (Park & Burgess, 1969, as cited in Alba & Nee, 1997, p. 828). Assimilation is founded on Sandberg’s straight-line theory and on the melting pot theory, which posit the blending of disparate ethnic groups into one major group (Gans, 1979). Park (1930) defined the process of social assimilation as one in which groups with different racial origins and cultural traditions in a shared territory achieve a ‘cultural solidarity’ (p. 828), which is enough to maintain a continued national existence (Alba & Nee, 1997). Assimilation theory assumes that ethnicity is a cultural experience which is variable and changeable, particularly for immigrants. Assimilation is depicted as a process during which the individual’s cultural characteristics and ethnic identity are moulded and changed. According to Park (1930), assimilation forms part of the ‘race-relations cycle’ (as cited in Alba & Nee, 1997, p. 828; see also Omi & Winant, 1994). Park (1930) proposed the cycle as a means of examining group relations and measuring a minority group’s evolution along a predetermined continuum (as cited in Omi & Winant, 1994). It starts with initial contact among the diverse groups in which a feeling of competition is aroused to gain power over the other, but the resulting outcome is accommodation, understanding, and assimilation.

Alba and Nee (1997) asserted that the assimilation concept was clarified by Gordon (1964), who portrayed it as a multidimensional construct. Thus, according to Gordon (1964, as cited in Williams & Ortega, 1990), the seven types of assimilations are: cultural/behavioural (acculturation), structural (inclusion in associations and organisations of host society), marital (tendency towards mixed marriage), identificational (a feeling of peoplehood), attitude-receptional (non-existence of prejudicial attitude), behaviour-receptional (no discriminatory acts), and civic (lack of value and power conflict). The paradigm suggested by Gordon (1964, as cited in Williams & Ortega, 1990) is based on the assumption of an ‘unbalanced model’ (p. 699) premised on the idea that groups are totally soaked up by the core society. Acculturation is the minority’s group espousal of the cultural values of the majority group (Alba & Nee, 1997). Fishman (1961) mentioned that the ‘core culture’ (p. 72) was taken from White Protestant Americans (WPA) (as cited in Gordon, 1964). While structural assimilation was defined as the admission of the minority

group into the social circles, associations, and institutions of the host society at the primary group level, identificational assimilation was viewed as a growing sense of individuality founded totally on the welcoming country (Alba & Nee, 1997). It pertains to the development of a national identity at the cost of an ethnic identity. Critics of the assimilation theory view it as deterministic, unidirectional, and not generalizable to other groups or to other nations outside the United States (Anderson, 2001). Gordon's (1964) theory also is depicted as stagnant and too homogeneous (Alba & Nee, 1997).

5.2.2 Primordialism

Primordialism is a 'commonsensical assumption' (Chandra, 2001, p. 7) of ethnic identity. The 'givens' (p. 266) of human existence, which are kin, blood ties, speech, and traditions, are deeply rooted and produce a primordial attachment to ethnicity (Burgess, 1978). The primordial view claims that ties are cemented by emotional attachment and solidarity (Seol, 2008). Shils (1957) argued that society is not merely a political and impersonal organisation but an association held together by 'personal attachments...ties of blood...[and] moral obligations' (cited in Seol 2008, p. 336). Shils' notion of primordial attachments goes beyond ethnicity to encompass territory, symbols, religion, and ideologies. However, he failed to explain how ethnicity is constructed or transformed in socio-cultural and historical contexts. Within the primordialist structure, there is the culturalist view that defines ethnicity along cultural lines—that is, the origins of ethnicity lie in a common culture (Yang, 2000). Geertz (1963, as cited in Anderson, 2001) included race, region, and religion in the list of ideas which crystallise primordial sentiments. Geertz reviewed Shils' thought on primordial attachments in national political development (Seol, 2008). According to Geertz (1963, as cited in Seol, 2008), primordial ties stem from the 'givens' (p. 337) of social existence; from the religion we are brought up to believe in; from the language or dialect we speak; and from the social practices we indulge in. Geertz (1973) proposed that humans have one ethnic identity, which is fixed in the present and future moment (as cited in Chandra, 2001). Although one's ethnic identity may have been 'assumed' in the past, once it is achieved it becomes permanent (Chandra, 2001, p. 7). Eller and Coughlan (1993) unravelled the concept of primordialism along three lines: the naturalness of primordial identities, the

overpowering force of such attachments, and the emotional component of such identities (as cited in Anderson, 2001).

Pursuing Shils' idea, Isaacs (1975, as cited in Seol, 2008) suggested a 'basic group identity' (p. 337) which an individual is born with or acquires at birth and which differs from his or her other identities. This basic identity includes the person's sense of belonging and his or her level of self-esteem (Burgess, 1978; Seol, 2008). Ethnicity is an ascribed status which is fixed on an ancestral basis (Yang, 2000). The sociobiological viewpoint stresses a 'sociobiological factor' (Van den Berghe, 1981, as cited in Yang, 2000, p. 42), which is kinship in shaping ethnicity. According to this perspective, the perennial nature of ethnicity lies in kinship or ancestral connections. Gil-White's (1999) field work with participants in Mongolia found adherence to a mostly primordialist ethnic transmission and acquisition model (ETAM) whereby the father's ethnicity determines the child's ethnic status. The sociobiological standpoints have been criticised for their contentions that an individual's ethnicity is biologically determined, that family ties are characterised as coercive and ineffable, and that one's birth country directs one's behaviour (Grosby, 1994, as cited in Seol, 2008). The critics of primordialism termed the theory as deterministic, descriptive, and circular (Cohen, 1974, as cited in Seol, 2008). Primordial attachments are viewed as coercive; people are thus just passive agents and there is no option for individual sentiments.

5.2.3 Circumstantialism

The circumstantialist approach is taken from the instrumentalist notion of material interest, but adds the question of when and why certain conditions impact ethnic identification, which pure instrumentalists do not address (Hempel, 2004). According to this approach, sociocultural and political circumstances shape people's interest in manifesting their ethnicity. People make rational choices about their ethnic statuses depending upon the circumstances of the time (Gil-White, 1999). Hempel's (2004) study of the Mauritian population found little evidence of a link between economic instrumentalism and ethnic identity. This thesis recognises the importance of viewing ethnicity as both related to the objective aspect (i.e. religion) and subjective conditions. This also

justified the use of the ethnic identity measure, which embraces a more constructivist style in acknowledging the historical and cultural aspects of ethnic identification.

Cornell and Hartman (2007) compared and contrasted primordialism with circumstantialism. Primordialism's rationale for group formation focusses on blood or family relationships and cultural connections embedded in circumstances at birth. In contrast, circumstantialism's rationale for group formation is either utility, such as access to political power, financial resources, or position, or organisational experience. A primordial model views the orientation of ethnic and racial identities as geared towards local community interests, whereas a circumstantial model views it as directed toward political, monetary, and status interests. Cornell and Hartman (2007) also noted that the main explanatory variables for primordialism are nature, biology, and socialisation, while those of circumstantialism are contexts, history, and structured inequality. The perennial debate has been between, on one hand, an inherent deeply-rooted and pre-set identity and, on the other, a short-term, instrumental, convenient, and fluctuating identity dependent upon situations. The contrast is between a model which depicts ethnicity as 'fixed and unchanging' in history, unaffected by situations, and one that defines ethnicity as 'fluid and contingent' (Cornell & Hartman, 2007, p. 70) and a product of history and circumstance. Cornell and Hartman (2007) also observed that primordialism views ethnicity/race as above class interests and can even deter such concerns. Circumstantialism, in contrast, tend to serve class interests. Whereas the primordial model has an independent function as social scientific variable, the circumstantial model has a dependent one.

5.2.4 Instrumentalism

The instrumentalist approach to ethnicity, prevalent in most schools of thought, means that an individual makes a conscious decision to be a member of an ethnic group in order to access the net benefits (Hempel, 2004). As mentioned by Cornell and Hartmann (2007), instrumentalism is the term used to highlight the pivotal role of utility in circumstantialism. The notion that ethnicity is 'circumstantially constructed' (Seol, 2008, p. 345) is present both in this viewpoint and in the constructive lens. However, prior to the rise of instrumentalist thought, there was a widespread belief that industrialisation would bring people from diverse cultures to mingle, which would

weaken ethnic attachment (Hempel, 2004). Instead, modernisation has strengthened the significance of ethnic division in face of the growing competition for power, economic advantage, or other benefits (Hempel, 2004; Seol, 2008).

Instrumentalists view ethnic groups as ‘interest groups’ (p. 345) built for individual benefit; in certain situations they can also prioritise the collective good over personal benefit (Balcha, 2008, as cited in Seol, 2008). According to Yancey, Eugene, and Richard (1976), the manifestation of ethnicity is conditional upon the social and cultural state of affairs in the country (as cited in Seol, 2008). In other words, it varies according to group interests. Previous studies in the United States found that migrant groups tend to emphasise their ethnic background to enhance their socioeconomic and political power (Bernard, 1971, as cited in Seol, 2008). The usefulness of ethnicity is the reason for its existence and persistence (Yang, 2000). The most extreme form of instrumentalism views ethnicity as determined by interests which result in an ephemeral ethnic affiliation (Yang, 2000). However, Bell (1975) argued that interest can be associated with affective ties (as cited in Yang, 2000). Furthermore, the rational choice theory proposes that people choose an ethnic group over another group for the benefits they gain and do not associate with other groups for the disadvantages it can bring forth (Yang, 2000). However, its limitations are obvious. For example, some people cannot reject their ethnic background, because it is defined by others. Furthermore, the idea that people make egotistic, logical, and money-orientated choices is overstated: Some individuals’ choices can be more symbolic and not selfish (Gans, 1979, as cited in Yang, 2000).

5.2.5 Constructionism

A more comprehensive approach articulated in the 1970s is the constructivist perspective, which sees ethnic identities as ‘socially constructed through cultural, historical, and/or political processes’ (Hempel, 2004, p. 256). The constructive stance advocates a definition of ethnicity based on a person’s subjective beliefs, perceptions, understanding, and identification (Brubaker et al., 2004). According to Hempel (2004), there are two types of constructivist approaches: the intersubjective and the elite model. The former proposes that the active construction of an identity occurs in relation with the environment. The individual is responsible for constructing his identity,

although there are external pressures influencing the process. Patterson (1974) highlighted that people make strategic choices for individual progress (as cited in Burgess, 1978). On the other hand, Patterson (1974) also argued that politics and economic power manipulate the retention and construction of ethnic identity and ethnic boundaries. Burgess (1978) portrayed ethnicity as ‘voluntary, functional, pragmatic, situational’ (p. 267), and argued that it is used by particular groups to create mobilisation for their advancement. Duran (1974, as cited in Burgess, 1978) used Kenya as reference to illustrate how the people united to claim their cultivation and political rights.

Seol (2008) explained that the genesis of constructive ethnicity goes back to Gluckman’s (1940) study on the social relations between Black and White people in South Africa. Gluckman (1958, as cited in Okamura, 1981) argued that a person’s membership in a group in a given situation is set by the principles, interests, and needs which affect his or her behaviour in a specific situation. Paden (1967, as cited in Okamura, 1981) coined the term ‘situational ethnicity’ to explain the effect of situations on people’s communal identities at a particular time. The latter contended that situational ethnicity included both structural and cognitive elements. The structural dimension refers to the limits imposed by the social, economic, and political statuses of ethnic groups. The cognitive dimension purports to represent the individual’s ‘subjective perception’ (Okamura, 1981, p. 455) of a particular situation and the importance he or she attaches to it in that moment. Cornell and Hartmann (1998) argued that the two important variables in this approach are ‘thick’ and ‘thin’ ethnicity (as cited in Anderson, 2001). ‘Thick’ ethnicity is more comprehensive and organises the life of the individual, while ‘thin’ ethnicity is less widespread. An instance of thin ethnicity becoming thick is the Hutus and Tutsis ethnic conflict in the post-colonial period of Rwanda. The Belgians colonists had organised the population in terms of ethnicity, with the Tutsi considered as superior and provided with more facilities (BBC News Africa, 2011). The discrimination accentuated the conflict and provoked an outburst of violence based on ethnicity.

Constructionism incorporates the circumstantialist arguments to explain the changes in ethnic identity from thick to thin and vice versa. The constructionist perceives ethnicity as constructed: not fixed or static, but more conditional upon situations (Anderson, 2001). Sarna (1978) contended that ascription of identity and adversity have resulted in the development of ethnicity. Ascribed identity is defined as ‘the outsiders’ view of immigrants’ (Sarna, 1978, p. 373).

Sarna (1978) analysed how immigrants from European countries to America were categorised based on their country of origin or religion by ‘outsiders’ (p. 372) such as the media and the public. Immigrants from the same country or religion, such as Italians and Jews, were divided among themselves. The external forces were so overwhelming that individuals did not have time to form an ethnic identity. Group labelling of immigrants by institutions such as schools, churches, and governmental organisations submerged their self-definition until the two fused into one identity—the ethnic identity (Sarna, 1978).

Constructivists envisaged that humans have multiple ethnic identities, which is conditional upon several particular causal variables (Chandra, 2001). The author argued that when causal variables are modified, the personal identifications also change and the ultimate influence is on the ethnic group and demography. Chandra (2001) suggested several variants of constructivism, namely:

1. The process of modernisation is a main variable contributing to ethnic identity formation.
2. Institutions such as colonial states affect the significance of ethnic identification.
3. Ethnic identity occurs as a response to the personal needs of the time to take away ‘patronage goods’ (p. 8) from the state.
4. Lastly, politics is a variable that influences the moulding of an ethnic group.

Yang (2000) advanced the concept of ‘resurgent ethnicity’ (p. 45), wherein ethnicity is built on previous ethnic boundaries. The case of the White ethnic group is cited as an example of resurgent ethnic importance despite the waning of boundaries with hybrid cultures due to marriage, changes of religion, and a drop in participation. Gans (1979, as cited in Yang, 2000) refuted this point by introducing the idea of ‘symbolic ethnicity’ (p. 45). Furthermore, Yang (2000) referred to Sollars (1989), who contended that ethnic identity is rooted in traditions which are shaped, maintained, and recreated by people. Nagel (1994) emphasised the constructive nature of ethnicity and the implication of the continual negotiation of ethnic boundaries (as cited in Seol, 2008). Both internal and external forces are at play in the social construction of ethnicity (Nagel, 1994, 1996, as cited in Yang, 2000). The internal pressures are the ethnic groups’ re-demarcation, restructuring,

and negotiation of ethnic boundaries, while the external forces are societal pressures, economic power, and political practices (Yang, 2000). The main drawback of this perspective is its inability to see primordial ties as a means for mobilisation and consequent action (Seol, 2008).

5.2.6 Integrated approach to ethnicity

Seol (2008) contended that the synthesis of both the primordial and the circumstantial approaches will provide a better perspective of current times. The author subdivided circumstantial views in constructionism and instrumentalism. Seol (2008) cited the study of Victoria, Canada, and Woon (1985), who found that the Sino-Vietnamese used ethnicity for instrumental gain but reported emotional ties and the importance of their sense of self. Yang (2000) asserted that the social construction of ethnicity is founded on an assumed ancestry, and individuals' interests influence their ethnic associations.

5.2.7 The cognitive perspective on ethnicity

Gil-White (1999) suggested a cognitive analysis of ethnicity following Barth's (1956) subjective view of ethnic statuses. According to Brubaker et al. (2004), ethnicity is not an entity which is 'in' the world but a viewpoint 'on' (p. 32) the world. Cognitive stances offer resources for conceiving ethnicity, race, and nationality in a non-groupist way (Brubaker, 2004). A shift in the way ethnicity is thought of is necessary. There is a need for a term that is more 'relational, processual, dynamic...' (p. 11) in terms of 'categories, situated actions, cultural idioms, cognitive schemas...' (Brubaker 2004, p. 11). Groupism is defined by Brubaker (2002) as the propensity 'to take discrete, sharply differentiated, internally homogeneous and externally bounded groups as basic constituents of social life, chief protagonists of social conflicts, and fundamental units of social analysis' (p. 164). Groupism is the propensity to characterise the social and cultural world as a multichrome mosaic of uniform ethnic, racial, or cultural blocs (Brubaker, 2002). Brubaker (2004) viewed groupism in the field of ethnicity, nationalism, and race as the inclination to consider ethnic groups, nations, and races as substantial entities to which interests and agency can be ascribed. The cognitive view assumes that ethnicity is a 'way of understanding, interpreting,

and framing experience' (p. 52), and has expanded the debate by suggesting that race, ethnicity, and nationality should be one domain because they all involve categorising, which is a mental process (Brubaker et al., 2004). Instead of focussing on groups, the focal point is on group-making and grouping activities, such as sorting, cataloguing, and identification. The mental processes involved in categorisation of thoughts, feelings, and actions give a structure to the massive flow of thoughts which overwhelm the cognitive process (Brubaker et al., 2004). Categories help us to function in society, providing maximum information with minimum cognitive effort. Brubaker et al. (2004) posited that ethnicity exists only in and through our views, understandings, public monuments and the like, and mental representations, organisations, cataloguing, and identifications.

Brubaker et al. (2004) argued that the current constructivism standpoint presents an evident difficulty with classification, but that the drawbacks could be covered by cognitive perspectives, which consider primordialism and constructivism as complementary to each other. Constructivists can capture the relations and lively nature of ethnicity by analysing how people parse, classify, code, and frame (Brubaker et al., 2004). Primordialists have contended that humans tend to assume ethnicity as a natural group formation (Brubaker et al., 2004). According to Brubaker et al. (2004), the authors Hirschfeld (1998) and Gil-White (2001) argued that people have a cognitive inclination to perceive individuals as members of 'natural kinds' (p. 50) with hereditary and permanent qualities. Hirschfeld (1996, as cited in Brubaker, 2002) named this style of perception 'folk sociology' (p. 165), which is a common-sense manner of interpreting the world. Moreover, the cognitive viewpoint argues that there is a predisposition to concentrate on the noticeable constructions of experts and politicians and to neglect laypeople's definitions of ethnicity (Brubaker et al., 2004). Thus, the cognitive standpoint is a bridge between primordialism and constructivism.

5.2.8 Symbolic ethnicity

Anderson (2001) used the umbrella term 'revisionism' to denote the tendency towards a 'new ethnicity' (p. 214). Waters (1996) claimed that White Americans have a choice in deciding their ethnic identity—that is, they can be White or American, and they can include their European

ancestry in their description. In the former, they are unhyphenated Whites (Waters, 1996). The choice of White people in picking the most attractive ancestry from their genealogy is possible because they represent a majority group which enjoys increased political and economic power (Waters, 1996). American social scientists have depicted ethnicity as a deliberate identification, an ‘ethnic self-ascription’ (Anagnostou, 2009, p. 96), and a subject of personal choice rather than a culturally established behaviour. The possibility of choice gives White people a feeling of uniqueness to situate their family ancestry (Waters, 1996). Ethnicity serves as a barricade to homogeneity (Anagnostou, 2009).

Gans (1979) coined the term ‘symbolic ethnicity’ (p. 95), which is an ‘ethnicity-as-choice’ (p. 95) of the assimilated White middle-class (as cited in Anagnostou, 2009). In short, it is their non-compulsory and intentional affective and social association with selective features of the ancestral culture (Anagnostou, 2009). In the 1800s and early 1900s, some European immigrants, considered non-White, were segregated, downtrodden, and subjected to discrimination by settled groups (Waters, 1996). The achievement and social upgrade of the later generations was termed the ‘ethnic miracle’ (Waters, 1996, p. 98). In addition to the accomplishment of the new generation, there was an escalation in the number of mixed marriages, which gave rise to multiple identities (Waters, 1996). The persistence of keeping their ethnic identities is a matter of choice, an individualistic ethnicity which bears no real social cost for the people now considered White (Waters, 1996). Symbolic ethnicity is the perspective of the new generation, which has no need for an ethnic structure or culture for adjustment; rather, ethnicity assumes an expressive purpose in the persons’ lives, an ephemeral and evocative attachment (Anagnostou, 2009). The idea of symbolic ethnicity falls within the postmodern views, which are described as reflexive constructs, outcomes of choice, hybrids of codes, smooth multiplicity, fuzzy boundaries, and apparent eclecticism (Anagnostou, 2009). Gans (1979, as cited in Waters, 1990) claimed that Whites’ identification is a ‘leisure-time activity’ (p. 7)—that is, they choose whether ethnicity will influence their lives or not (see also Waters, 1996). White’s identity is based on their nuclear family customs and strengthened by the freely enjoyable facets of being ethnic; they can decide whether to state their ethnic affiliation at work or school. With the fall in ethnic collectivity due to mixed marriages, Gans (1979) was dubious about this new ethnicity, because it is based on people’s voluntary ethnic attachments (Waters, 1990).

Waters' (1996) presentation of symbolic ethnicity's limitation represents a severe weakness of the theory. The researcher stated that the privilege of choosing one's ethnicity will depend upon whether the person's race is defined by society. The population of the United States is still very conscious of race, the commonly known Black-White divide (Anagnostou, 2009). Symbolic ethnicity applies to Whites but not to Blacks, as the latter are restricted to the social definition. Anagnostou (2009) argued that this is a delicate reinforcement of racism. Fischer (1986, as cited in Anagnostou, 2009) adopted a psychological approach to ethnicity and criticised symbolic ethnicity's view of ethnicity being transmitted across generations. Fischer (1986, as cited in Anagnostou, 2009) portrayed ethnicity as 'dynamic, often unsuccessfully repressed or avoided' (p. 102), because unconscious processes are active in motivating someone's ethnic attachment. Another critique of symbolic ethnicity regards the reproduction of a biological paradigm of ethnicity (Anagnostou, 2009). The assumption that individuals choose their ethnic identity from their ancestral descent pertains to biology (Anagnostou, 2009).

5.2.9 Constructionism perspective for the present study

Ethnic identity is a social construction shaped by culture, history and politics (Hempel, 2004). The population of Mauritius descended from immigrants, slaves, traders or European colonies. The ethnic groups formed shared values and cultures that differed from their origin. For example, Indo-Mauritians preferred "mild" spicy food to "hot" spicy, the latter being a food habit in India. Politics have also influenced ethnic group formation. For example, Indo-Mauritian group was subdivided into Muslim and Hindu subgroups through political lobby. The major ethnic groups such as Hindu-Mauritian, Muslim-Mauritian and Creole-Mauritian were socio-culturally and historically created. However, other theories of ethnicity are also pertinent especially for the Creole-Mauritian group.

5.3 Types of ethnicity

According to Pieterse (1997), ethnicity is observed along a continuum which changes in terms of salience, strength, and significance, thus giving rise to many types of ethnicity. At one

end there is domination ethnicity, defined as the imposition of a single cultural force over the nation. Pieterse (1997) argued that in the case that a nation imposes a monocultural power on the people, there is only one ethnicity: this is called ethnocracy, and in this case there is no difference between ethnicity and nation. Ethnicity can imply both emancipation and domination, that is, it is relevant to the cultural politics of the majority and the minority groups (Pieterse, 1997). The other extreme is optional ethnicity, which is of ‘low intensity and is light, volitional and fluid’ (p. 365), such as symbolic ethnicity (Pieterse, 1997). Wang (1992) coined the term enclosure ethnicity in relation to the ethnicity of the Taiwanese, who are viewed as ethnic by outsiders but not by the Taiwanese themselves (Pieterse, 1997) (another term for this category is dormant ethnicity). Enclosure ethnicity can also mean ‘cultural confinement’ or an ‘inward-looking’ tactic, characterised by low mobility and a monocultural system (Pieterse, 1997, p. 375). The former regards a majority group’s imposition and domination on a subaltern group to move away from the centre, for example in the creation of ghettos. The latter is about ‘collective self-definition’ (Pieterse, 1997, p. 375), as in the case of Afrocentrism, where everything is assessed in relation to being Black, from marriage to voting. An additional type of ethnicity is competition ethnicity, which is about ethnic group creation to win state provisions and power (Pieterse, 1997).

5.4 Identity development theories

Before embarking on ethnic identity development theories, it is essential to understand the foundation of such theories. Erikson accentuated the importance of contextual factors in identity development. The next subsection starts with Erikson’s theory of identity development.

5.4.1 Erikson’s theory of psychosocial development

Identity formation is the fifth stage of the psychosocial development of an individual (Erikson, 1968, as cited in Santrock, 1998). It is a dynamic and lifetime process (Beyers & Cok, 2008). As Dollinger (1995) puts it, identity is a ‘multidimensional construct’ (p. 475) and the development of a stable identity is the most important psychological task for adolescents (Erikson,

1968, as cited in Laghi, Baiocco, Liga, Guarino & Baumgartner, 2013). Some theorists view identity in terms of organisation, while others consider it as a process theory (Dollinger, 1995). According to Erikson's theory, it happens during adolescence: adolescents explore the different roles in their work life or romantic life, and successful exploration leads either to the achievement of a positive identity or to identity confusion (Santrock, 1998). The ego identity has several functions, which are sameness over time, inner stability, the blend of consecutive identifications, and shield against occurrences of abrupt discontinuities (Laghi et al., 2013). The personal identity formation has two critical aspects: exploration and commitment (Waterman, 1999; Luyckx, 2010, as cited in Laghi et al., 2013). Exploration involves the pursuit of a 'more complete sense of self' (p. 483), and in the process there is a choice which is put forward to solve one's problems in life. Commitment is the choice one makes to adhere to specified goals or beliefs (Laghi et al., 2013). See Table 5.1 for an adaptation of Erikson's theory of human development for the first few stages preceding identity development. Identity formation is normally triggered in the fifth stage of development, during the period of adolescence.

Wheeler, Ampadu, and Wangari (2002) noted that Erikson recognised the cultural influences which can ease the fifth stage of development, such as 'rites of passage' (p. 75). They criticised the stage theory traditionally used by Westerners to assess people from other cultures and ethnic groups in terms of how closely they match Westerners, which assumes the latter are at a higher level of development. Furthermore, the authors found that Erikson's stage theory embodies an individualistic perspective which is not applicable to the African's established collectivist proclivity, which embraces interpersonal associations and community development. Frame, Williams, and Green (1999) mentioned a 'sense of communalism' (p. 49) which highlights African society (as cited in Banerjee & Pyles, 2004). The African values prized are 'interdependence, self-sacrifice, and dedication to family and group members' (Wheeler et al., p. 74; see also Banerjee & Pyles, 2004, p. 49). A better view of Africans' development would be as non-linear and multidimensional as they go through life events (Dahl, 1995, as cited in Wheeler et al., 2002). Furthermore, for the African framework, the 'psyche and spirit' (p. 75) are not separate (Wheeler et al., 2002).

Table 5.1.

Adapted from Erikson's theory of human development

Psychosocial stages	Developmental period	Features
1. <i>Trust versus mistrust</i>	Infancy–1 st year	A feeling of trust entails physical comfort and negligible fear about future.
2. <i>Autonomy versus shame and doubt</i>	Infancy–2 nd year	After trust is gained, the infants begin to exercise their feeling of independence. Too many restraints can lead to shame and doubt.
3. <i>Initiative versus guilt</i>	Early childhood–3 rd to 5 th year	Children start taking responsibility for their bodies, toys, etc., which augments initiative.
4. <i>Industry versus inferiority</i>	Mid to late childhood–6 th year to puberty	Children's initiative exposes them to many learning situations. They become proficient in particular areas and develop skills. Lack of skill development can lead to feelings of incompetence.
5. <i>Identity versus identity confusion</i>	Adolescence–10 th to 20 th year	Adolescents start asking existential questions and are faced with various roles in work and in the romantic field. Successful transition leads to positive identity.

Adapted from Santrock, John, W. (1998), *Adolescence* (7th ed.), Boston: McGraw-Hill, p. 47.
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5.4.2 Bronfenbrenner's ecological systems theory

According to Beyers and Cok (2008), Bronfenbrenner's theory looks at context in relation to identity development. There are five nested systems which shape a person's development: the microsystem, the mesosystem, the exosystem, the macrosystem, and the chronosystem (Santrock, 1998). While the microsystem is the environment in which the person lives, such as one's family, peers, school, and neighbours whom one has direct contact with; the mesosystem is the interaction

among the microsystems, such as between family and school (Santrock, 1998). The exosystem refers to an external setting which affects the individual's experiences, such as being part of an ethnic subgroup (Beyers & Cok, 2008). The macrosystem involves the sociocultural context in which the person lives, and, finally, the chronosystem refers to the 'patterning of environmental events and transitions' over the lifespan (Beyers & Cok, 2008; Santrock, 1998, p. 52). Beyer and Cok (2008) reported the research of Sabatier (n.d.) who studied the impact of the exosystem on identity development and found that parents' ethnic and national enculturation traditions directly affect the cultural identity of adolescents.

5.4.3 Marcia's four statuses of identity model

Marcia (1989) believed that identity development was more complex, and that its onset and accomplishment were not confined to the period of adolescence (Santrock, 1998). According to Marcia (1966), Erikson's theory depends upon how people try to resolve crises they experience (as cited in Bosma & Kunnen, 2001). The four statuses theory offers a better understanding of the connection between the variables of exploration and commitment (Laghi et al., 2013). Santrock (1998) defined crisis as 'a period of identity development' (p. 325) in which the person is faced with significant substitutes. Individuals' preference regarding the type of exploration and commitment will put them in one of the statuses listed in Table 5.2 below.

Table 5.2

The four identity statuses suggested by Marcia (1966)

	Identity status			
Position on occupation and ideology	<i>Identity moratorium</i>	<i>Identity foreclosure</i>	<i>Identity diffusion</i>	<i>Identity achievement</i>
<i>Crisis or "exploration"</i>	Present	Absent	Absent	Present
<i>Commitment</i>	Absent	Present	Absent	Present

Adapted from Santrock, John, W. (1998), *Adolescence* (7th ed.), Boston: McGraw-Hill, p. 326. Copyright 1998 by the McGraw-Hill Companies, Inc.

Table 5.2 summarises the four identity statuses along the lines of exploration and commitment. As shown in Table 5.2, identity moratorium implies that the individual is exploring but there is no commitment. In identity foreclosure, the person has not gone through a crisis but has made a commitment, whilst in the third status, identity diffusion, the individual has neither explored nor made any commitments. Finally, the fourth status, identity achievement, occurs when someone has been through a process of exploration (crisis) and made some commitments (Santrock, 1998; Bosma & Kunnen, 2001). The statuses do not happen in a developmental continuum (Phinney, 1993). Archer (1989, as cited in Santrock, 1998) reported studies in which a frequent pattern of positive identity development was an ‘M-A-M-A cycle’ (p. 326) of alternating moratorium and achievement throughout an individual’s lifetime.

5.4.4 Optimal distinctiveness theory (ODT)

Group membership is salient to the overall functioning of the person. According to Brewer (1991), people have contradicting social motives: the need for resemblance and the need for individualism. The optimal distinctiveness paradigm defined social identity as a compromise of the opposing needs of the individual for inclusion and demarcation from others (Brewer, 1991; Brewer & Gaertner, 2004). Brewer (1991) stressed the distinction between personal identity and social identity. Personal identity is the ‘individuated self’ (p. 476), which are the features which distinguish one person from the other in a social context; social identity, on the other hand, is classification of the self into a comprehensive social unit which ‘depersonalize[s] the self-concept, where I becomes we’ (Brewer, 1991, p. 476). Brewer (1991) noted that while US scholars viewed social identities as facets within the individual self, European scholars considered social identities as an ‘extension of the self’ (p. 476), which is outside the person.

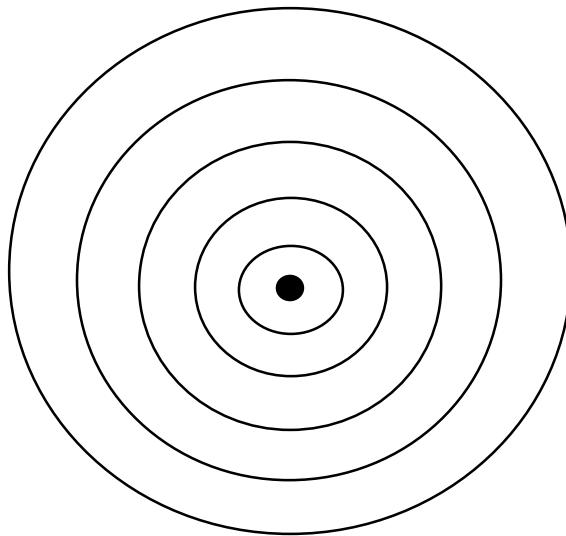
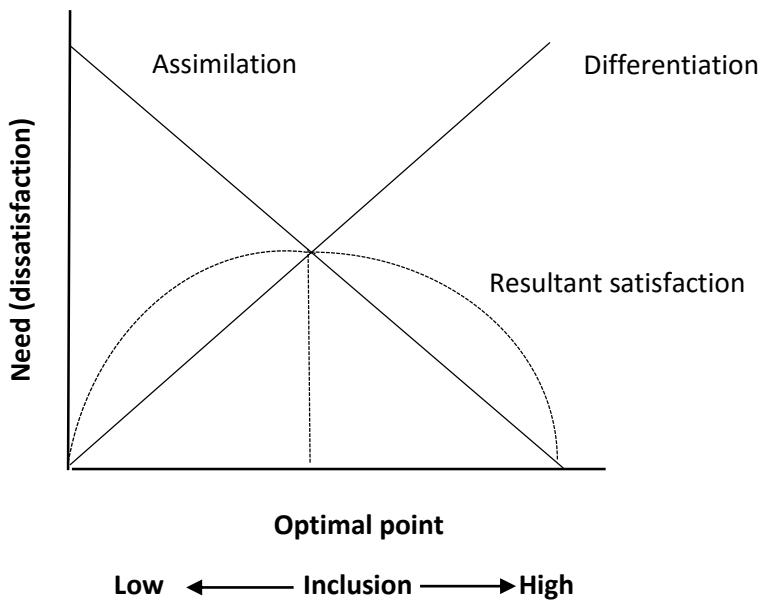


Figure 5.1: Personal identity is the dot inside the circles and social identities surround the personal identity. Adapted from “The Social Self: On Being the Same and Different at the Same Time,” by Marilyn B. Brewer, 1991, *Personality and Social Psychology Bulletin*, 17, p. 476. Copyright 1991 by the Sage Publications.

As shown in Figure 5.1, the dot in the middle represents personal identity, and the concentric circles symbolise the external setting which provides a ‘frame of reference’ (Brewer, 1991, p. 476) for comparison and contrast. For instance, being a student of UNISA is part of the researcher’s personal identity. The immediate frame of reference for comparison is all the doctoral students completing the thesis module in the Psychology department of the College of Human Sciences. Social identity, on the other hand, embraces a wider sphere. The first level of social identity is the researcher within the department of psychology, with the frame of reference being other students in doctoral psychology with different specialisations. The wider the frame of reference, the more departments or colleges will be included for comparison. Thus our self-concept is flexible and transmittable across various levels of social identity, with connected transformations in the definition of self and the foundation for self-evaluation (Brewer, 1991).



*Figure 5.2: The optimal distinctiveness model. Redrawn from “The Social Self: On Being the Same and Different at the Same Time,” by Marilyn B. Brewer, 1991, *Personality and Social Psychology Bulletin*, 17, p. 477. Copyright 1991 by the Sage Publications.*

Figure 5.2 shows that equilibrium is reached when the needs for assimilation and distinctiveness both reach the same level. Groups which are too inclusive do not fulfil the need for distinctiveness, while groups which have a high level of individuation do not satisfy the need for affiliation (Brewer & Gaertner, 2004). Furthermore, the boundaries which separate in-groups from out-groups have to be clearly defined for an optimal level of self-description.

5.5 Ethnic identity: Definitions and theories

Mauritius is a rainbow nation with a multitude of traditions, rites, rituals, and religions (Burrun, 2002). According to Burrun (2002), the world's most sacred and adored things can be found within Mauritius' boundaries, and emphasised that all main religions are represented in our society. As a starting point, a definition of terms is necessary.

5.5.1 Definitions

Ethnic identity is a social construct (Fearon & Laitin, 2000). As an element of the self, it is born of psychological processes (Breakwell, 1986, as cited in Jaspal & Cinnirella, 2012). There is an increasing recognition of the importance of ethnic identity for the psychological wellbeing of the members of the ethnic group (Roberts, Phinney, Masse, Chen, Roberts & Romero, 1999). There are abundant empirical and theoretical resources on the implications of ethnic identity, intergroup relations, linguistic behaviours, and potential benefits for the psychology of the individual (Jaspal & Cinnirella, 2012). Ethnic identity is viewed as ‘an individual’s ancestral heritage’ (Baumann, 2004, p. 12). As an aspect of identity, it is an essential element of the self-concept (Roberts et al., 1999). Furthermore, it is typified as a ‘shifting, situational and subjective identifying of oneself and others’ (Jones, 1998, as cited in Johannessen, 2004, p. 162), which is entrenched in everyday practices and historical experiences. Jones (1998) underlined the changing nature of ethnic identity as ‘subject to transformation and discontinuity’ (as cited in Johannessen, 2004, p. 162). Chandra and Wilkinson (2008) claimed that ethnic identity is an ‘umbrella concept’ (p. 519) which incorporates other identity categories linked to religion, language, nationality, and race, to name a few.

5.5.2 Theories of ethnic identity and stages of development

Theories of ethnic identity are discussed in this section. As indicated before, ethnic identity can be ‘thick’ or ‘thin’ and ‘assigned or ‘ascribed’ (Cornell & Hartmann 2007, p. 85). The notion of thick/thin pertains to the degree to which identity organises the person’s life, while assigned/ascribed identity relates to whether the identity is tagged by outsiders or affirmed by the person (Cornell & Hartmann, 2007). A well-known example of a thick and assigned identity is the Black South African identity.

5.5.2.1 Dual or multiple identities

A dual identity validates ethnic or religious group uniqueness from a perspective of a national bond and common belonging (Ng Tseung-Wong & Verkuyten, 2013). Studies have produced contradictory evidence as to the effects of multiple identities on psychological health (Brook, Garcia & Fleming, 2008). Brook, Garcia, and Fleming (2008) suggested that the role of multiple identities influences mental health. Conflicting identities have adverse effects, while harmonious identities positively impact mental health (Brook et al., 2008). Bi-ethnic youths had unique experiences connected to ethnicity which meaningfully changed the direction of their ethnic identity formation (Gonzales-Backen, 2013). For the purposes of this study, however, mixed ethnicities were not considered. Research by Ng Tseung-Wong and Verkuyten (2013) found that identification with a religious group was stronger than national identification among Mauritian adolescents. Moreover, the Muslim ethnic group identification remained strong throughout adolescence, unlike that of Hindus and Christians. The following subsections will discuss the various theories of ethnic identity development.

5.5.2.2 Cross's Nigrescence model of identity

Cross's model of Black identity development inspired later models of minority identity stages. The first stage, the pre-encounter or 'pre-change' (p. 122), is one which is characterised by an absence of interest in race and ethnicity, a state of 'denial, self-hatred' (Cross, 1994, p. 122). Cross acknowledged the fact that individuals may have an identity which is functional and based on other directions, such as religion. The shift to stage two is triggered by 'an encounter' (p. 122) which provokes stage three, a period of disturbance, and a search for Black origins—a time of confusion and high emotions. The third stage, the immersion/emersion phase, embodies the annihilation of the 'old', 'non-black' (p. 58) self; a high level of symbolic attachment to Blackness; a critical view of people who do not affirm their Blackness; a visible closeness and solidarity with other Black people; and a distrust of other groups, particularly White people (Peterson-Lewis & Adams, 1990). This culminates in the emersion stage, which is characterised by a more pragmatic view of one's group (Peterson-Lewis & Adams, 1990). The transition to stage four brings stability

and an internalisation of a constructed identity. Cross (1994) suggested a higher level, at which the person sees and values connections with groups other than theirs—a multicultural outlook. Moreover, the lifespan identity development culminates with the individual recognising the interconnection of all lives and the harmony of every life.

5.5.2.3 Helms' four stages of ethnic minority identity development

Helms assessed how Black identity development could be applied to the ethnic identity development model (Santrock, 1998). Stage one consists of a ‘preencounter’ (Santrock, 1998, p. 329), which is a preference for the values and culture of the majority over the minority. The majority provides the role model, while their ethnic minority representation is less valuable (Santrock, 1998). The next stage, the ‘encounter’ (Santrock, 1998, p. 329) involves a shattering experience which triggers an awareness of difference, including a willingness to identify with their minority group. This leads to stage three, the ‘immersion/emersion’ (Santrock, 1998, p. 330) phase, which is characterised by a total support of minority views and the struggle for the elimination of prejudices, discrimination, and oppression of their group. The emersion phase involves the expression of anger through music, discussions, and education, which help to restore an emotional balance and gain a realistic perspective of their culture’s contribution. The ‘internalisation/commitment’ (Santrock, 1998, p. 330) stage is the final phase, wherein the person feels a sense of accomplishment in resolving conflicts in relation to personal and cultural identity. There is a higher degree of objectivity in their views of cultural values and norms of other groups. Furthermore, at this stage, the individual pledges to take steps to eliminate the yoke of domination (Santrock, 1998).

5.5.2.4 Phinney's three-stage model of ethnic identity development

Phinney's (1993) ethnic identity theory is based on Erikson's identity formation theories and is harmonious with Marcia's four-statuses identity model. Furthermore, the three-stage model, which cut across ethnic groups, stressed the process of creating an ethnic identity rather than its content. The first stage, the unexamined ethnic identity, is similar to Cross's (1978) pre-encounter

stage or Marcia's foreclosure status, where the individual fails to explore his ethnicity, instead absorbing the values of the majority even if that entails a negative perception of his or her own culture (Phinney, 1993). Individuals want conformity, and their preference for the majority can be unconscious or active (Atkinson, Morten & Sue, 1983, as cited in Phinney, 1993). Kim (1981, as cited in Phinney, 1993) labelled this stage as 'white-identified' (p. 66), the tendency of the person to compare him- or herself to the White majority and to see similarities and overlook differences between them and the White majority. Based on the interviews conducted by Phinney (1993), there is evidence that this stage can be compared to the identity diffusion status of people who neither make any exploration of nor have any attachment to their ethnicity.

The search for an ethnic identity is the second stage, triggered by an upsetting situation or event which shifts an individual from his or her worldview, opening that person to a new interpretation of his or her identity (Phinney, 1993). Cross (1978) proposed the term 'encounter' to define this prompting to review one's viewpoints. It is compared to the identity crisis, as defined by Erikson (1968), or the moratorium status defined by Marcia (1989). The identity search is characterised as a 'necessary turning point' (Phinney, 1993, p. 69). Similar to the ethnic identity search is Cross's (1978) immersion/emersion stage, which will be the result of a time of enquiry for personal meaning. Atkinson, Morten, and Sue (1983, as cited in Phinney, 1993) suggested the term dissonance to explain the process of reviewing established beliefs and values and realizing their limited benefits to minorities. The final stage is ethnic identity achievement, which is the ultimate end product of the whole ethnic identity process. During this stage, people feel proud, confident, and stable in their ethnic group. People who have achieved an ego identity have settled doubts about their future directions (Marcia, 1980, as cited in Phinney, 1993). As regards to ethnicity, identity achievement represents acceptance of one's ethnicity. Cross (1978, as cited in Phinney, 1993) termed this 'internalization', where the person gains a serene and secure demeanour. Kim (1981, as cited in Phinney, 1993) defines the attitudes and feelings experienced in this period as the incorporation stage.

5.5.2.5 Identity process theory (IPT)

Identity Process Theory (IPT) posits that there is a difference between social and personal identity. It views identity as a ‘unique constellation of self-aspects’ (Jaspal & Cinnirella 2012, p. 506). IPT suggests an identity structure with two components: content and value affect, which are in turn controlled by two universal processes, namely the assimilation-accommodation process and the evaluation process (Jaspal & Cinnirella, 2012). While the assimilation-accommodation process implies the absorption of new data and modifications in connection with these for the information to become part of the identity structure, the evaluation process attaches meaning and value to the contents of the identity. The four identity principles proposed by Breakwell (1986, 1992, as cited in Jaspal & Cinnirella, 2012) are:

- a. Continuity across time and situation;
- b. Distinctiveness from others;
- c. Self-efficacy (a sense of self-worth and feeling of competency) (Myers, 2002); and
- d. Self-esteem (an overall self-evaluation) (Myers, 2002).

Vignoles, Regalia, Manzi, Golledge, and Scabini (2006, as cited in Jaspal & Cinnirella, 2012) introduced two more principles: belonging and meaning. An additional principle was also included, which was termed the coherence identity principle (Jaspal & Cinnirella, 2012). Individuals perceiving threats to their identity resort to certain behaviours, which are described in the IPT theory of identity construction and coping strategies. IPT proposed two criteria which have to be met for an ethnic identity to become ‘a socio-psychological reality’ (Jaspal & Cinnirella, 2012, p. 509).

5.5.2.5.1 The application of IPT in the Mauritian context (1)

The IPT is a structural theory that involves both the cognitive and the affective aspects of the individual. In contrast, the previous theories discussed are stage developmental theories of

ethnic identity that are limiting and inappropriate for the Mauritian context. Mauritius is a multicultural society with a history of slavery, indentured labour, and trade. The diverse origins of the people, whose ancestors came from France, Africa, Madagascar, India, and China, make the country unique (Varma, 2008). However, during political meetings, politicians rhetorically stress the shared history and one nation which Mauritius has become—the *Ilois* or Creole—which means all people living on an island. The first criteria presents the identity for acceptance, while the second criteria persuades significant others which it is a genealogical fact.

According to Jaspal and Cinnirella (2012), an individual who has a positive sense of continuity in his ethnic identity will have good results with regard to the self-esteem principle. However, social context influences ‘self-categorisation’ (Jaspal & Cinnirella 2012, p. 513), and the use of socio-psychological reserves is expected to go along with maintaining positive self-esteem or a sense of distinctiveness.

5.5.2.5.2 The application of IPT in the Mauritian context (2)

The Mauritian-Creole is more a stigmatised ethnic group with negative social representations, given their modest origin of slave descent. The implied threat to their self-esteem is evident. There is a social group known as *Les verts Fraternels* which is militating for compensation for the wrongs done to this ethnic group. With a view to enhancing their self-esteem, they have made an effort to maintain their strategic ethnic self-categorisation as ‘Mauritian’.

5.6 Mauritius: Its history and ethnic groups

Mauritius has remained an integrated society, which has not been stained by segregation and ‘community ghettos’ (Christopher, 1992, p. 57), unlike South African society. In other words, Mauritius has embraced religious pluralism, whereby people try to learn about the culture, faith, and worldview of groups other than their own. However, there are instances which portray the country as being religiously diverse. For instance, the 1999 riots in Mauritius are an illustration of the ignorance of other cultures, fear of the unknown, and anger on the part of a deprived minority. Only a few ethnic clusters are visible among the Chinese and Muslim groups in the capital city of

Port-Louis (Nave, 2000). The population of Mauritius, known as a ‘paradise island’ (p. 25), with its rich tapestry of ethnicity, has proved to be successful in overcoming inter-ethnic conflict (Carroll & Carroll, 2000; see also Christopher, 1992). The racial and cultural hybridity in Mauritius has created an appearance of heterogeneity (Carter, 1998; Teelock, 1998, as cited in Laville, 2000). Mauritius’ population of 1.23 million is ‘one of the world’s most culturally mixed’ (Central Statistics Office, 2011; Addison & Hazareesingh, 1999, p. 1). It is positioned in the southwest Indian Ocean, approximately 2,000 km off the East African coast (Government Portal, 2013). This ‘multicultural mosaic’ (Ng Tseung-Wong & Verkuyten, 2010, p. 624) nation originates from three continents (Asia, Africa, and Europe), as there is no indigenous population on the island (see also Eriksen, 1999).

Mauritius’s history started with Dutch settlement. The French colonised the island until 1810, but they later capitulated to the British. The ‘rainbow nation’ (Ng Tseung, 2006, p. 71) came to life with the import of slaves from various African countries; when slavery was abolished, immigrants from India and Pakistan were brought to the island in large numbers as indentured labourers, and many Chinese people came as traders. All of these groups have coalesced to form the Mauritian society (see also Carroll & Carroll, 2000; Addison & Hazareesingh, 1999). The African-Mauritians were subjected to a great deal of prejudice and were the poorest of the poor (Addison & Hazareesingh, 1999). Economic diversification and the rise of the manufacturing sector in the 1980s benefitted the different ethnic groups (Nave, 2000). However, the other side of the coin was the formation of class stratification inside the ethnic groups (Nave, 2000). Nave (2000) also emphasised the multilingual aspect of the country. Although the official language of the Republic of Mauritius is English and Mauritian people’s mother tongue is Creole, the television and radio transmit information in French.

The term ‘Indo-Mauritians’ was first introduced in the census in 1891 to mark the difference between those born in Mauritius and natives of India (Christopher, 1992). As intermarriage was a common occurrence, children’s ethnicity was determined by that of their father. The group ‘general’ was created in the nineteenth century to include the ‘physically diverse population’ from European and African origin (Christopher, 1992, p. 58). Only in the 1962 census was the burden of determining ethnic classification moved from the enumerator to the householder.

Christopher (1992) stated that individuals tend to identify themselves on a religious basis, so the general category was thus linked to Christians while Hindu and Muslim groups were divided into distinct categories. Mauritius became independent in 1968, and its economy was solely founded on sugar cultivation (Carroll & Carroll, 2000). The country is affected by substantial social and economic issues, such as unemployment, poverty, and its dense population. Ethnic, religious, and racial tensions were palpable during that period (Carroll & Carroll, 2000). In 1972, the Mauritian people had to state their ethnic identity in a national census; as a result, the population was officially divided into four ethnic groups: Hindu (57 percent), Muslim (17 percent), Sino-Mauritian (3 percent) and the general population (Laville, 2000; Carroll & Carroll, 2000).

Bourdieu's (1994, as cited in Brubaker et al., 2004) writings on the 'state's symbolic power' (p. 33) highlighted the influence of the state to determine 'what is what and who is who'. Bourdieu (1994) further explained how political and cultural leaders used such data to manipulate and mould identities. Michel (1998, as cited in Laville, 2000) argued that the lumping of both the Creole and the people of French descent in the category of 'general population' was an act of revenge on the French for their exploitation of the Indian labourers. The languages spoken are Mauritian Bhojpuri, which reflected Indian origins, and a French-based creole (Eisenlohr, 2004; Eriksen, 1999). Furthermore, the electoral system in Mauritius requires that candidates declare their ethnic background (from among the four constitutionally recognised ethnic groups) (Srebrnik, 2000). Srebrnik (2000) commented that eight seats are reserved for defeated candidates under the 'best losers' (p. 11) system, which ensures proportional representation of ethnic minorities in parliament. According to Lam Hung (2010), the ethnic structure is predominantly Indo-Mauritian (68 percent), followed by Creole-Mauritians, which she termed *Afro-mauricienne*⁸ (27 percent). The minority ethnic groups were the Sino-Mauritians and the White Mauritians, who accounted for 3 and 2 percent of the population, respectively. This study focuses on a sample of adults from the two largest ethnic groups, the Indo-Mauritians and the Creole-Mauritians, also known as the general population. The Indo-Mauritians can be divided into the subgroups of Hindus, Marathis, Tamils, Telugus, and Muslims.

⁸ *Afro-mauricienne* can be translated as 'African-Mauritian'.

Simply assessing the spiritual intelligence of participants and comparing their ethnic groups will be similar to imposing the researcher's perception of the level of ethnic identification of the respondents on the readers (Zagefka, 2009). The concept of ethnicity is complex and multidimensional, and it is necessary to reconsider ethnicity as part of the subjective construct of the participant, which varies according to respondents, groups, situations, and time (Phinney, 1996, as cited in Zagefka, 2009). As Ng-Tseung (2006) clearly explains, communities in Mauritius are also based on religion; for instance, the Indo-Mauritians are divided into Hindu and Muslim (Addison & Hazareesingh, 1999). Those of Hindu faith are subdivided along religious lines, i.e. Tamil, Hindu, Telegu, and Marathi. Muslims are those who have embraced the Islamic religion. The term general population is commonly used to denote those of African descent, the majority of whom adhere to the Christian faith (Ng-Tseung, 2006).

5.6.1 Ethnic Groups

As far as Gil-White (1999) is concerned, ethnic groups are defined across cultural, ascriptive, and normative lines. The diverse ethnic groups have different cultures, are labelled by others, and their members prefer one another to non-members. Brubaker (2004) defined groups as 'mutually interacting' (p. 12), reciprocally identifying, jointly adjusting, efficiently conversing, collectively restricted with a sense of cohesion, corporate identity, and aptitude for collaboration. A social group is a cluster of people who recognise themselves as part of the same social category (Ysseldyk, Matheson & Anisman, 2010). From race to religion, people belong to specific groups which unavoidably mould their reactions to different situations (Ysseldyk, Matheson & Anisman, 2010). The notion of in-group relates to the group which a person is a member of, while out-group pertains to a group that an individual is not a member of. Chandra and Wilkinson (2008) asserted that while categories are descriptive tags assigned to people without any consideration of their feelings, a group is 'a subset of categories' (p. 519) that depicts a set of persons who have a common descriptive tag and who also consider themselves a community. In the context of Mauritius, the cultural politics of the state favours diasporic 'ancestral cultures' (p. 395) at the expense of a locally constructed culture (Eisenlohr, 2006, 2012), envisioning a nation which

exemplifies harmony in diversity (Eisenlohr, 2006; Varma, 2008). The boundary between religious traditions and national identity is fuzzy, as the former is coextensive with national celebrations (Eisenlohr, 2006).

5.6.1.1 The Mauritian-Creole identity

Creolisation is the notion of blending and merging two or more previously discrete cultures (Hanners, 1992, as cited in Eriksen, 1999). Creole has different meanings in many countries. In Reunion Island, not far from Mauritius, a creole is someone born on the island, while those born in metropolitan France are *zoreils* (Eriksen, 1999, p. 2). In Trinidad, it refers to Trinidadians, with the exception of those of Asian descent. In Suriname, it means people of African descent, while in French Guyana, it refers to anyone who has taken up a European style of life (Eriksen, 1999). The commonality among these different definitions is the idea of uprootedness, the commix of cultures, and *appartenance*⁹ to the New World (Eriksen, 1999). In Mauritius, even in the face of ‘cultural creolisation’ (Eriksen, 1999, p. 4), Creoles are people of African origin.

In the 1700s, Creole people were those of French descent born in Mauritius, but now this is termed as Franco-Mauritian (Benedict, 1965, as cited in Laville, 2000). Today the term Creole means a Mauritian of ‘mixed African or Indian and European descent’ (Laville, 2000, p. 278). Mauritian-Creoles are descended from African and Malagasy slaves who were introduced to Mauritius by the Dutch, the French, and the English (Boswell, 2006). The ethnic origins of the slaves were different, as indicated by the physical markings, language, and social behaviour (Alpers, 1999, as cited in Laville, 2000). Laville (2000) discussed the precise ethnicity of the Mozambican slaves who came to Mauritius: they were from Moujouane (from the Comoros), Kamanga (from Malawi), Maravi, Yambane, Sagara (from Tanzania) and Makua (Laville, 2000). Mauritian Creoles, who account for 27 percent of the country’s population, number around 200,000 and are subdivided in terms of class and colour (Laville, 2000). Several studies have highlighted the continued existence of belief in spirits, sorcery, and divination rituals (Laville, 2000).

⁹ *Appartenance* means belongingness in French.

According to Eriksen (2000, as cited in Boswell, 2006), the Mauritian-Creole identity is marked by a *joie de vivre*¹⁰ (p. 2) and a lack of cultural values. Eriksen (1998) described the Creole as a ‘lazy and present-oriented’ (p. 279) people (as cited in Laville, 2000). Furthermore, Laville (2000; Eriksen, 1999) pointed at the negatively stereotyped views of the Creoles as having a natural tendency for alcohol, being uneconomical without any plan for future, and consumers rather than contributors to the country’s economic growth. Boswell (2006), on the one hand, defined the Creoles as lacking a collective identity, and on the other as a heterogeneous group whose identity was greatly affected by many factors. They have the lowest socio economic status in the country, despite the country’s progress. It is unusual for black Creoles to become leaders; they are instead subjected to prejudicial and discriminatory treatment, particularly in being ‘dark-skinned person[s] with negroid’ appearances and *ti Sevé*, the dense, curly hair common among people of African descent (Laville, 2000, p. 281). Research has mushroomed on phenotype differences within groups, which has revealed that darker skin and less access to resources were observed in particular ethnic groups, which left the members with fewer chances for progress (López, Walker & Spinel, 2015). Moreover, Laville (2000) denounced the attitude towards women with such features who are perceived as ‘sexually inhibited’ (p. 281). Boswell (2006) described the state of the Mauritian-Creoles which she termed as *le malaise creole* (p. 5) or the Creole malaise, which is a continuity of impoverishment, social difficulties, and political marginalisation among this group (Jeffery, 2007). The negative social stereotyping is a possible reason for their current situation in society (Laville, 2000). Eriksen (1999) underlined the lack of a Creole history before colonialism upon which they could have built their actual political identity. Black communities were seen as ‘lazy, dirty and dangerous’ (Brunal, 2011, p. 172) during the segregation era. These widespread flawed beliefs triggered enduring images which are still remembered today.

The Roman Catholic Church has been very influential in the lives of the Mauritian-Creoles. During the period of slavery, the conversion of the slaves to Roman Catholicism and their acceptance in the Church was done with the agreement of their masters (Eriksen, 1999; Laville, 2000). For Eriksen (1999), ‘African survival’ (p. 5) is seen in *séga* music and dance, which is Mauritius’ informal national music. Songs are a feature of the dynamic African oral ritual which

¹⁰ *Joie de vivre* means a lively, cheerful, and joyous style of life.

penetrate time, space, and aims (Dube, 2012). Séga, a folk music tradition, was used as a creative way of expression and to narrate past sufferings and celebrate freedom. As Dube (2012) put it, music has ‘ethnographical power’ (p. 109) to reinstate communal identity and custom. The post-slavery era was also tainted with discrimination; for example, Laville (2000) explained that the front pews in churches were reserved for White people. The religious authorities tended to discourage their Creole parishioners’ efforts to organise themselves for their upliftment. On the other hand, the message which was conveyed was one of acceptance and servitude. Because Mauritius is a predominantly non-Christian society, the Church will be at a disadvantage if Mauritian Creoles invest in other institutions. As mentioned earlier, although this ethnic group is the most economically challenged, the survival of non-religious groups is also threatened by lack of funds (Laville, 2000). Furthermore, the lack of unity among this group leaves little space for coherent organisation towards representativeness in politics and civil society. As Eriksen (1999) described it, successful Creoles shared their progress and improved wealth only with their immediate family, unlike other ethnic groups. The 1999 riots which shook the country after the death of the singer Kaya¹¹ reawakened African ethnic ties among Creoles (Boswell, 2006). This could be evidence of the failure of the majority to protect the rights of minorities (Fearon, 1998, as cited in Chandra, 2001). As Chandra (2001) stated, the expectation that minorities’ rights will be curtailed in the future can provoke rebellion in the present.

5.6.1.2 The Hindu identity: The majority

The Hindus constituted a majority non-homogeneous group on the island, which is partitioned into North Indian Hindus, Tamils, Telugus, and Marathis (Eriksen, 1999). Varma (2008) added the Gujarati to the list, as determined by the pre-independence census. The Hindus originally came from villages in Bihar, east of Uttar Pradesh, Andhra Pradesh, Tamil Nadu, and Maharashtra, as a labour force to do the work once done by the liberated slaves (Eriksen, 1999). North Indian Hindus represent 35 percent of the Mauritian population (Eriksen, 1999). The

¹¹ Joseph Reginald Topize , known under the pseudonym of Kaya, was a popular Mauritian singer and musician who invented the Seggae music. Kaya fought for the rights of the Creole-Mauritians. It is believed that the singer was killed in prison causing a major social turbulence in Mauritius.

language spoken among them is Bhojpuri, which is an amalgamation of Creole and Bihar Bhojpuri (Eisenlohr, 2004). They share the same food traditions and religious ceremonies and practices (Hollup, 1996b). The temples of the different Hindu subgroups are all very different (Srebrnik, 2000). The Bhojpuri-speaking Hindus are split into four castes, which are birth-ascribed statuses and in hierarchical order: Brahmin, Vaish, Rajput, and Ravived (Hollup, 1996b). The last one, also known as *chamar*, is the lowest caste in Mauritius.

Varma (2008) described the Hindus as a ‘well-knit community’ (p. 208) who were hard workers, patient, and good savers, which has helped them buy portions of land. Varma (2008) noted that Hindus mainly settled in rural areas as they became small planters. The Hindu community is a well-organised group which relies on a system of charitable socio-cultural and religious organisations which are still prevalent in the society. The common threads which unite the Indo-Mauritians apart from the importance of the family are:

- Hinduism and its many deities serving as a main religion;
- Celebrations of Indian festival such as Divali, the celebration of light; Maha Shivaratri, characterised by prayer, pilgrimage and fasting; and Holi, commemorating the victory of good over evil; and
- Traditional dress, such as the saris worn by women (Varma, 2008, p. 211).

According to Hollup (1996b), the deconstruction and reconstruction of social identities has been fashioned by both external effects in connection with economic growth and modernisation, such as the ‘Creolization’ process, inter-ethnic relations, and internal speeches and religious reforms introduced by Hindu socio-religious associations. The caste system in Mauritius has been fragmented by the rise in intermarriage and modernisation (Hollup, 1996b). However, the socio-religious associations ensure that a fair amount of state resources are distributed evenly. The tendency for Creolisation—that is, the construction of a new culture out of several existing cultural traditions—is palpable among the people. Hollup (1996b) claimed that such a propensity is mitigated by cultural revivalism and the politicisation of ethnicity, which curb the development of a national identity.

5.6.1.3 The Muslim identity

The Mauritian Muslims, although a subgroup of the Indo-Mauritians, are acknowledged as a detached community in Mauritius' constitution (Eisenlohr, 2006). Most of them were Indian immigrants with a similar history as the Hindus (Varma, 2008). However, with the politicisation of ethnicity, Islamic revivalism demanded a distinct identity founded on Islam and Urdu, and they redefined their history (Hollup, 1996b). The Muslims of Indian origin make up 17 percent of the population (Eriksen, 1999; Eisenlohr, 2006). According to Owodally (2011), Mauritian Muslims are not a homogeneous group but one which diverges along social and ethnic lines (Rajah-Carrim, 2004). Eisenlohr (2006) noted that Muslims arrived on the island during the French period, between 1715 and 1810. Well-off Muslim Gujarati traders migrated to Mauritius in the 1840s from Kutch and Surat; their native languages were Kutchi and Gujurati, respectively (Owodally, 2011). However, their connection to India and its customs remained strong (Eisenlohr, 2006). The first group was from the 'Kutchi memons' (Eisenlohr, 2006, p. 400) caste, and this group organised, managed, and sponsored Islamic institutions such as mosques and madrasas¹² all over Mauritius. They cherished the tradition of the 'Sunni South Asian Ahl-e Sunnat va Jama'at' (p. 400) or *Barelwi* practices, which arose from Sunni Islam and stressed rituals of intercession and the adoration of Sufi saints (Eisenlohr, 2006). The *Sunnat Jama'at*, as it is commonly known, views the recital of poetry in honour of the Prophet during religious assemblies such as *mahfil-e mawlid* (Eisenlohr, 2006, p. 401) or after Friday prayers as a way of manifesting the divine presence of the Prophet.

The second Gujarati group was the Sunni Surtees Gujarati traders who migrated to Mauritius and introduced the Deobandi customs to Muslims, represented by the *Tablighi Jama'at*, and constructed the Markazi Mosque (Eisenlohr, 2006; Owodally, 2011, p. 135). They emphasised Arabic 'as the language of the Quran' (Owodally, 2011, p. 135). Another group of Muslims is the indentured labourers known as the *Kalkattiya* (Eisenlohr 2006, p. 401; Eisenlohr, 2012; Hollup, 1996b). Similar to the Hindus, this subgroup moved up the social ladder through hard work and higher education. A connection was formed between the *Kalkattiya* and the Sunni Surtees through

¹² Madrasas are the religious Islamic schools (Eisenlohr, 2006).

adherence to Deobandi traditions which created a counterweight to the Sunnat Jama'at hegemony. Eisenlohr (2006) argued that the Mauritian Government should take the Sunnat Jama'at to denote the Muslim community (Owodally, 2011).

Muslims practice Islam, and their major celebrations are *Yaum an-Nabi*, Eid al-Fitr, and *Eid al-Adha* (Varma, 2008). While Yaum an-Nabi celebrates the Prophet Mohammed, Eid al-Fitr occurs after a month of fasting and prayer, and is marked by the giving of alms (Varma, 2008). Eid al-Adha is linked to the notion of sacrifice and sharing with family and friends. The common language taught is Urdu. However, as noted by Eisenlohr (2006), the tendency of the people following the Sunnat Jama'at is to teach Urdu to their children, while the followers of Deoband or Tablighi prefer the Arabic language. Hollup (1996b) claimed that the Urdu language was a symbol of Muslim distinctiveness because it had no practical importance for the people, who actually spoke Kreol as their everyday language (Hollup, 1996b).

5.7 Multiculturalism and interculturalism

Mauritius is a multicultural nation which has set an example of cooperation, tolerance, and adaptation for peaceful coexistence (Varma, 2008). The Mauritian nation is split into 'communities' (Eisenlohr, 2006, p. 397) with religion as the most outstanding criterion of demarcation. Eisenlohr (2006) asserts that the Gandhian philosophy guides the Mauritian state—that is, moral values, which are crucial for the peaceful cohabitation of all citizens, are extracted from positive religious traditions to counter negative communalism. Between the 1960s and 1970s, the word multiculturalism first appeared in Canada and Australia and afterwards in the United States, the UK, and Germany (Parekh, 2010; Meer & Modood, 2011). Meer and Modood (2011) defined multiculturalism as a political adjustment by the state and/or majority group of all minority cultures, characterised principally by race, ethnicity, religion, nationality and aboriginality. The basis of multiculturalism is the belief in tolerance among cultures (Wood, Landry & Bloomfield, 2006). Verkuyten (2005) defined multiculturalism as an appreciation of difference and a celebration of diversity through respect and equality. Multiculturalism values dialogue and communication (Meer & Modood, 2001). Meer and Modood (2001) cited Taylor's (1992)

reference to identity as being based on recognition. Taylor (1992) also stressed the presence or nonexistence of recognition or misrecognition of others as a means of ‘oppression’ (Meer & Modood, 2011, p. 10). Parekh (2010) argued that multiculturalism is an understanding of the importance of culture in human life, that different cultures complement each other, and that cultures are within themselves plural and nonstatic.

In studies conducted by Verkuyten (2005) on Turkish and Dutch people, it was found that supporting the principle of multiculturalism is directly linked with ethnic in-group identification and positive evaluation among minorities. However, the majority group who plump for multiculturalism are less likely to identify with their ethnic group and less probable to demonstrate negative out-group evaluation. The shortcomings of multiculturalism have called for a new approach: interculturalism, which is an attitude of openness towards other cultures (Wood, Landry & Bloomfield, 2006, p. 7). Interculturalism is viewed as a process which goes beyond multiculturalism to the ‘pluralist transformation of public space, institutions and civic culture’ (Wood, Landry & Bloomfield 2006, p. 9). Hammer (2004) claimed that multiculturalism is a policy founded on personal autonomy that safeguards cultural legacies, while interculturalism recognises that polyethnic nations and cultures act in a multidirectional fashion. Both minorities and dominant groups influence each other (Sze & Powell, 2004). The intercultural approach views the wide importance of culture in relation to all the aspects of an individual (Hammer, 2004). Thus, interculturalism is about broad cultural exchanges which are premised on intercultural dialogue. In the Mauritian context, the multicultural perspective is emphasised rather than the intercultural view, although the Mauritian people have a shared value system which is visible during festival celebrations.

5.8 Conclusion

The definition of ethnicity has evolved through the centuries. Many schools of thought have emerged to explain the continued importance of ethnicity in people’s lives. Ethnicity is believed to be on a continuum, with one extreme being the imposition of a sole ethnic group and the other extreme being an optional ethnicity. Ethnic identity was considered in terms of different

points of view. Mauritius has a rich history in the formation of ethnic groups. Initially, the two main ethnic groups were Indo-Mauritians and Creole-Mauritians. However, the Indo-Mauritians were influential in various ethnic groups, because they encompassed multiple ethnic subgroups. The Muslim Mauritians strived to stand on their own, separate from the Indo-Mauritians, and claimed a different history. The three major identities are therefore the Hindus, the Muslims, and the Creoles. Mauritius is midway between a religiously diverse society and a religiously pluralistic society. The country is also engaging in the ongoing debate over whether to adopt a multicultural approach or an intercultural approach; the intercultural perspective is considered more important than multiculturalism because it encourages dialogue and openness.

Chapter 6: Methodology

The methodology of the present study was determined by the nature of the research problem and the research questions that followed from the problem. The research problem examined in this study is how spiritual intelligence manifests in different ethnic groups. The rationale for the present study was the scarcity of quantitative research in this area. The first research question was to determine whether there were differences in SQ among Hindus, Muslims, and Creoles living in Mauritius. The second research question examined the relationship between the levels of ethnic identity with SQ. The third research question investigated the differences in ethnic identity in among three ethnic groups. The fourth research question examined the differences in religious groups with regard to SQ. The last research question for Study One was to determine the differences in ethnic identity and SQ explained by gender. Study Two investigated the factor structure obtained in Study One. The research question of Study Two examined whether a six-factor model fit the data and investigated the covariance among the dimensions obtained in Study One. The research used a positivist paradigm, and a quantitative approach was required to address the questions. However, there was also a qualitative phase of cognitive analysis in the research, whereby the researcher had to formulate the items required to operationalise spiritual intelligence in a multi-ethnic society. The methodology chapter addresses the research paradigm, the research design chosen, and data collection. Data entry and analysis techniques are briefly mentioned for Study One and Study Two. Research ethics are also addressed in this chapter.

6.1 Research paradigm

The research paradigm outlined the nature of the enquiry according to ontology, epistemology, and methodology (Blanche & Durrheim, 2006; Brand, 2009). The study relied on objectivism epistemology from a positivist theoretical perspective, with survey research as the methodology or ‘strategy’ (Crotty, 1998, p. 3) and questionnaires as the method. The epistemology was rooted in the theoretical perspective, and consequently in the survey research methodology (Crotty, 1998; Walliman, 2011). Reality was distinct from the observer—that is, the researcher

and the object of study were independent (Weber, 2004). Dualism is part of a positivist model; the study embraced a positivist approach which engaged the manipulation of theoretical propositions via ‘the rules of formal logic’ in addition to ‘the rules of hypothetico-deductive logic’, so that the theoretical propositions fulfilled the four conditions of falsifiability, logical consistency, relative explanatory power, and survival (Lee, 1991, p. 343). This research, in taking a positivist stance, is founded on rationalistic, empiricist beliefs (Mertens, 2015). The researcher was independent of the research and had a negligible amount of interaction with the research participants, which is one of the conditions of the positivist stance (Wilson, 2010, as cited in Dudovskiy, 2015). Positivism, a belief system that resulted from practices in the natural sciences, presumes that research studies should be examined objectively (Brand, 2009). The veracity of studies can thus be proven with a satisfactory degree of confidence (Brand, 2009). In this study, the objective method used is the questionnaire, which was developed according to the guidelines for a scientific scale development and statistically analysed without the researcher’s subjective interpretation of data. The only qualitative phase of cognitive analysis in the study was in the formulation of items to operationalize spiritual intelligence in a multi-ethnic society.

The positivist paradigm has many advantages (Raddon, n.d.). Firstly, it permits the collection of a large quantity of data in a study with a well-defined theoretical focus. Secondly, it enables more control over the research process through standardised procedures (Raddon, n.d.). This implies that research results can be replicated (see also Cohen, Manion & Morrison, 2011). The positivist paradigm claims that only knowledge acquired through the senses, using a scientific means of measurement, is reliable (Dudovskiy, 2015; Gray, 2014). The task of the researcher was ‘neutral’ (Walliman, 2011, p. 22), restricted to data collection and interpretation through an objective method (see also Dudovskiy, 2015). Thus, the use of the scientific method enabled experimentation and measurement of what could be observed, with the objective of determining general laws to explain constant relationships among variables (Mertens, 2015). Thirdly, within this paradigm, there was the possibility of formulating quantitative predictions, testing hypotheses, and making generalisations of research findings (Johnson & Onwuegbuzie, 2004). Johnson and Onwuegbuzie (2004) highlighted that because research outcomes are independent of the researchers, positivism has more credibility with many people in power. Data collection and data

analysis were straightforward and quick with use of statistical software. The choice of the positivist approach was influenced by the aims of the study.

6.2 Research design

The cross-sectional survey design was used in this study to collect data on the spiritual intelligence of Mauritians in relation to their ethnic profile. An initial sample of 1,177 participants responded to the study. The development of an appropriate questionnaire called the Multicultural Spiritual Intelligence Scale (MSIS) formed part of the present research. During the first part of the study, the MSIS-1 was administered together with a number of other questionnaires and the data were used to refine the questionnaire and to examine the relationships between ethnic identity, religion, and spiritual intelligence. The factor structure of the MSIS-2 was confirmed during the second part of the study. The design or ‘frame of reference’ (De Vaus, 2014, p. 29) linked the conceptual research problems to the relevant empirical research (see also van Wyk, 2012). The descriptive and inferential research used the survey research design to set the context and structure of the study. The role of the research design was to confirm that the evidence obtained allowed the researcher to respond to the initial research questions as unequivocally as possible (De Vaus, 2001). The research questions were used to determine the research design or ‘strategic framework’ (Durrheim, 2006, p. 36), thus enhancing the validity and reliability of the design of the study. Because variables were not manipulated, this study could also be called a correlational one (Gavin, 2008).

The advantage of this design was the possibility of quick observation and measurement, and the collection of a large amount of data (Creswell, 2012). The development of the research design encompassed four scopes (Durrheim, 2006). The aim of the study was the first scope. The overall aim of the present study was to expand knowledge on spiritual intelligence in the Mauritian context and its pertinence to ethnic profiles. The second scope related to the theoretical paradigm informing the investigation. As mentioned above, the positivist paradigm was the theoretical perspective of the study, which was also intended as a means of controlling the research context. The third scope concerned the context within which the research was executed. The last scope

pertained to the techniques used to collect and analyse the data. The technique applied was the survey research design. The author noted that the two main standards that led the process of developing a research design were the design validity and the design coherence. By covering all four scopes, the design validity and design coherence were maximised for the present study.

Scale development is a very time-consuming task, and the test-retest reliability could not be performed given the time constraint. As mentioned, the first study took more than one year to reach a large number of participants, and the second study was completed in one semester. Furthermore, the research was limited to only three ethnic groups; other groups, such as the Sino-Mauritians and the Franco-Mauritians, were negligible in number and thus not considered during analysis. Multiple identities were also not considered in this thesis.

6.3 Data collection

This study used empirical quantitative research, a method used to identify phenomena by gathering numerical data, which are then examined using mathematically grounded methods (Aliaga & Gunderson, 2000, as cited in Muijs, 2011). As quantitative research, this study focused on measuring the spiritual intelligence of Mauritians, testing the set of hypotheses mentioned in the introduction, and looking at the correlation between SQ and ethnicity. The quantitative research is more structured and had well-defined features, which allowed researchers to plan much of the research process before its onset (Lund Research, 2013). As Gavin (2008) argued, the difference between quantitative and qualitative approaches is rather philosophical than methodological.

6.3.1 Questionnaires

The study gathered data on the spiritual intelligence and ethnic identity of the participants. The survey design used questionnaires, namely the MSIS-1, the Multigroup Ethnic Identity Measure-Revised (MEIM-R) and other questionnaires to gather this data. The self-report instrument MSIS-1 consists of 106 items on spiritual intelligence which were developed for the purpose of the survey. The MSIS-1 covers six dimensions: self-awareness, level of consciousness, transcendental awareness, sensitivity, resilience, and quest for meaning. The MEIM-R developed

by Phinney and Ong (2007) has six items on ethnic identity and equally measured two dimensions of ethnic identity, namely exploration and commitment.

6.3.1.1 The MSIS-1

The items on the MSIS-1 were divided among the six dimensions as follows: self-awareness = 16 items, level of consciousness = 19 items, transcendental awareness = 21 items, sensitivity = 16 items, resilience = 16 items, and quest for meaning = 18 items. The questionnaire also included a ten-item demographic section which inquired about the characteristics of the participants (Shaughnessy et al., 2003), specifically gender, age, marital status, educational level, occupational background, religion, and religious affiliation. The items were determined after a thorough review of the literature on spiritual intelligence scale development. The study took into consideration multicultural aspects such as the African and Eastern perspectives in some items (Amram, 2007; Hall & Edwards, 2002; King & DeCicco, 2009; Steger et al. 2006; Zohar & Marshall, 2001). For instance, item 16 regarding the self-awareness dimension (see Appendix 2) was as follows: ‘I can recognize the voice of my ancestors addressing me’, with a response scale ranging from ‘not at all true of me’ to ‘completely true of me’. This item addressed the African and Indian belief in communication between ancestors and the current generation. The scoring procedures for the MSIS-1 are as follows, there are 106 items in total and the total score ranges from 0 to 424. Each dimension has a subscore. The self-awareness (items no. 1 to 16), the sensitivity (items no. 57 to 72) and the resilience (items no. 73 to 88) dimensions have 16 items each and the subscore on each dimension ranges from 0 to 64. The subscores on the level of consciousness dimension with a total of 19 items (item no. 17-35) range from 0 to 76. The subscores on transcendental awareness dimension (items no. 36-56) and quest for meaning dimension (items no. 89-106) range from 0 to 84 and from 0 to 72 respectively. The response for items no. 8, 9, 24, 32, 52, 59, 63, 64, 69, 74, 77, 79, 82, 90, 94, 100, and 104 must be reversed before adding the scores. Higher scores indicate a higher level of SQ.

The most straightforward principles of methodology for good research design were reliability and validity (6 [sic] & Bellamy, 2012)—these are also technical necessities and the main criteria for weighing the quality of a psychological measure (Trochim, Donnelly & Arora, 2016; Wolfaardt & Roodt, 2006). The reliability of the MSIS-1 was the consistency with which it assessed SQ (Wolfaardt & Roodt, 2006; 6 [sic] & Bellamy, 2012). In other words, the reliability of the MSIS-1 was its stability (Trochim et al., 2016; Gravetter & Forzano, 2012). In a mathematical sense, the reliability of the MSIS-1 was an estimation of the coefficient created from the variance components in a statistical model (Zumbo & Rupp, 2004). This study used internal consistency reliability, which involves measuring the consistency of outcomes across items within the MSIS-1 (Trochim et al., 2016). The Cronbach's alpha coefficient was determined to be the most appropriate reliability test used in this study, because it could be used to estimate reliability from multiple scored items of the MSIS-1. The MSIS-1, as an instrument for self-reporting, featured similar items in multiple phrasings, and the internal reliability evaluated whether the participants' responses to the different wordings were consistent (Morling, 2012).

The validity of the MSIS-1 meant how far the test measured SQ and to what extent it measured the construct (Wolfaardt & Roodt, 2006; Gravetter & Forzano, 2012). As the study involved the construction of a measure, content validity and face validity were the two types of validation procedures which were obtained before any data analysis. The MSIS-1 can be judged to have face validity if it appears to measure what it is supposed to measure (Morling, 2012; Kline, 2000). The MSIS-1 was found to have face validity, as the construction of the items was based on a thorough study of the literature on each dimension, and community members also assessed the relevance and readability of the MSIS-1. Furthermore, the MSIS-1 could claim to have high content validity, which was a subjective view of the scale (Morling, 2012). After the measure was drafted, it was sent to a panel of experts, such as academics and psychologists, for evaluation and improvement. The construct validity was the extent to which the MSIS-1 operationalised spiritual intelligence to capture what it was anticipated to describe (6 [sic] & Bellamy, 2012). This was assessed through an EFA (Kahn, 2006) performed using IBM SPSS version 22 software.

The development of the MSIS-1 involved the six phases of questionnaire development as described by Foxcroft (2006).

- *Phase 1: planning*

The purpose of the MSIS-1 was to gauge the spiritual intelligence of Mauritius' multi-ethnic society. This included both men and women above 18 years of age in the Republic of Mauritius. The MSIS-1 is designed to measure six dimensions of spiritual intelligence: self-awareness, level of consciousness, transcendental awareness, resilience, quest for meaning, and sensitivity. The planning phase involved an extensive literature review on spiritual intelligence. The exploration of spiritual intelligence and the development of SQ scale were influenced by several authors (Amram, 2007; Emmons, 2000; King, 2008; Vaughan, 2002; Wigglesworth, 2006; Zohar & Marshall, 2005). The content of the MSIS-1 reflects the influence of Eastern, African and Western perspectives on the local population.

- *Phase 2: Item writing*

The item format was guided by the research questions and research objectives. The MSIS-1 consists of close-ended items in a Likert format. Reverse items were also included to curtail the opportunity of response sets. The items were drawn from the literature on spiritual intelligence. As the measure was aimed at a multi-ethnic population, the local beliefs and practice of the Mauritian people were considered in developing the SQ scale. See Appendix 2 for the 106-item questionnaire. Prior to the large survey, a pilot study was conducted on 25 participants who completed SC-level studies in view of testing the readability and comprehension of the MSIS-1. The Likert scale responses to the items presented range from 'Not at all true of me (0)', 'Slightly true of me (1)', 'Moderately true of me (2)', 'Very true of me (3)', to 'Completely true of me (4)'. Respondents were asked to choose the answer which best reflected them. The pilot test provided qualitative information on the items and on the MSIS-1's instructions. The feedback was used to improve the measure. Certain words were found to be too difficult for the participants, so some of the wording was changed and additional definitions were included to make the scale more accessible in terms of language. In this phase, it was necessary to rewrite items that were found to

be confusing or ambiguous. A panel of experts consisting of academics and psychologists also reviewed the items. The data in the pilot test were not used in the study.

- *Phase 3: Assembling and pre-testing the experimental version*

There were 106 items in the MSIS-1. It was designed to be over-inclusive, so as to capture the essence of spiritual intelligence as defined by the six dimensions. The items were organised in terms of the construct being measured. For instance, all items measuring self-awareness were grouped in sequential order. The MSIS-1 was administered to 1,177 Mauritian participants by mail or online.

- *Phase 4: Item analysis*

For each of the 106 items, a z-score for skewness and kurtosis were calculated to check which items were significant. Using IBM SPSS version 22, an EFA was carried out to obtain the factors of spiritual intelligence. However, all items were kept for the EFA. A principal component analysis (PCA) was performed on the 106-item scale. Items which had factor loadings higher than 0.35 were considered salient and therefore retained; items which had factor loadings below this level were discarded. Complex structure items—those which loaded robustly on two factors—were eliminated. Components which had only reverse-coded items were also removed from the scale.

- *Phase 5: Revising and standardizing the final version of the MSIS-1*

The Cronbach's alpha value for the 106-item was 0.99, which signified an excellent internal consistency for the MSIS-1, meaning that none of the items could influence the Cronbach's alpha if deleted. Each of the subscales had also excellent reliability, with values ranging from 0.899 to 0.946. Other measures such as the New Indices of Religious Orientation (NIRO) (Francis, 2007), the PSC, and the BIDR confirmed the construct, convergent, and discriminant validity respectively. A CFA was conducted with IBM SPSS AMOS version 22 in a second study to confirm the factors obtained in the EFA, and a final 29-item version of the MSIS-2 was made.

- *Phase 6: Technical evaluation and establishing norms*

The 29-item MSIS-2 also had an excellent reliability of 0.95, with subscale reliability values ranging from 0.761 and 0.91. The test-retest reliability was not determined, as it was not required for the present study. In the second study, the CFA confirmed five out of six factors: self-mastery, transcendental awareness, spiritual sensitivity, resilience, and existential quest. More detailed information is provided in the results chapter.

6.3.1.2 The MEIM-R

The Multigroup Ethnic Identity Measure-Revised (MEIM-R) (Phinney & Ong, 2007) was used to examine the ethnic profile of the participants. The scale represented two dimensions which encompassed cognitive development and the affective components. Pegg and Plybon (2005) confirmed the two-factor MEIM-R in a study on African-Americans. There was a three-item ethnic identity exploration (items 1, 4 and 5 in Section ii of the MEIM-R in Appendix 4) and the three-item ethnic identity commitment dimension (items 2, 3 and 6 in Section ii of MEIM-R, as shown in Appendix 4). The MEIM-R had an overall good reliability with Cronbach's alpha, $\alpha = 0.81$. The reliability of the ethnic identity exploration subscale was 0.76, and the Cronbach's alpha (α) for the ethnic identity commitment subscale was 0.78. Sections (i), (iii), (iv), and (v) were for identification and grouping only. These sections were adapted to the local population. For instance, on the item 'my ethnicity is', participants could choose from Indo-Mauritian, Creole Mauritian, Sino-Mauritian, Franco-Mauritian, mixed, or other.

6.3.1.3 The MLQ, CD-RISC, PSC, NIRO, and BIDR

Besides the MSIS and MEIM-R, the two main measures, participants responded to other measures to provide for the convergent and discriminant validity. The selected measures for convergent validity were the Meaning in Life Questionnaire (MLQ) (Steger, Frazier, Oishi & Kaler, 2006), the CD-RISC (Connor & Davidson, 2011), the Private Self-Consciousness Subscale (PSC) (Scheir & Carver, 1985), and the New Indices of Religious Orientation—the extrinsic subscale (NIRO) (Francis, 2007). The Balanced Inventory of Desirable Responding (BIDR-6)

(Paulhus, 1991) provided for the discriminant validity. Permission was sought from the respective authors to use these questionnaires. While most measures were free for academic use, the CD-RISC was bought for this study.

The 10-item MLQ equally measured the presence and the search dimensions. The measure had good psychometric properties; the internal consistency was above 0.7 for both the presence ($\alpha = 0.86$) and search ($\alpha = 0.87$) subscales (Steger et al., 2006). There was one reverse-coded item: 'My life has no clear purpose', where participants had to choose an answer from a 7-point scale which ranged from 'absolutely untrue' to 'absolutely true' (Steger et al., 2006). The shortened one-dimensional version of the CD-RISC, a ten-item self-reported scale, had also very good psychometric properties and was appropriate to diverse cultures. Unlike the long version which was found to be unstable (Hartley, 2012; Scali et al., 2012), CD-RISC 10 had reliable and valid scores for worldwide samples (Campbell-Sills & Stein, 2007, as cited in Coates, Phares & Dedrick, 2013). Coates et al. (2013) demonstrated the construct validity and internal consistency of the CD-RISC ($\alpha = 0.87$). With the CD-RISC, 10 participants responded on a five-point scale to statements such as 'I see the humorous side of things', choosing from responses which ranged from 'Not at all true' to 'True nearly all of the time'.

The Self-Consciousness scale assessed three constructs: private self-consciousness, public self-consciousness, and social anxiety (Scheier & Carver, 1985). The PSC, a nine-item subscale with good reliability ($\alpha = 0.75$), was used to examine its association with the consciousness construct of MSIS-1. An item taken from the PSC was 'I am quick to notice changes in my mood', and respondents had to indicate their choice on a four-point scale from 'a lot like me' to 'not like me at all'. The NIRO developed by Francis (2007) measured three religious orientations: extrinsic, intrinsic, and quest orientation. In this research, the six-item extrinsic scale was used and it involved the compartmentalisation, social support, and personal support subscales (Francis, 2007). The scale had good reliability ($\alpha = 0.84$). According to Francis (2007), high scores on the compartmentalisation subscale meant that respondents viewed religion as important but limited to some aspects in their life. A high score on the social support subscale meant that participants received social support through their religious commitment. Lastly, a high score on the personal support subscale indicated that personal support was received through individual religious

practices (Francis, 2007). One item from the extrinsic measure and the personal support subscale was ‘I pray chiefly because it makes me feel better’; participants indicated their response from a five-point scale which ranged from ‘strongly agree’ to ‘strongly disagree’.

A common problem with the use of questionnaires is response distortion, such as participants deliberately choosing socially desirable responses (Li & Bagger, 2007). Scales such as the BIDR (Paulhus, 1984, 1986, 1994, as cited in Lanyon & Carle, 2007) were developed to measure such effects. High correlations with tests such as these result in intentional distortion (Li & Bagger, 2007). According to Paulhus (1984, 1991, 2002, as cited in Li & Bagger, 2007), social desirability can be split into self-deception (an unintentional inclination to depict oneself in a favourable way) and impression management (a propensity to deliberately distort one’s self-image to be perceived favourably by others). The BIDR-6 comprised two subscales, Impression Management (IM) and Self-Deception Enhancement (SDE) (Lanyon & Carle, 2007; Li & Bagger, 2007). Each subscale of the BIDR was composed of 20 items. Respondents of BIDR designated their agreement with 40 statements about themselves on a seven-point scale, with 1 signifying ‘not true’ and 7 meaning ‘very true’. In view of monitoring for potential acquiescence bias, the measure was counterbalanced so that there were equivalent numbers of positively and negatively keyed items (Li & Bagger, 2007; Vispoel & Kim, 2014). One item from the SDE was ‘I am a completely rational person’, and one example from the IM was ‘I never swear’. Paulhus (1999) verified that BIDR-6’s alpha coefficients for both subscales varied between 0.70 and 0.84 (as cited in Vispoel & Kim, 2014). However, the reliability of the measures was re-assessed and elaborated in the results section.

6.3.2 Distribution and response rates

The questionnaires were mailed or administered online; this combination resulted in a high response rate (Creswell, 2012). The paper version was returned by 636 participants, who represented 54 percent of the sample. The Mauritius ‘yellow-pages’ phonebook was used to select the organisations. The phonebook listed businesses in Mauritius by categories and alphabetically. Seven categories were initially chosen at random like insurance companies, the education sector,

tourism organisations, telecommunications, the transport sector, customer services in private sector and the health sector. From these seven categories, a list of companies were drawn. The companies in the study were randomly selected by drawing lots. For example, private clinics, private bus transport companies, state secondary schools and universities were part of the survey. Instead of simply mailing the questionnaire to the selected organisations, the researcher scheduled an appointment with the head of each organisation to explain the purpose of the study and to ensure that the seriousness of the study was well understood at the beginning. Upon the approval of the manager or the director, copies were left for completion. The questionnaires were collected within a month. While mailing the questionnaires was an expedient way of reaching a geographically scattered sample and resulted in relatively fast data collection, the researcher avoided the problem of few questionnaires being returned by collecting them personally.

To achieve better reach for the survey, an online version of the questionnaire was also made available using eSurvey Creator (2015). The online version was available for a period of 12 months, with the option of filling it out in one go or over several intervals. This version garnered 541 participants (46 percent of the sample). The web-based format of the questionnaires made them accessible from any computer which had Internet facilities (Creswell, 2012). As Schonlau (2009) pointed out, the Internet survey generated new openings to measure new and complex concepts which were difficult to measure with other methods, and did so in a shorter time frame. The web survey was also cost-effective and provided new opportunities for ‘quality enhancement and quality control’ (Schonlau, 2009, p. 294). Krantz and Dalal (2000) highlighted one main advantage of web surveys—the study sample characterised a wider cross-section of the population. Of those participants who completed the online version, 84 percent were invited by email, while only 16 percent (88 participants) responded to the page directly. Permission was sought to send email notifications to companies which provided the facility to its employees.

Mauritius is a technologically well-advanced country with more than 60 percent of internet penetration, which means that there was no major problem of coverage (Miniwatts Marketing Group, 2015). There were also no issues with technological accessibility. The public was made aware of this study by a publication in a local newspaper ('Spiritual Intelligence Survey', 2013), and promotional posters were also displayed in public places such as the University of Mauritius,

the University of Technology, and bus stops. Furthermore, a page dedicated to this research was also set up on a social media network to explain the aim and purpose of the study, and a direct link was attached for ease of response. Local online advertising companies such as Orange and L'express were used to encourage participation. The Internet survey was a random sample, because the population was made aware of the study via different media, and their time spent was rewarded by lottery participation. The questionnaires were numbered and participants were given the space and choice to include their email addresses to participate in a lottery to win prizes. Prizes were a means to stimulate higher response rate. Three winners were selected at random and won telephone vouchers of MUR 1000, MUR 500, and MUR 200 as the first, second and third prizes respectively. They were contacted by email and their voucher was sent by the same medium. The main drawback of the online and take-home administration was a weaker control over administrative procedures and from unauthorised use and distribution.

6.3.3 Sampling strategies

6.3.3.1 Study One

The sample population for the present study were adults from the Republic of Mauritius. The participants were at least 18 years old, which represented the age of consent. According to the Child Protection Act (1994), any person younger than 18 years old is considered as a child. The age group of the sample represented mostly the working population, who generally have access to Internet facilities. The target population or sampling frame for this study was working men and women above 18 who were in one of the three main ethnic groups: Mauritian Creoles, Mauritian Hindus, and Mauritian Muslims. The sample size was 1,177 participants (47.7 percent male and 52.3 percent female), including participants who withdrew or submitted incomplete questionnaires. The sample population was initially set at 1,500 participants drawn from the working population. The bigger the sample, the less the potential for the error that the sample will be dissimilar from the population (Creswell, 2012). Table 6.1 describes the sample distribution. However, many questionnaires were not returned or not completed by participants. The three ethnic groups were fairly equally represented, with 330 Hindu-Mauritian participants (28 percent

of the sample population), 308 Muslim-Mauritian participants (26.1 percent of the sample population), and 338 Creole-Mauritian participants (28.7 percent of the sample population). The participants who reported mixed, Franco-Mauritian, or Sino-Mauritian ethnicity represented 17.1 percent.

The type of quantitative sampling strategy used was probability sampling, which meant that each element had an equal chance of being selected in the study (Creswell, 2012; Shaughnessy et al., 2003). According to Shaughnessy et al. (2003), probability sampling was considerably better than nonprobability sampling with regard to ensuring the sample representativeness of the population. The study used stratified random sampling, meaning that the target population was stratified along the three ethnic groups (the strata), and then simple random sampling was done for each of the three ethnic groups (Creswell, 2012). The use of stratified random sampling was justified, as simple random sampling would have yielded significantly unequal numbers for the three ethnic groups. Issues such as non-random sampling and technological problems were not relevant in this study (Creswell, 2012).

Table 6.1

Frequencies and percentages of responses on demographic items in Sample One (N = 1177) and Sample Two (N = 303).

	SAMPLE 1 (N = 1177)		SAMPLE 2 (N = 303)	
Variables	<i>Frequency</i>	<i>Percentages (%)</i>	<i>Frequency</i>	<i>Percentages (%)</i>
Gender:				
Male	495	47.7	149	49.2
Female	543	52.3	154	50.8
Age:				
18 – 29 years old	498	48	112	37
30 – 39 years old	288	27.8	87	28.7
40 – 49 years old	150	14.5	66	21.8
50 – 59 years old	72	6.9	27	8.9
Above 60 years old	29	2.8	11	3.6
Marital status:				
Single	385	37.1	107	35.3
Committed	108	10.4	21	6.9
Married	513	49.5	170	56.1
Divorced	21	2.0	5	1.7
Separated	7	0.7	-	-
Others	3	0.3	-	-
Education level:				
Certificate of Primary	1	0.1	-	-
Below School Certificate	56	5.4	13	4.3
School Certificate	172	16.6	46	15.2
Higher School Certificate	357	34.5	147	48.5
Prevocational Courses	8	0.7	-	-
Short Courses	13	1.3	-	-
Diploma	118	11.4	38	12.5
Bachelor Degree	196	18.9	34	11.2
Post Graduate Diploma	22	2.1	12	4
Master Degree	80	7.7	12	4
PhD	11	1.1	1	0.3
Others	2	0.2	-	-

Variables	SAMPLE 1 (N = 1177)		SAMPLE 2 (N = 303)	
	<i>Frequency</i>	<i>Percentages (%)</i>	<i>Frequency</i>	<i>Percentages (%)</i>
Occupational background:				
1. Director/Senior Management	21	2	-	-
2. Middle management/ Administrative	68	6.6	-	-
3. Executive Professional (Doctor/Lawyer/architect etc.)	17	1.6	-	-
4. Secretarial / clerical	121	11.7	-	-
5. Self-employed/ businessman	179	17.3	26	8.6
6. Artist/ writer/ musician	20	1.9	-	-
7. Teacher (Primary and secondary)	127	12.2	104	34.4
8. Technical (skilled and manual)	70	6.8	25	8.3
9. Lecturer/ Professor	23	2.2	-	-
10. Nursing sector	8	0.8	59	19.5
11. Tourism sector	16	1.5	34	11.3
12. Accounting sector	6	0.6	-	-
13. Public officer	4	0.4	-	-
14. Employed in Private sector	13	1.2	-	-
15. Consultant	5	0.5	-	-
16. Social worker	7	0.7	-	-
17. Unskilled worker	5	0.5	-	-
18. Housewife	52	5	-	-
19. Retired	16	1.5	-	-
20. Full-time Student	107	10.4	42	13.9
21. Unemployed	71	6.8	12	4
22. Others	81	7.8	-	-
Religion of participants:				
Christianity	368	35.5	105	34.7
Buddhism	64	6.2	3	1
Hinduism	270	26.1	122	40.3
Islam	316	30.5	71	23.4
Others	18	1.7	2	0.7
Ethnicity:				
Hindu-Mauritian	330	31.8	125	41.3
Muslim-Mauritian	308	29.7	70	23.1
Creole-Mauritian	338	32.6	99	32.7
Mixed background	27	2.6	-	-
Others	34	3.3	9	3

6.3.3.2 Study Two

Following the explanatory factor analysis in Study One, the revised version of MSIS-2 was tested in a second study. In this study, 303 participants ($N = 303$) (49.2 percent males and 50.8 percent females) completed the 29-item questionnaire, as shown in Table 6.1. The Mauritius ‘yellow-pages’ phonebook was used to select the businesses. Seven categories were initially chosen at random, namely the insurance companies, the education sector, tourism organisations, telecommunications, the transport sector, customer services in private sector and the health sector. From these seven categories, a list of companies were also drawn for the second study. The companies were randomly selected in odd numbers. All participants completed the survey using either the Web-based format or the paper version. Questionnaires which were emailed to respondents represented 40.6 percent of the sample. Participants who responded to the web-based version represented only 17.5 percent of the sample. The web-based format was available online for a three-month period. The participants who responded using the paper version represented 41.9 percent of the sample. Of the 303 participants, 34.7 percent denoted Christianity as their religion; 40.3 percent Hinduism, 23.4 percent Islam while Buddhism and Others represented 1 percent and less than 1 percent respectively. Although the initial sample was 450 participants, only 67 percent responded to either the emailed Web-based questionnaire or the paper version. Apart from the 29-item Likert scale section, seven items on gender, age, marital status, educational and occupational background, religion, and ethnic cultural origin were mentioned in the questionnaire’s demographic part. The instructions about the survey were provided at the beginning. Respondents were made aware of the voluntary nature of the research and their right to withdraw at any time. The private and confidential character of the study were clearly stated in the survey. Participants were made aware of the purpose of the research. The aims of this second study were to develop a psychometric evaluation of the MSIS-2 and to test its construct validity on a random sample of Mauritians citizens (Harrington, 2009; Hoyle, 2000). A CFA was used to achieve these objectives through the use of IBM SPSS AMOS version 22. CFA is a form of structural equation modelling (SEM) which explicitly manages measurement models, that is, the association between observed measures or indicators (such as items from the MSIS-2) and latent variables (such as dimensions of SQ) (Brown, 2015). According to Hoyle (2000), CFA uses a deductive approach to test

hypotheses centring on the correspondence between the pattern of correlation in observed data and the pattern inferred by a hypothesised model, unlike EFA, which uses an inductive style.

6.4 Data analysis

IBM SPSS version 22 and IBM SPSS Amos version 22 were the software used for data entry and research analysis. Descriptive statistics were first calculated for each of the 106 items in the MSIS. The mean, standard deviation, kurtosis, and skewness statistics of each item were computed prior to other analyses. Frequencies and percentages were also measured for the demographic items in both samples, as seen in Table 6.1.

Data analysis was guided by the objectives of the study.

1. Confirm the factors of spiritual intelligence.

The study involved the development of a spiritual intelligence scale, so it was important to examine the factor structure of the MSIS-1. EFA—namely a principal component analysis—was the most appropriate data reduction technique. Factor analysis, a methodical simplification, was used to identify the number of factors from the 106-item MSIS questionnaire (Suhr, 2012; Worthington & Whittaker, 2006). The variables used in the factor analysis were the scores on the six dimensions of the MSIS-1. The sample adequacy was checked using the Kaiser-Meyer-Olkin (KMO) measure and the Bartlett's Test of Sphericity was used to analyse whether the data could be factorised in Study One. The main aim of the factor analysis was to determine the number of variables and the nature of latent variables (factors), which represented the variation and covariation among the set of observed measures (Brown, 2006). EFA was a methodical simplification of related measures.

CFA was used to confirm or reject the factors obtained from the EFA. In other words, CFA was used to determine the overall fit of a six-factor model of spiritual intelligence. The CFA involved the computation of different fit measures, such as the chi-square or the relative chi-square, the normed fit index (NFI), the comparative fit index (CFI), the goodness-of-fit index (GFI), the

adjusted goodness-of-fit index (AGFI), the standardised root mean square residual (SRMR), and the root mean square error of approximation (RMSEA).

2. Determine whether the three ethnic groups differ with regard to SQ.

A **one-way ANOVA** was carried out to look at the differences in SQ across the three ethnic groups: Hindu-Mauritians, Muslim-Mauritians, and Creole-Mauritians. When assumptions were violated, it was deemed useful to use a nonparametric test—in this case the Kruskal-Wallis H—along with the parametric measure.

3. Establish how ethnic identity relates to SQ.

The **Pearson product moment correlation** was calculated to gauge the strength and direction of the relationship between ethnic identity and spiritual intelligence. However, the assumptions of linearity, normality, or absence of outliers were all violated. As Pearson's product moment correlation is a robust test, the results were noted. A **Spearman's rank order correlation**, which was more appropriate in this case, was also calculated and compared to the Pearson product moment correlation.

4. Determine whether the three ethnic groups differ with regard to ethnic identity.

Both parametric and non-parametric tests were used to meet this objective. A **one-way ANOVA** was run to determine the degree of ethnic identity for the three ethnic groups. Assumptions such as normal distribution and absence of outliers were violated for one-way ANOVA. Kruskal-Wallis H, a non-parametric test, was also calculated to determine the differences in ethnic identity. A **one-way Multivariate Analysis of Variance (MANOVA)** was conducted to assess the effect of the dimensions of ethnic identification on the three ethnic groups. MANOVA used an ‘analogue of contrast codes’ on DV (ethnic identification) to test the hypothesis about how IV (ethnic groups) differentially predicted ethnic identification (Carey,

1998). The MANOVA was run to determine the differences in terms of sub-dimensions of ethnic identity, such as ethnic exploration and ethnic commitment among ethnic groups.

5. Determine how spiritual intelligences differ across religious groups.

A **one-way Welch ANOVA** was performed to determine whether the spiritual intelligence (MSIS score) was different across different religious groups such as Christianity, Buddhism, Hinduism, Islam, and others.

6. Ascertain the differences in ethnic identity and spiritual intelligence explained by gender.

A **one-way MANOVA** was run to ascertain the differences in ethnic identity and spiritual intelligence according to gender. Initial assumptions such as the normality of distribution and the presence of univariate and multivariate outliers were verified using boxplots and Mahalanobis distance respectively. A Pearson product moment coefficient was also computed to check for the presence of multicollinearity. The Box M Test was used in examining the assumption of homogeneity of variance-covariance matrices. Homogeneity of variance was also assessed using Levene's Test of Homogeneity of Variance.

6.5 Ethical considerations

Prior to conducting this study, an ethical clearance form was filled out and signed for the research proposal. This form specified the personal details of the candidate and details of the project; it also included a list of issues such as race and ethnic identity, which demand ethical sensitivity. However, there was no issue in the present study, which takes a positivist stance and involves minimal intervention on the part of the researcher. The advantage of quantitative research is that it permits researchers to forecast ethical challenges ahead of time and devise plans to overcome such issues (Lund Research, 2013). According to Wassenaar (2006), four extensively acknowledged philosophical principles determine whether a study is ethical or not: autonomy and

respect for the dignity of individuals, non-maleficence, beneficence, and justice (Wassenaar, 2006). The first principle is linked to informed consent and confidentiality. Informed consent is an individual's overtly expressed willingness to participate in a study, founded on a clear understanding of the nature of the research, the effects of not participating, and all factors which might be expected to influence that person's readiness to participate (Shaughnessy et al., 2003). The cover page of the questionnaire clearly stated that the study is part of the fulfilment for a Doctoral Degree and its purpose is to understand the significant dimensions of spiritual intelligence and the ethnic difference in spiritual intelligence in the Mauritian context. There was no deception in the research procedure. Furthermore, the cover page also stipulated that participation in the study implied that respondents had read and understood the nature of the study, and were participating in the research voluntarily. The respondents' participation was therefore voluntary and, at any time they wished to withdraw from the survey, it was their right to do so. The issues of confidentiality and privacy were also mentioned on the first page of the questionnaire. The instructions were well-defined so as to guide the participants in giving the answer which best represented them. The contact person's details were given in case participants had any queries on the survey. Furthermore, the anonymity of the study's participants was stressed, as it requested that no references to names or surnames were to be written on the questionnaire. Organisations which did not want their name to be listed were reassured about the confidentiality of data reporting. The information gathered was for study purposes only, and the privacy as well as anonymity of those who took part in the study were stressed.

The principle of non-maleficence and beneficence specifies that studies should not cause harm to participants or other people, but should instead make a positive impact on the welfare of the people (APA, 2015; Wassenaar, 2006). The privacy of the participants was maintained, as the research used email addresses provided by the respondents for the lottery only. These were kept confidential, and the winners were privately notified of their prizes without revealing their identity to any third party. The privacy of the respondents was a priority, despite the need for more transparency in the announcement of the prize winners. The respondents may have benefited personally from their participation in terms of self-exploration and self-understanding. The study was morally justified as it could also benefit individuals, organisations, and academics. The research involved designing a local scientific tool which could be used by other researchers and in

relation to other key variables such as performance, absenteeism, and motivation, to name a few. Organisations could use the measure to look at the SQ of their employees and provide training and sponsor workshops for the development of spiritual intelligence. According to Tutorial Letter 104 for PSY471S (2007), the principle of justice stipulated that the benefits and threats of studies should be fairly distributed among people. The selection of participants was based on random sampling from a large sample, which meant that the selection was fair. Furthermore, with regard to the practicability of the research, the researcher was qualified to conduct this research. The researcher, a practicing psychologist, had completed her Master's thesis on Spirituality in Counselling and followed a certified course on the 'use of spiritual and religious beliefs in pursuit of [a] client's goal' by the American Counselling Association.

6.6 Conclusion

The study was conducted according to the positivist paradigm, using a quantitative research design (the survey research design). A self-reported Multicultural Spiritual Intelligence Scale (MSIS-1) was developed and administered to a large sample of the Mauritian population. The several phases of questionnaire development were followed, and many other related and unrelated questionnaires were used to test the reliability and validity of the MSIS-1. The data was coded and analysed using IBM SPSS version 22 and IBM SPSS Amos version 22 software. The ethical part of the study was also addressed. The next chapter expands on the results of the research and resolves the various questions posed in the introductory section.

Chapter 7: Results

This chapter addresses the descriptive statistics of the 106-item scale. The reliability of the scale, the Cronbach's alpha, was also calculated for the large Mauritian sample. Prior to performing a principal component analysis (PCA), certain criteria had to be met, such as the Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy and the Bartlett's Test of Sphericity. While the first study involved preliminary analyses using EFA, the second study was conducted to confirm the factors obtained in Study One using CFA. Additionally, the construct validity of the MSIS was obtained by correlating it with similar measures. The discriminant validity of the MSIS was obtained using the social desirability scale. In Study Two, a shorter version of the MSIS was distributed to a smaller sample. Comparative fit indices were examined for the five-factor, four-factor, and three-factor models respectively. A five-factor model was chosen as the best fit model for the data. The factors of SQ were self-mastery, transcendental awareness, spiritual sensitivity, resilience, and existential quest. All research questions were answered in detail in the next subsections.

7.1 Study One

7.1.1 Skewness and kurtosis

Descriptive statistics and response distributions were assessed for the 106 items (as shown in Table 7.1). The mean response of most items was higher than 2.0, which was equivalent to the response of 'moderately true of me'. The z-score for skewness and kurtosis was ± 2.58 at 0.01 significance level. For each item, a z-score for skewness was calculated by dividing the skewness value by the standard error (Lund Research, 2013). Items which were significant were highlighted in the skewness column. The z-score for kurtosis was also computed by taking the kurtosis value divided by the standard error (Lund Research, 2013). All items were negatively kurtosed, with the exception of three items, as shown in Table 7.1. However, all items were retained for the EFA. Although most items violate normality, transformation could not be applied successfully for all data. Thus, the initial data was retained for analysis in the SPSS.

Table 7.1

Descriptive statistics for the MSIS-1 106-item pool (N = 1074)

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Qu. 1	2.43	1.167	-.361	.071	-.741	.142
Qu. 2	2.21	.984	-.080	.071 ¹³	-.426	.142
Qu. 3	2.52	1.118	-.376	.071	-.696	.143
Qu. 4	2.62	1.107	-.482	.071	-.566	.143
Qu. 5	2.38	1.051	-.227	.071	-.547	.143
Qu. 6	2.56	1.099	-.442	.071	-.542	.143
Qu. 7	2.75	1.085	-.577	.071	-.433	.143
Qu. 8	2.69	1.080	-.503	.071	-.495	.143
Qu. 9	2.62	1.096	-.393	.071	-.648	.143
Qu. 10	2.58	1.084	-.425	.071	-.570	.143
Qu. 11	2.53	1.102	-.377	.071	-.618	.143
Qu. 12	2.20	1.133	-.253	.071	-.663	.143
Qu. 13	1.87 ¹⁴	1.117	-.026	.071	-.783	.143
Qu. 14	2.61	1.151	-.447	.071	-.722	.143
Qu. 15	2.56	1.123	-.405	.071	-.704	.143
Qu. 16	1.28*	1.028	.557	.071	-.291	.143
Qu. 17	2.25	1.020	-.081	.071	-.583	.143
Qu. 18	1.98*	1.021	.098	.071	-.426	.143
Qu. 19	2.37	1.159	-.305	.071	-.788	.143
Qu. 20	2.34	1.133	-.256	.071	-.750	.143
Qu. 21	2.22	1.080	-.174	.071	-.624	.143
Qu. 22	2.18	1.058	-.155	.071	-.562	.143
Qu. 23	1.92*	1.000	.132	.072	-.371	.143
Qu. 24	2.59	1.060	-.441	.072	-.476	.143
Qu. 25	1.96*	1.069	.204	.072	-.583	.143
Qu. 26	2.30	1.073	-.144	.072	-.668	.143
Qu. 27	2.04	1.046	-.052	.072	-.564	.143
Qu. 28	1.80*	1.050	.223	.072	-.507	.143
Qu. 29	2.29	1.119	-.129	.072	-.838	.143

¹³ Highlighted rows represented items with z-score that were significant for either skewness or kurtosis¹⁴ Items with an asterix had mean below 2.0; item 16 had lowest mean of 1.28

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Qu. 30	2.30	1.083	-.129	.072	-.762	.143
Qu. 31	1.96*	.994	.019	.072	-.386	.143
Qu. 32	2.20	1.123	-.130	.072	-.728	.143
Qu. 33	2.08	1.122	-.105	.072	-.734	.143
Qu. 34	1.91*	1.098	-.045	.072	-.672	.143
Qu. 35	2.20	1.215	-.173	.072	-.946	.143
Qu. 36	2.09	1.102	.028	.072	-.760	.143
Qu. 37	2.20	1.080	-.040	.072	-.697	.143
Qu. 38	2.30	1.095	-.149	.072	-.742	.144
Qu. 39	2.12	1.053	.045	.072	-.615	.144
Qu. 40	1.88*	1.057	.133	.072	-.508	.144
Qu. 41	2.19	1.132	-.045	.072	-.830	.144
Qu. 42	1.92*	1.096	.049	.072	-.711	.144
Qu. 43	2.45	1.144	-.197	.072	-.926	.144
Qu. 44	2.37	1.206	-.161	.072	-.997	.144
Qu. 45	2.17	1.113	.001	.072	-.817	.144
Qu. 46	2.45	1.159	-.220	.072	-.951	.144
Qu. 47	2.37	1.184	-.177	.072	-.957	.144
Qu. 48	2.34	1.275	-.219	.072	-1.059	.144
Qu. 49	1.95*	1.171	.076	.072	-.864	.144
Qu. 50	1.82*	1.272	.119	.072	-1.019	.144
Qu. 51	2.35	1.134	-.309	.072	-.690	.144
Qu. 52	2.12	1.014	-.158	.072	-.387	.144
Qu. 53	2.10	1.129	-.030	.072	-.789	.144
Qu. 54	2.13	1.113	-.079	.072	-.751	.144
Qu. 55	2.12	1.188	-.109	.072	-.907	.144
Qu. 56	2.39	1.200	-.190	.072	-.963	.144
Qu. 57	2.21	1.127	-.141	.072	-.702	.144
Qu. 58	2.07	1.104	.035	.072	-.750	.144
Qu. 59	2.29	1.051	-.084	.072	-.693	.145
Qu. 60	2.13	1.086	.001	.072	-.691	.144
Qu. 61	2.14	1.042	-.063	.072	-.546	.144
Qu. 62	2.32	1.089	-.129	.072	-.759	.144
Qu. 63	2.53	1.057	-.293	.072	-.703	.144
Qu. 64	2.46	1.089	-.270	.072	-.734	.144
Qu. 65	2.25	1.083	-.026	.072	-.796	.145

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Qu. 66	2.50	1.085	-.322	.072	-.715	.145
Qu. 67	2.44	1.129	-.102	.072	-1.071	.145
Qu. 68	2.36	1.079	-.188	.072	-.678	.145
Qu. 69	2.46	1.111	-.198	.073	-.812	.145
Qu. 70	1.96*	1.080	.122	.073	-.668	.145
Qu. 71	2.08	1.089	-.055	.073	-.660	.145
Qu. 72	2.16	1.088	.024	.073	-.733	.146
Qu. 73	2.20	1.071	-.038	.073	-.741	.146
Qu. 74	2.43	1.043	-.278	.073	-.572	.146
Qu. 75	2.32	1.093	-.170	.073	-.773	.146
Qu. 76	2.43	1.066	-.331	.073	-.474	.146
Qu. 77	2.57	1.059	-.322	.073	-.672	.146
Qu. 78	2.23	1.104	-.091	.073	-.806	.146
Qu. 79	2.46	1.075	-.230	.073	-.726	.146
Qu. 80	2.42	1.171	-.186	.073	-.948	.146
Qu. 81	2.30	1.096	-.187	.073	-.661	.146
Qu. 82	2.43	1.157	-.266	.073	-.810	.146
Qu. 83	2.01	1.131	.012	.073	-.788	.146
Qu. 84	2.32	1.147	-.190	.073	-.800	.146
Qu. 85	2.33	1.164	-.206	.073	-.876	.146
Qu. 86	2.23	1.222	-.111	.073	-.989	.147
Qu. 87	2.33	1.163	-.210	.073	-.853	.147
Qu. 88	2.26	1.212	-.176	.073	-.917	.147
Qu. 89	2.40	1.089	-.219	.073	-.656	.147
Qu. 90	2.70	1.050	-.380	.074	-.703	.147
Qu. 91	2.17	.956	-.110	.074	-.224	.147
Qu. 92	2.17	1.171	-.001	.074	-.844	.147
Qu. 93	2.12	1.075	-.022	.074	-.617	.147
Qu. 94	2.55	1.072	-.326	.074	-.622	.147
Qu. 95	2.25	1.095	-.197	.074	-.650	.147
Qu. 96	2.32	1.075	-.111	.074	-.719	.147
Qu. 97	2.14	1.118	-.042	.074	-.727	.148
Qu. 98	2.24	1.082	.009	.074	-.776	.147
Qu. 99	2.15	1.110	-.027	.074	-.734	.147
Qu. 100	2.53	1.124	-.314	.074	-.754	.147
Qu. 101	2.32	1.106	-.148	.074	-.764	.148

	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Qu. 102	2.30	1.152	-.067	.074	-.946	.148
Qu. 103	2.32	1.160	-.107	.074	-.887	.148
Qu. 104	2.60	1.098	-.331	.074	-.734	.148
Qu. 105	2.04	1.109	.019	.074	-.693	.148
Qu. 106	2.17	1.234	-.049	.074	-1.008	.148

7.1.2 Reliability of the MSIS-1 and its subscales

Cronbach's alpha coefficients were used as indices of the reliability of the questionnaire and its subscales. The Cronbach's alpha coefficient for the 106-item set was very strong, suggesting excellent internal consistency and reliability for the whole item pool (as shown in Table 7.2). It was not necessary to delete any of the 106 items of the questionnaire. Moreover, all the subscales had excellent reliability (See Table 7.2). This meant that the measure (including the subscales) was reliable for the sample of the Mauritian population. The inter-item correlation matrix displayed a correlation coefficient of minimum 0.30, which was within the range of 0.15 and 0.50 (Clark & Watson, 1995, as cited in King, 2008).

Table 7.2

Reliability of the MSIS-1 and its subscales (N = 1177)

Scales	No. of items	Cronbach alpha coefficient	Standardized alpha
MSIS	106	0.99	0.99
Self-awareness subscale	16	0.899	0.898
Level of consciousness subscale	19	0.923	0.923
Transcendental awareness subscale	21	0.946	0.946
Sensitivity subscale	16	0.916	0.916
Resilience subscale	16	0.934	0.933
Quest for meaning subscale	18	0.939	0.938

7.1.3 Exploratory factor analysis of the Multicultural Spiritual Intelligence Scale (MSIS-1)

The proposed MSIS-1 measured six dimensions of spiritual intelligence: self-awareness (16 items), transcendental awareness (21 items), levels of consciousness (19 items), quest for meaning (18 items), sensitivity (16 items), and resilience (16 items). The new measure of spiritual intelligence was factor analysed to condense the variables to fewer dimensions (Lee & Ashton, 2007; Meyers, Gamst & Guarino, 2006). Thus, it gave the number of constructs assessed by the measure (Fabrigar & Wegener, 2012). The data for the MSIS-1 were used in answering the five research questions in the the first study.

The MSIS-1 was administered to a random sample ($N = 1177$) of citizens of Mauritius aged 18 and above. A PCA was performed on the 106-item questionnaire, which measured spiritual intelligence. The appropriateness of the PCA was examined prior to analysis. The correlation matrix was scrutinised, and it was found that all variables had at least one correlation coefficient greater than 0.3. A KMO measure was used as an index of sampling adequacy to see if there was a linear relationship and whether a PCA was suitability for the MSIS. The KMO measure was 0.988, which was considered ‘marvellous’ (Kaiser, 1974, as cited by Lund Research, 2013). All individual KMO measures which exceeded 0.7 were categorised as ‘meritorious’ according to Kaiser (1974, as cited by Lund Research, 2013). The Consortium for Educational Communication (2013) suggested that the KMO should be greater than 0.5, while Meyers et al. (2006) proposed that only a KMO coefficient greater than 0.70 was adequate. Table 7.3 displays the KMO for the individual variables which were obtained from the diagonals on the anti-image correlation matrix in the SPSS. The Bartlett’s Test of Sphericity tested the null hypothesis that the correlation matrix was an identity matrix, that is, there was no correlation among the variables. Bartlett’s test was statistically significant ($p < 0.0005$), which meant that the data was likely factorisable (Lund Research, 2013).

Table 7.3

KMO measure for each of the 106 items in the MSIS-1 (N = 1177)

Variables	KMO	Variables	KMO	Variables	KMO	Variables	KMO
	Measure		Measure		Measure		Measure
Qu. 1	0.988	Qu. 28	0.977	Qu. 55	0.987	Qu. 82	0.981
Qu. 2	0.985	Qu. 29	0.988	Qu. 56	0.990	Qu. 83	0.989
Qu. 3	0.990	Qu. 30	0.992	Qu. 57	0.984	Qu. 84	0.993
Qu. 4	0.985	Qu. 31	0.987	Qu. 58	0.989	Qu. 85	0.989
Qu. 5	0.985	Qu. 32	0.984	Qu. 59	0.973	Qu. 86	0.989
Qu. 6	0.991	Qu. 33	0.986	Qu. 60	0.992	Qu. 87	0.992
Qu. 7	0.970	Qu. 34	0.985	Qu. 61	0.983	Qu. 88	0.992
Qu. 8	0.976	Qu. 35	0.985	Qu. 62	0.991	Qu. 89	0.991
Qu. 9	0.980	Qu. 36	0.989	Qu. 63	0.985	Qu. 90	0.973
Qu. 10	0.988	Qu. 37	0.991	Qu. 64	0.981	Qu. 91	0.972
Qu. 11	0.992	Qu. 38	0.988	Qu. 65	0.976	Qu. 92	0.989
Qu. 12	0.988	Qu. 39	0.995	Qu. 66	0.986	Qu. 93	0.989
Qu. 13	0.980	Qu. 40	0.979	Qu. 67	0.992	Qu. 94	0.978
Qu. 14	0.992	Qu. 41	0.992	Qu. 68	0.989	Qu. 95	0.983
Qu. 15	0.992	Qu. 42	0.986	Qu. 69	0.985	Qu. 96	0.992
Qu. 16	0.902	Qu. 43	0.990	Qu. 70	0.991	Qu. 97	0.991
Qu. 17	0.984	Qu. 44	0.988	Qu. 71	0.992	Qu. 98	0.988
Qu. 18	0.977	Qu. 45	0.989	Qu. 72	0.987	Qu. 99	0.989
Qu. 19	0.986	Qu. 46	0.991	Qu. 73	0.990	Qu. 100	0.986
Qu. 20	0.989	Qu. 47	0.993	Qu. 74	0.985	Qu. 101	0.993
Qu. 21	0.988	Qu. 48	0.993	Qu. 75	0.993	Qu. 102	0.990
Qu. 22	0.987	Qu. 49	0.985	Qu. 76	0.988	Qu. 103	0.991
Qu. 23	0.980	Qu. 50	0.982	Qu. 77	0.980	Qu. 104	0.978
Qu. 24	0.980	Qu. 51	0.982	Qu. 78	0.993	Qu. 105	0.989
Qu. 25	0.969	Qu. 52	0.939	Qu. 79	0.987	Qu. 106	0.993
Qu. 26	0.990	Qu. 53	0.993	Qu. 80	0.990		
Qu. 27	0.987	Qu. 54	0.984	Qu. 81	0.993		

KMO = Kaiser-Meyer-Olkin

Comrey and Lee (1992) and Tabachnick and Fidell (2001) suggested 3.2 as the minimum factor loading for consideration (as cited in Meyers et al., 2006). A factor loading greater than 3.5 was considered salient in this study. Kaiser (1960, as cited in Lee & Ashton, 2007) proposed that only factors with eigenvalues of at least one should be extracted during the process of factor analysis. The PCA unveiled 12 components that had eigenvalues greater than one, which accounted for 60.3 percent of the total variance. Tabachnick and Fidell (2001, as cited in Meyers et al., 2006) recommended that a strong solution should account for a minimum of 50 percent of the variance. The 12 components explained the respective 41.2, 3.7, 2.8, 2.2, 1.9, 1.7, 1.4, 1.2, 1.1, 1.1, 1.0 and 1.0 percent of total variance. An examination of the scree plot, which had to be enlarged for a clearer view, indicated that the inflection point was at seven components.

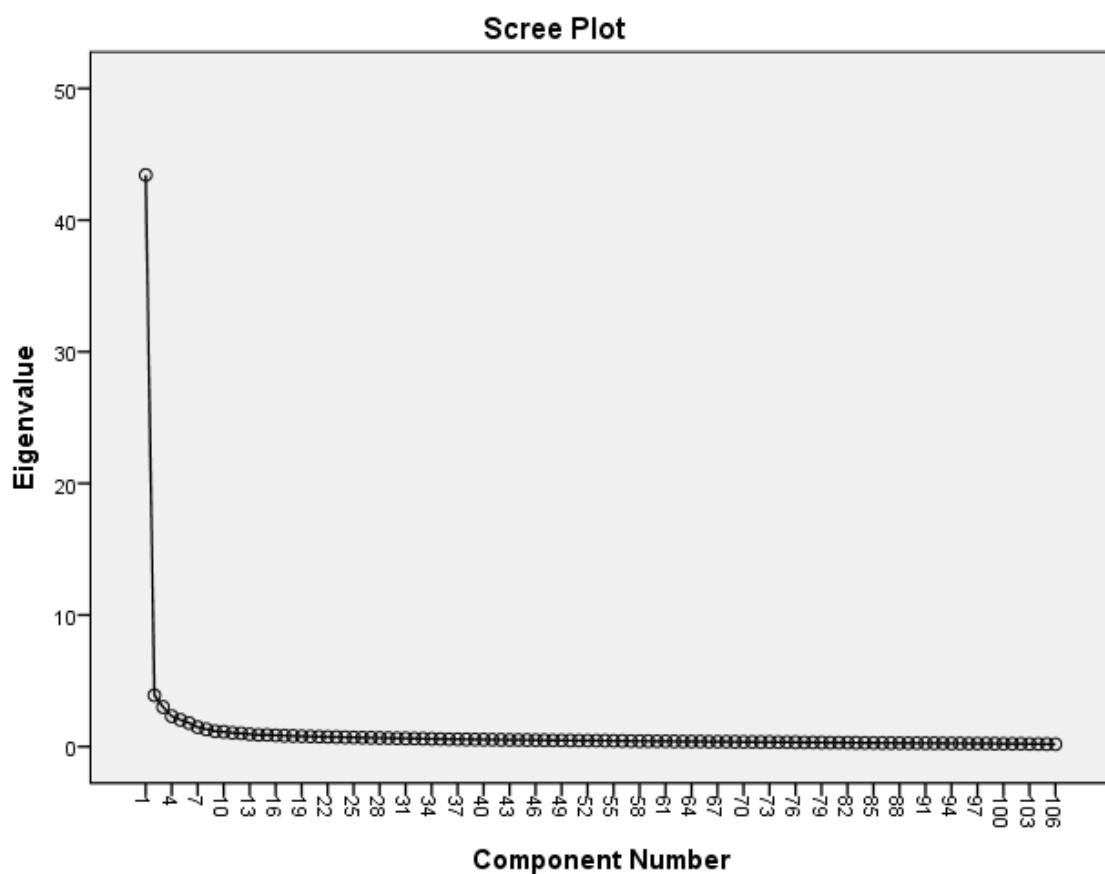


Figure 7.1 Scree plot with a “jump” in eigenvalues after component one (Lee & Ashton, 2007).

A varimax orthogonal rotation was used to facilitate interpretability. An inspection at the rotated component matrix revealed a ‘complex structure’ (Lund Research, 2013), which occurred when more than one component loaded on one variable. It was decided that all variables where more than one component loaded robustly were to be eliminated from the data. These items were: 1, 2, 3, 6, 8, 9, 12, 13, 15, 17, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 41, 43, 44, 45, 46, 47, 48, 49, 51, 52, 53, 59, 60, 62, 63, 64, 67, 68, 71, 72, 73, 74, 75, 78, 79, 80, 81, 84, 85, 87, 88, 89, 91, 92, 94, 95, 96, 98, 100, 103, and 106. Component 4 constituted six simple structure reverse-coded items: 7, 69, 77, 82, 90, and 104, and was removed from the data set. Component 9 was also removed, as it had only two variables (16 and 18), which were not adequate for a simple structure (Lund Research, 2013). Components 7, 8, 10, 11, and 12 did not have simple structures and were also eliminated from the data set.

The interpretability criterion was also crucial for component retention. The interpretation of the data was fairly consistent with the initial proposition. The MSIS questionnaire was intended to assess six components. However, five components with moderate loadings met the interpretability criterion. The five-component solution described 51.4 percent of the total variance. Component 1 had two items from the transcendental awareness dimension (items 55 and 56), one item from the sensitivity dimension (item 57), and one item from the resilience dimension (item 86). Component 2 had six items from the quest for meaning dimension (items 93, 97, 99, 101, 102, 105), two items from the resilience dimension (items 76 and 83) and two items from the sensitivity dimension (items 58 and 70). Component 3 had six items from the self-awareness dimension (items 4, 5, 10, 11, 14, 19) and one item from the level of consciousness dimension (item 26). Component 5 included four items from the transcendental awareness dimension (items 36, 40, 42, 50). Component 6 involved three items from the sensitivity dimension (items 61, 65, 66) and one item from the transcendental awareness dimension (item 54). Component loadings and communalities of the rotated solution are exhibited in Table 7.4. Comrey and Lee (1992) and Rummel (1970, as cited in Meyers et al., 2006) recommended that the labelling process of the factors be steered by those variables with high loadings (values of more than 0.65). Factor 1 was labelled resilience, factor 2 was renamed the existential quest, factor 3 was termed self-mastery, factor 5 was labelled transcendental awareness, and factor 6 was termed spiritual sensitivity.

Table 7.4

Rotated structure matrix for PCA with varimax rotation (major loadings for the MSIS > 0.35) (N = 1177)

Items	Rotated Component Coefficients					
	Factor 1	Factor 2	Factor 3	Factor 5	Factor 6	Communalities
Qu55	.643	0.204	0.210	0.161	0.183	0.635
Qu56	.653	0.216	0.226	0.147	0.105	0.674
Qu57	.659	0.211	0.116	0.044	0.145	0.591
Qu86	.655	0.290	0.169	0.085	0.158	0.664
Qu58	0.275	0.420	0.218	0.095	0.283	0.605
Qu70	0.262	0.499	0.252	0.247	0.143	0.590
Qu76	0.297	0.402	0.291	0.067	0.120	0.524
Qu83	0.235	0.376	0.081	0.251	0.250	0.540
Qu93	0.159	0.622	0.166	0.249	0.198	0.614
Qu97	0.277	0.601	0.242	0.188	0.156	0.615
Qu99	0.198	0.646	0.211	0.199	0.129	0.663
Qu101	0.271	0.587	0.205	0.173	0.188	0.636
Qu102	0.234	0.622	0.272	0.158	0.172	0.677
Qu105	0.084	0.582	0.249	0.184	0.147	0.545
Qu4	0.180	0.278	0.587	0.129	0.135	0.583
Qu5	0.089	0.261	0.638	0.028	0.082	0.550
Qu10	0.252	0.190	0.604	0.052	0.127	0.561
Qu11	0.247	0.204	0.543	0.171	0.226	0.591
Qu14	0.280	0.262	0.528	0.205	0.145	0.613
Qu19	0.278	0.207	0.527	0.069	0.192	0.547
Qu26	0.295	0.229	0.531	0.294	0.175	0.578
Qu36	0.290	0.271	0.214	0.525	0.149	0.588
Qu40	-0.050	0.237	0.221	0.524	0.241	0.557
Qu42	0.234	0.241	0.153	0.607	0.163	0.595
Qu50	0.239	0.206	-0.028	0.469	0.225	0.557

Items	Rotated Component Coefficients					
	Factor 1	Factor 2	Factor 3	Factor 5	Factor 6	Communalities
Qu54	0.207	0.184	0.125	0.229	0.545	0.537
Qu61	0.194	0.182	0.209	0.144	0.616	0.585
Qu65	0.049	0.149	0.136	0.140	0.630	0.567
Qu66	0.211	0.201	0.282	0.117	0.498	0.566

In summary, the new MSIS, with 29 items, had a Cronbach's alpha value of 0.95 with a standardised alpha value of 0.96. The number of participants which could be maintained in further analyses of the data was 1,085 (90.4 percent of the original sample). Kline (2000) recommended a minimum reliability of 0.7 for a good test; therefore the MSIS-2 has good reliability. From the item statistics, the average value of all items was 2, which means that 'moderately true of me' was the average response. This indicates that the participants choose the middle value. The participants' response behaviour could have resulted from a response fatigue due to the number of items in study 1. There is the danger of overinterpretation of results. Cronbach's alpha values were obtained for the five new subscales of MSIS. Factor 1, with four items, had a high level of internal consistency, with a Cronbach's alpha value of 0.85 (standardised alpha = 0.85). Factor 2 had a Cronbach's alpha value of 0.91, with 10 items. Factor 3 had a Cronbach's alpha value of 0.86, with seven items. Factors 5 and 6, with four items each, had a Cronbach's alpha value of 0.761 (refer to table 7.5).

Table 7.5

Reliability of the MSIS-2 and its subscales (N = 1177)

Scales	No. of items	Cronbach alpha coefficient	Standardized alpha
MSIS	29	0.95	0.96
Self-mastery subscale	7	0.86	0.86
Transcendental awareness subscale	4	0.761	0.761
Spiritual Sensitivity subscale	4	0.761	0.761
Resilience subscale	4	0.85	0.85
Existential Quest subscale	10	0.91	0.91

Table 7.6

Correlations among latent variables for study 1 (N = 1111)

	Transcendental				Quest for meaning	Level of consciousness
	Self Awareness	Awareness	Sensitivity	Resilience		
Self Awareness	1	0.842**	0.805**	0.825**	0.808**	0.854**
Transcendental Awareness	0.842**	1	0.845**	0.872**	0.827**	0.860**
Sensitivity	0.805**	0.845**	1	0.887**	0.847**	0.794**
Resilience	0.825**	0.872**	0.887**	1	0.873**	0.805**
Quest for meaning	0.808**	0.827**	0.847**	0.873**	1	0.770**
Level of consciousness	0.854**	0.860**	0.794**	0.805**	0.770**	1

** Correlation was significant at the 0.01 level (two-tailed).

Refer to table 7.6, there is a strong positive correlation between the dimensions of the MSIS-1. The correlation coefficient for the level of consciousness and the quest for meaning is 0.770. The correlation coefficient is 0.887 for the sensitivity dimension and the quest for meaning dimension.

7.1.4 Research questions

Research question 1: Do Hindu-Mauritians, Muslim-Mauritians, and Creole-Mauritians differ with regard to spiritual intelligence?

There were certain assumptions which needed to be satisfied for a one-way ANOVA (Lund Research, 2013), which presumed that the dependent variable (SQ) was normally distributed for each group of the independent variable (ethnic group) and that there were no outliers in any group (ethnic groups). There were no outliers in the data, as gauged by inspection of a boxplot for values greater than 1.5 box-lengths from the edge of the box. Data were grouped into five categories: Hindu-Mauritians ($n = 330$), Muslim-Mauritians ($n = 308$), Creole-Mauritians ($n = 338$), ‘Mixed ethnicity’ ($n = 27$), and ‘Other’, which included Franco-Mauritians and Sino-Mauritians ($n = 34$). However, the MSIS-1 scores were not normally distributed, except for ‘mixed background’ and ‘other’ groups as assessed by normal Q-Q plots, and Shapiro-Wilk’s test of normality failed for all groups. The ethnic groups of Hindu-Mauritians, Muslim-Mauritians, and Creole Mauritians all had p values of < 0.0005 . ‘Mixed background’ and ‘Other’ had p values of 0.029 and 0.028 respectively. However, as the one-way ANOVA was rather robust to divergences from normality and the sample size was large, the analysis was done despite the violations of normality. There were unequal numbers of participants in the five groups, and the unbalanced design affected the violations (Lund Research, 2013). The assumption of homogeneity of variances was violated, as measured by Levene’s Test of Homogeneity of Variance ($p < 0.0005$). The one-way Welch ANOVA resulted in a statistical non-difference in the MSIS-1 scores among the Welch’s Fs for the different groups ($4, 115.88 = 2.17, p = 0.077$).

Another one-way ANOVA was conducted on only three groups of interest (Hindu-Mauritians, Muslim-Mauritians, and Creole-Mauritians) which had a fairly equal number of participants. There were no outliers, but the MSIS-1 scores were not normally distributed for all ethnic groups, as assessed by normal Q-Q plots and Shapiro-Wilk’s test of normality ($p < 0.05$). The Levene’s Test of Homogeneity of Variance was still violated ($p < 0.0005$), and therefore a modified form of the ANOVA (a one-way Welch ANOVA) was used to determine whether the spiritual intelligence (MSIS-1 score) was different for Hindu-Mauritians, Muslim-Mauritians, and

Creole-Mauritians. Participants were classified into the three main groups: the Hindu-Mauritian group ($n = 330$), the Muslim-Mauritian group ($n = 308$), and the Creole-Mauritian group ($n = 338$). There were statistically significant differences in spiritual intelligence (MSIS-1 scores) among the different ethnic groups: Welch's $F(2, 639.98) = 3.923$, $p = 0.02$. The spiritual intelligence score (MSIS_SCORE) reached an average mean of 2 across the different ethnic groups. The Hindu-Mauritians had the highest MSIS-1 score ($M = 2.36$, $SD = 0.70$); that of Muslim-Mauritians was slightly lower ($M = 2.27$, $SD = 0.77$), and Creole-Mauritians had the lowest score ($M = 2.21$, $SD = 0.67$). A Games-Howell post-hoc analysis showed that the mean difference between Hindu-Mauritians and Creole-Mauritians (0.15, 95 percent CI [0.023, 0.27]) was statistically significant ($p = 0.015$).

Non-Parametric test. A Kruskal-Wallis H test was also done to determine if there were differences in MSIS-1 scores among the three ethnic groups of participants for non-normal distribution. Distributions of MSIS-1 scores were similar for all groups, according to a visual inspection of boxplots. The median MSIS-1 scores were statistically significantly different among the ethnic groups. The H -value of 8.665, with 2 degrees of freedom, produced a p-value of 0.013. In mathematical terms, $X^2(2) = 8.665$, $p = 0.013$. Consequently, pairwise comparisons were executed using Dunn's (1964) procedure, with a Bonferroni correction for multiple comparisons (as cited in Lund Research, 2013). The p-values were then adjusted. The post-hoc analysis exposed statistically significant differences in MSIS scores between the Creole-Mauritians ($Mdn = 2.27$) and Hindu-Mauritians ($Mdn = 2.64$) ($p = 0.004$), but not between Creole-Mauritians and Muslim-Mauritians or Muslim-Mauritians and Hindu-Mauritians.

Hypothesis 1: Hindu-Mauritians, Muslim-Mauritians, and Creole-Mauritians do not differ with regard to spiritual intelligence.

Both the Welch ANOVA and the non-parametric Kruskal-Wallis H test indicated statistically significant differences ($p < 0.05$). The null hypothesis was rejected in favour of the alternative hypothesis. A one-way multivariate analysis of variance (MANOVA) of the ethnic groups on the six dimensions of MSIS-1 could not be completed due to multicollinearity. The Pearson correlations between the various dimensions varied between 0.767 and 0.888. According

to Russo (2003), the correlation coefficient r indicates the relationship between two variables. A standard guideline for evaluating correlations as weak, medium or strong is given in table 7.7.

Table 7.7

Standard guideline for evaluating correlations (Russo 2003, p. 184).

Correlation coefficient, r	Strength of linear relationships
$r = \pm 0.1$	Weak
$r = \pm 0.3$	Medium
$r = \pm 0.5$	Strong

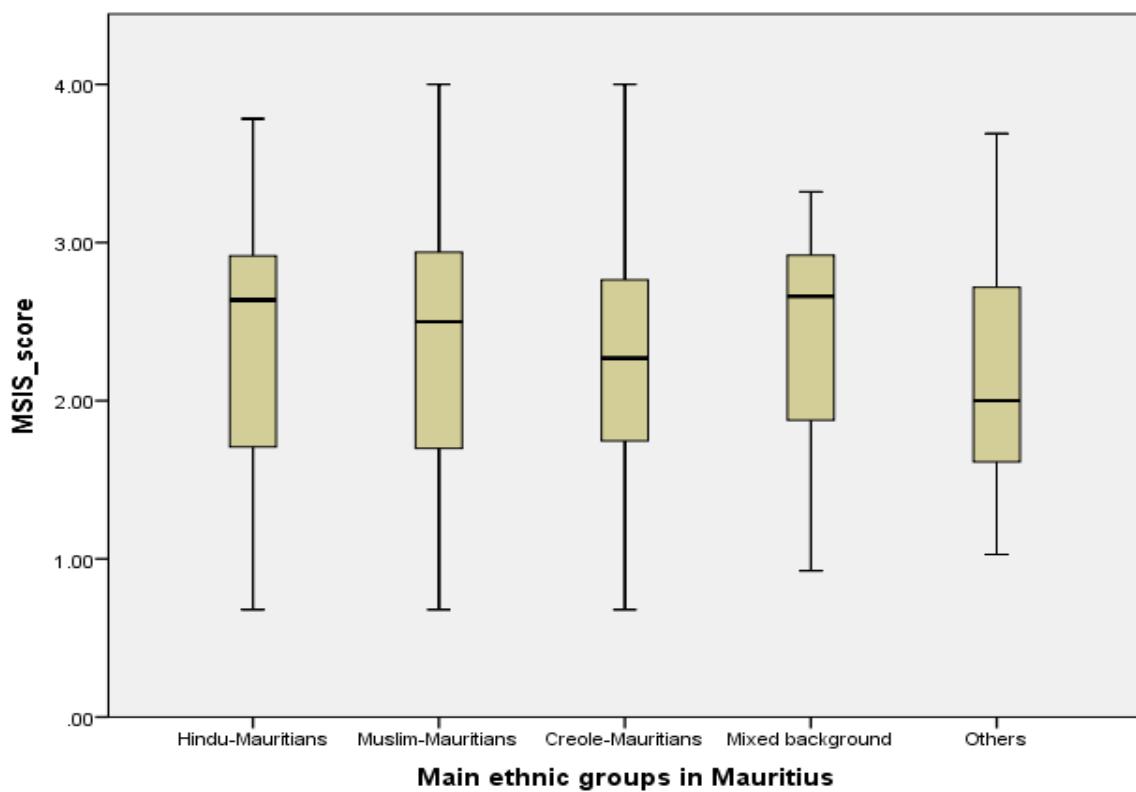


Figure 7.2 Boxplot with dependent variable the MSIS-1 mean score for outlier determination across the main ethnic groups, including ‘mixed background’ and ‘others’.

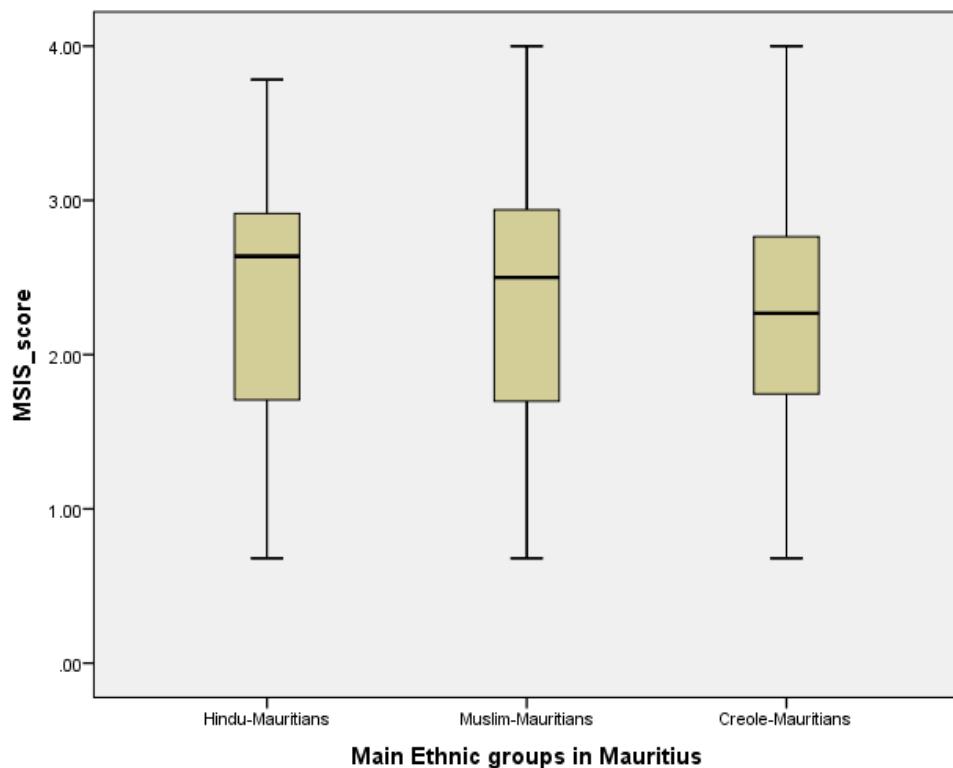


Figure 7.3 Boxplot with dependent variable the MSIS-1 mean score for outlier determination across Hindu-Mauritians, Muslim-Mauritians and Creole-Mauritians.

7.1.4.1 Spiritual affiliation

Out of 1,038 participants who responded to the item on religious or spiritual group affiliation, only 20.4 percent gave a positive response, as shown in Figure 7.4

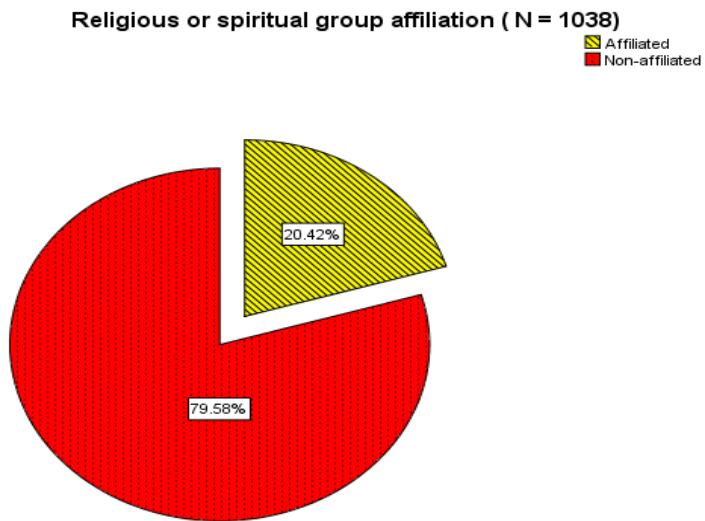


Figure 7.4. A pie chart for religious and spiritual group affiliation and non-affiliation in sample one ($N = 1038$).

Research question 2: Is there a relationship between level of ethnic identity and spiritual intelligence?

The Pearson's product-moment correlation was calculated to measure the strength and direction of the relationship between ethnic identity and spiritual intelligence for both males and females aged 18 years or above in the population of Mauritius. The MEIM and MSIS-1 scores were used for this calculation. The assumptions of linearity, outliers, and normality were tested first to see if there were any violations. The scatter plot showed a non-linear correlation between ethnic identity (MEIM) and spiritual intelligence (MSIS-1) (see Figure 7.5). A suggested linear relationship line between MEIM and MSIS-1 scores was indicated in the scatter plot. The variables were not normally distributed, as assessed by normal Q-Q plots and Shapiro-Wilk's test ($p < 0.05$). As Maciocha (2012) put it, normal distribution was implicit when the sample size was more than 30. Moreover, using a non-normal distribution when gauging Pearson's product-moment correlation resulted in an underestimate of the correlation coefficient, thus avoiding the risk of

false positive results. There were outliers spotted in the scatter plots; a scientific way of detecting these was using casewise diagnostics in linear regression. The potential outliers observed were items 173, 911, and 1025, which had standardised residuals of -3.2, 3.1, and 3.1, respectively, and respective predicted values of 2.6, 1.4, and 1.6. The differences among the three values were -2.0, 1.9, and 1.9, respectively. However, the elimination of outliers was not the solution. Subsequent linear regressions revealed further outliers. The Cronbach's alpha value for the MEIM was 0.842 (the standardised alpha value was 0.850), and the reliability for the exploration subscale and the commitment subscale were 0.714 (the standardised alpha value was 0.730) and 0.834 respectively. The Pearson's coefficient was run despite the assumption violations, as the test was robust to violations. A strong positive correlation was observed between ethnic identity and spiritual intelligence, $r(98) = 0.507$, $p < 0.0005$ with ethnic identity explaining 26 percent of the variation in spiritual intelligence. Table 7.8 displays the correlations between the MEIM and MSIS-1 scores. The MEIM's dimensions had a moderate correlation with the MSIS-1 subscales.

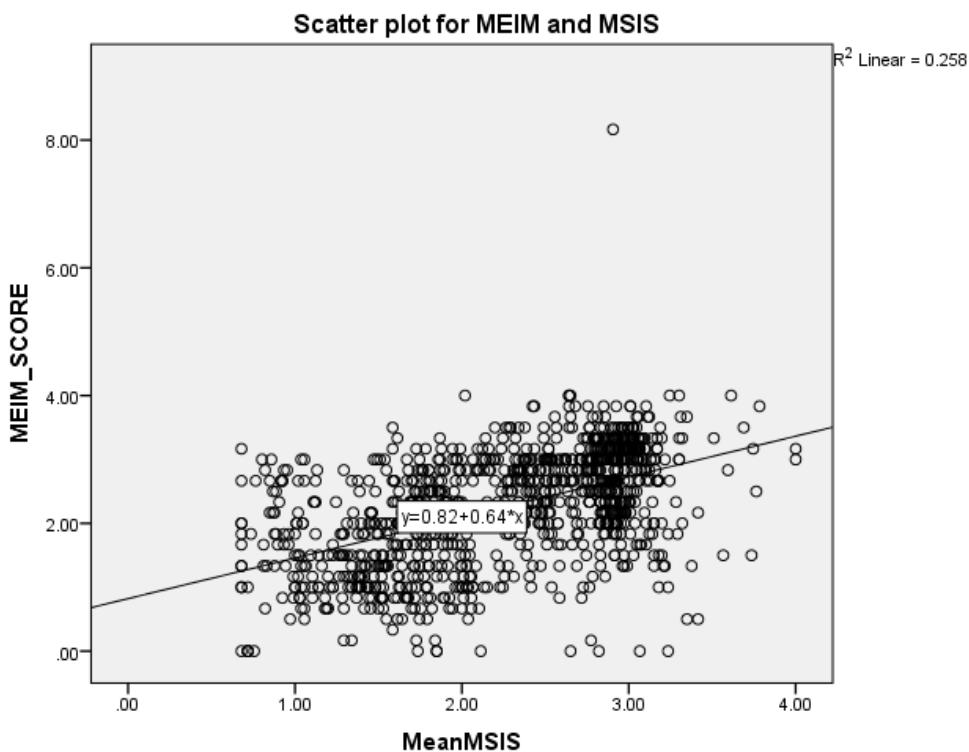


Figure 7.5: Establishing a linear relationship between the MSIS-1 score and the MEIM score

Table 7.8

Correlation between the MSIS-1 and the MEIM including their subscales

Measure: Variable	MSIS¹⁵	SA	LC	TA	S	R	QM
MEIM (n= 1054)	0.507**	0.483**	0.485**	0.489**	0.438**	0.486**	0.465**
MEIM: Exploration	0.540**	0.507**	0.499**	0.523**	0.478**	0.521**	0.503**
MEIM: Commitment	0.373**	0.362**	0.374**	0.357**	0.310**	0.353**	0.334**

Correlation was significant at the 0.01 level (2-tailed). **MSIS**: Multicultural Spiritual Intelligence Scale; **SA**: Self-awareness; **LC**: Level of Consciousness; **TA**: Transcendental awareness; **S**: Sensitivity; **R**: Resilience; **QM**: Quest for Meaning; **MEIM**: Multigroup Ethnic Identity Measure

Non-parametric test. The more appropriate measure was the Spearman's rank-order correlation, which was also run to gauge the relationship between ethnic identity and spiritual intelligence. The preliminary analysis indicated that the relationship was monotonic, as assessed by visual inspection of the scatterplot. There was a good positive correlation between ethnic identification and spiritual intelligence for the citizens of Mauritius aged 18 and above, $r_s(98) = 0.52$, $p < 0.0005$. The question of collinearity was excluded, as the correlation coefficient was less than 0.9 (O'Brien & Scott, 2012).

Hypothesis 2: There is no relationship between ethnic identity and spiritual intelligence.

There was a statistical significant relationship between ethnic identification and spiritual intelligence; consequently the null hypothesis was rejected in favour of the alternative hypothesis.

¹⁵ The MSIS and the MEIM subscales had medium correlation

Research question 3: Are there differences in ethnic identity in the three ethnic groups?

A one-way ANOVA was run to determine if the ethnic identity (MEIM score) was different for the diverse ethnic groups in Mauritius. Participants were arranged into three groups: Hindu-Mauritians ($n = 328$), Muslim-Mauritians ($n = 305$), and Creole-Mauritians ($n = 335$). The outliers were cases 691(extreme value), 773, 846, 1007, and 1056, as examined by boxplots. It was decided that the outliers would also be included, because an attempt to completely eradicate them proved unsuccessful and other outliers were spotted in a second inspection. Furthermore, the MEIM scores were not normally distributed, as per a Shapiro-Wilk test ($p < 0.0005$). The normal Q-Q plots showed that the three ethnic groups had a normal distribution for the MEIM score. Furthermore, the variances were homogenous, as gauged by Levene's test of homogeneity of variances ($p = 0.847$). The MEIM score was highest for Muslim-Mauritians ($M = 2.56$, $SD = 0.91$), followed by Hindu-Mauritians ($M = 2.20$, $SD = 0.86$); the lowest scores were those of the Creole-Mauritians ($M = 2.09$, $SD = 0.84$). The differences were statistically significant: $F(2, 965) = 25.721$, $p < 0.0005$. A Tukey post-hoc analysis showed that the difference between Hindu-Mauritians and Creole-Mauritians (0.12, 95 percent CI (-0.04 to 0.27)) was not statistically significant ($p = 0.198$). However, the differences between Muslim-Mauritians and Hindu-Mauritians (0.36, 95 percent CI (0.20 to 0.52)) and between Muslim-Mauritians and Creole-Mauritians (0.47, 95 percent CI (0.31 to 0.64)) were statistically significant: $p < 0.0005$ for both.

Non-parametric test. A Kruskal-Wallis H test was run to determine whether there were differences in the MEIM scores across ethnic groups, as this test was not influenced by outliers. The ethnic groups were: Hindu-Mauritians ($n = 328$), Muslim-Mauritians ($n = 305$), and Creole-Mauritians ($n = 335$). The distribution of MEIM scores was relatively similar for the three groups, as gauged by visual inspection of a boxplot. Median MEIM scores were statistically significantly different among the ethnic groups: $X^2(2) = 60.523$, $p < 0.0005$. The H -value was 60.523, with 2 degrees of freedom and a p-value of less than 0.0005. Moreover, pairwise comparisons were executed using Dunn's (1964) procedure, with a Bonferroni correction for multiple comparisons (as cited in Lund Research, 2013). The p-values were adjusted. This post-hoc analysis revealed statistically significant differences in median MEIM scores between Muslim-Mauritians ($Mdn =$

2.83) and Hindu-Mauritians ($Mdn = 2.33$) ($p < 0.0005$) and between Muslim-Mauritians and Creole-Mauritians ($Mdn = 2.17$) ($p < 0.0005$), but not between Hindu-Mauritians and Creole-Mauritians.

A one-way multivariate analysis was run to establish the effect of ethnic groups on ethnic identification. The MEIM test measured two dimensions: ethnic exploration and ethnic commitment. Scores for the two subscales were also used in the analysis. The data were normally distributed according to the normal Q-Q plots, although the Shapiro-Wilk test did not reveal the same distribution ($p < 0.05$). There were univariate and multivariate outliers, which were evaluated using a boxplot and Mahalanobis distance measure respectively. Univariate outliers were the cases 78, 691 (extreme), 773, 846, and 1007, which were kept in the data. The largest Mahalanobis distance value was 130, while the critical value for the two dependent variables was 13.82. The scatterplot showed that there were linear relationships between the variables. The Pearson correlation between ethnic exploration and ethnic commitment ($r = 0.625$, $p < 0.0005$) suggested that there was no multicollinearity, as the coefficient did not exceed 0.9. There was no homogeneity of variance-covariance matrices as examined by Box's test of equality of covariance matrices ($p < 0.0005$). Levene's Test of Homogeneity of Variance revealed that the assumption of homogeneity of variances was violated for ethnic commitment ($p = 0.018$) but not for ethnic exploration ($p = 0.788$).

The Muslim-Mauritians had the highest score in both ethnic exploration ($M = 2.64$, $SD = 1.20$) and ethnic commitment ($M = 2.49$, $SD = 0.91$). The Hindu-Mauritians and the Creole-Mauritians had lower scores in ethnic exploration ($M = 2.37$, $SD = 0.94$; $M = 2.20$, $SD = 0.91$ respectively) and in ethnic commitment ($M = 2.04$, $SD = 0.95$; $M = 1.98$, $SD = 0.99$ respectively). The differences among the ethnic groups on the combined dependent variables were statistically significant: $F(4, 1930) = 14.679$, $P < 0.0005$; Pillai's $\Lambda = 0.059$; partial $n^2 = 0.030$. Follow-up univariate ANOVAs indicated that both ethnic exploration ($F(2, 965) = 15.918$, $p < 0.0005$; partial $n^2 = 0.032$) and ethnic commitment ($F(2, 965) = 27.198$, $p < 0.0005$, partial $n^2 = 0.053$) were statistically significant, using a Bonferroni-adjusted α level of 0.025. A Games-Howell post-hoc analysis demonstrated that the mean difference between Hindu-Mauritians and Creole-Mauritians (0.17, 95 percent CI [-0.0084, 0.35]) was not statistically significant ($p = 0.066$). However, the

mean differences between Muslim-Mauritians and Hindu-Mauritians (0.27, 95 percent CI [0.083, 0.45]) and between Muslim-Mauritians and Creole-Mauritians (0.44, 95 percent CI [0.25, 0.62]) were statistically significant ($p = 0.002$ and $p < 0.0005$ respectively).

Hypothesis 3: The ethnic groups do not differ with regard to ethnic identification.

There was a statistically significant difference between means ($p < 0.0005$), and the null hypothesis was rejected in favour of the alternate hypothesis.

Research question 4: Do religious groups differ with regard to spiritual intelligence?

A one-way Welch ANOVA was carried out to establish whether the spiritual intelligence (MSIS-1 score) was different across different religious groups. The participants were from the following religious groups: Christianity ($n = 368$), Buddhism ($n = 64$), Hinduism ($n = 270$), Islam ($n = 316$), and Other ($n = 18$). There were no outliers, as shown in Figure 7.6. The Buddhism and Other groups had normal distributions, while Christianity, Hinduism, and Islam religious groups were non-normally distributed, as assessed by both normal Q-Q plots and a Shapiro-Wilk test ($p < 0.05$). Furthermore, there were no equal variances, that is, the assumption of heterogeneity of variances was breached, as measured by Levene's Test of Homogeneity of Variance ($p < 0.0005$). MSIS-1 scores were highest for Buddhism ($M = 2.46$, $SD = 0.75$), followed by Hinduism ($M = 2.32$, $SD = 0.69$), Islam ($M = 2.28$, $SD = 0.77$), Christianity ($M = 2.21$, $SD = 0.66$), and Other ($M = 2.42$, $SD = 0.82$). However, the differences among the religious groups were not statistically significant: Welch's $F(4, 104.966) = 2.276$, $p = 0.066$.

Hypothesis 4: Religious groups do not differ with regard to spiritual intelligence.

As there was no statistically significant difference between means ($p > 0.05$), the null hypothesis is supported.

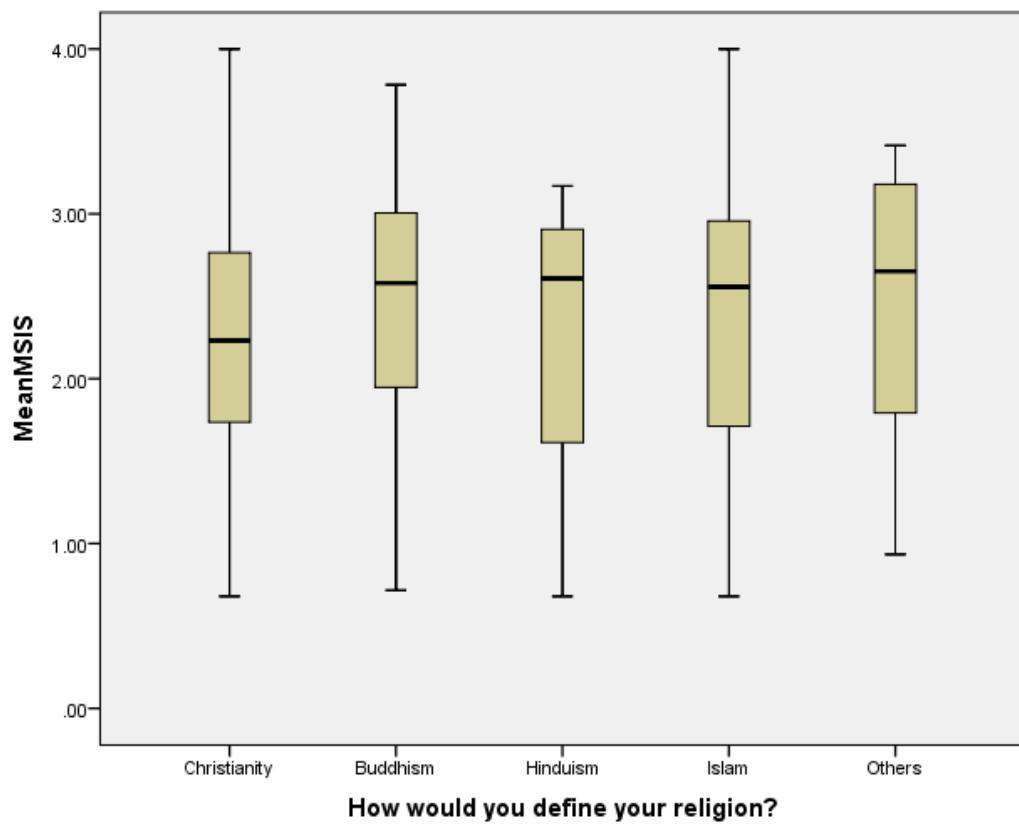


Figure 7.6 Boxplot showing the MSIS-1 score across religions

Research question 5: Are the differences in ethnic identity and spiritual intelligence explained by gender?

A one-way multivariate analysis of variance was run to ascertain the difference in ethnic identity and spiritual intelligence according to gender. The two measures used were the MEIM score and the MSIS-1 score. Of the participants, 492 were male and 538 were female. Preliminary assumption checking revealed that the data were not normally distributed, as examined by a Shapiro-Wilk test ($p < 0.05$). Normal Q-Q plots confirmed that the MSIS-1 scores were non-normal. However, normal Q-Q plots showed that MEIM scores were normal for both male and female. There was one univariate outlier (case 715) as assessed by boxplot, which was eliminated before further analysis. The presence of multivariate outliers was also detected by the Mahalanobis

distance ($p < 0.001$) measurement, but they were not removed for analysis. As Lund Research (2013) noted, the one-way MANOVA was fairly robust with regard to multivariate outliers in studies using large samples. The scatter plot also indicated a linear relationship, and there was no multicollinearity as gauged by the Pearson correlation ($r = 0.507$, $p < 0.0005$). The assumption of homogeneity of variance-covariance matrices was met as measured by Box's M test ($p = 0.670$). There was also homogeneity of variances, as assessed using Levene's Test of Homogeneity of Variance ($p = 0.161$ and $p = 0.402$). Male participants scored higher on the MEIM ($M = 2.29$, $SD = 0.88$) than female participants ($M = 2.25$, $SD = 0.86$). However, female participants scored higher on the MSIS-1 ($M = 2.29$, $SD = 0.70$) than their male counterparts ($M = 2.26$, $SD = 0.72$). The differences in gender on the combined dependent variables were not statistically significant: $F(2, 1026) = 0.952$, $p = 0.386$; Wilks' $\Lambda = 0.998$; partial $n^2 = 0.002$.

Hypothesis 5: There is no difference in ethnic identity and spiritual intelligence between males and females.

As no statistically significant difference was found between means ($p > 0.05$), the null hypothesis is supported.

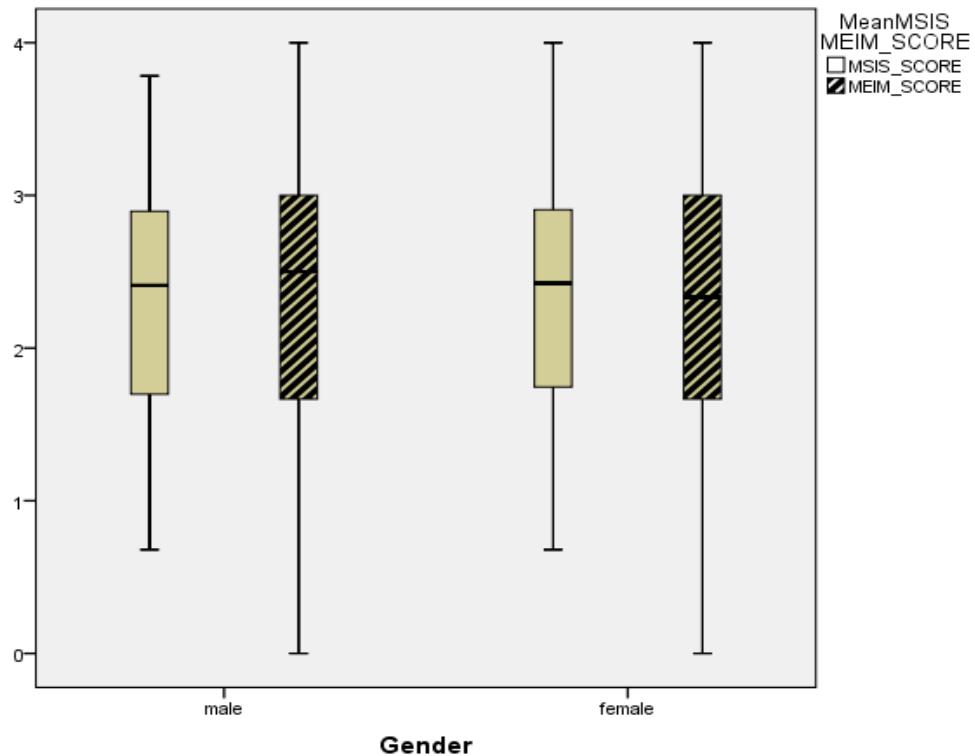


Figure 7.7 Boxplot MEIM and MSIS-1 scores across gender

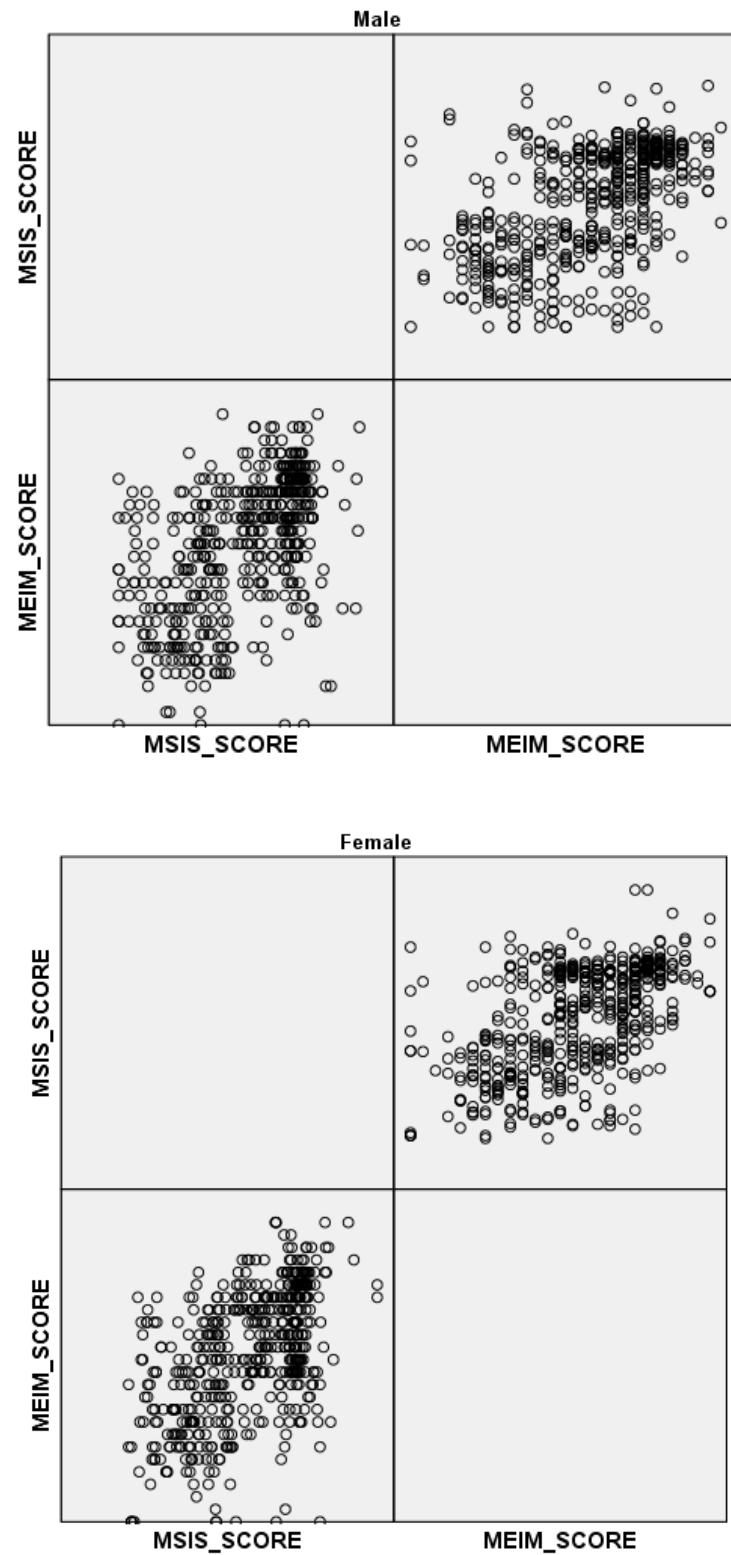


Figure 7.8 Plot 2 and plot 3 show linear relations for both male and female respectively

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7.1.5 Comparison of the MSIS-1 with other similar and dissimilar tests

The construct validity of a test involves establishing the degree to which a measure of a construct is empirically linked to other measures with which it is theoretically related (Durrheim & Painter, 2006). The construct validity of the MSIS-1 was assessed through its correlation with similar measures, namely the MLQ (Steger et al., 2006), the CD-RISC (Connor & Davidson, 2011), the PSC (Scheier & Carver, 1985), and the NIRO (Francis, 2007)—the extrinsic subscale. The MLQ is a ten-item self-reported measure, comprising two subscales of five items each: the presence of meaning and the search for meaning, with $\alpha = 0.82$ and 0.87 respectively. The MLQ was used to measure the quest for meaning (Steger et al., 2006) which was similar to the quest dimension in MSIS-1. A positive correlation between the MSIS-1 and the MLQ would support the former's validity. The CD-RISC, a 10-item self-report test showing a Cronbach's alpha value of 0.90 , measured the resilience construct, which was comparable to the resilience dimension. A positive correlation between the CD-RISC and the resilience dimension would support the validity of this subscale of the MSIS-1. The PSC, a nine-item self-report measure with $\alpha = 0.75$, was used to examine aspects such as the cognitive and emotional facets of an individual (Scheier & Carver, 1985), and is analogous to the self-awareness subscale in the MSIS-1. A correlation between the two scales would validate MSIS-1's subscale. The NIRO, a six-item self-report measure with a Cronbach's alpha value of 0.97 for an extrinsic subscale, was added to validate MSIS-1's universality and its being an example of an inclusive concept, not just an intrinsic or quest measure but also measuring an extrinsic aspect. A relationship between the NIRO and the MSIS-1 would validate this universal aspect. Four hypotheses were formulated regarding the construct validity of each subscale. The first hypothesis implied a significant relationship between the quest for meaning dimension of the MSIS-1 and the search for meaning of the MLQ. The second hypothesis suggested a significant correlation between the resilience dimension of the MSIS-1 and the CD-RISC. The third hypothesis proposed the existence of a significant relationship between the PSC and the self-awareness dimension of the MSIS-1. Finally, the fourth hypothesis suggested a significant correlation between the MSIS-1 and the NIRO.

The convergent validity and the discriminant validity were also examined using the following tests: the MLQ (Steger et al., 2006), the CD-RISC (Connor & Davidson, 2011), the PSC subscale (Scheir & Carver, 1985), the NIRO extrinsic subscale (Francis, 2007) and the BIDR (Paulhus, 1991). As Li and Bagger (2007) highlighted, it was not the test that is reliable but the test scores. The reliability coefficient for the MLQ scores was 0.845 (the standardised alpha value was 0.844), and the subscales (the presence of meaning and the search for meaning) had Cronbach's alpha values of 0.905 and 0.830 respectively. The CD-RISC and the PSC had also high internal consistency reliability scores of 0.924 and 0.785 respectively. The NIRO measure had a lower Cronbach's alpha value of 0.663 (the standardised alpha value was 0.662). The subscales of the NIRO such as compartmentalisation, social support, and personal support also had low reliability scores of 0.670, 0.542, and 0.676 respectively. The BIDR is a 40-item questionnaire with $\alpha = 0.83$, measuring two constructs: self-deception enhancement (SDE) and impression management (IM). Each subscale of the BIDR has 20 items. The reliability coefficient of the BIDR scores was 0.770 for this study. The SDE and the IM subscales had reliability coefficients of 0.659 and 0.629 respectively. The four hypotheses were tested first for construct validity; a fifth hypothesis was verified for the discriminant validity, which claimed that measures theoretically dissimilar to one another should not be empirically associated (Durrheim & Painter, 2006). The fifth hypothesis suggested a low correlation between the MSIS-1 and the BIDR.

Table 7.9

Correlations among related and unrelated measures with MSIS-1 and its subscales

Measure: Variable	MSIS	SA	LC	TA	S	R	QM
MLQ (N= 1043)	0.679**	0.635**	0.608**	0.640**	0.631**	0.631**	0.678**
MLQ: Presence	0.722**	0.690**	0.637**	0.664**	0.680**	0.684**	0.715**
MLQ: Search	0.330**	0.291**	0.306**	0.331**	0.297**	0.292**	0.337**
CD-RISC (N= 1036)	0.828**	0.769**	0.784**	0.764**	0.772**	0.805**	0.776**
PSC (N= 1033)	0.699**	0.628**	0.654**	0.632**	0.685**	0.683**	0.664**
NIRO (N= 1031)	0.538**	0.509**	0.479**	0.527**	0.486**	0.531**	0.501**
NIRO: Compartmentalization	0.472**	0.458**	0.406**	0.456**	0.417**	0.487**	0.444*
NIRO: Social support	0.288**	0.257**	0.291**	0.290**	0.264**	0.264**	0.253**
NIRO: Personal support	0.389**	0.372**	0.325**	0.380**	0.360**	0.383**	0.375**
BIDR (N= 1024)	0.072*	0.082**	0.080*	0.093**	0.070*	0.043	0.038
BIDR: SDE	0.110**	0.121**	0.111*	0.123**	0.102**	0.086**	0.082**
BIDR: IM	0.019	0.025	0.032	0.044	0.024	-0.008	-0.012

Correlation was significant at the 0.01 level (2-tailed). * Correlation was significant at the 0.05 level (2-tailed). **MSIS = Multicultural Spiritual Intelligence Scale; **SA** = Self-awareness; **LC** = Level of Consciousness; **TA** = Transcendental awareness; **S** = Sensitivity; **R** = Resilience; **QM** = Quest for Meaning; **MLQ** = Meaning in Life; **CD-RISC** = Connor-Davidson Resilience Scale; **PSC** = Private self-consciousness subscale; **NIRO** = New Indices of Religious Orientation; **BIDR** = Balanced Inventory for Desirable Responding.

Hypothesis 1: The quest for meaning dimension of the MSIS-1 was expected to have a significant correlation with the search for meaning of the MLQ.

A Pearson's product-moment correlation was run to examine the relationship between the quest for meaning dimension of the MSIS-1 and the search for meaning scale of the MLQ. Initial analyses demonstrated a non-linear but normal distribution of both variables according to Q-Q plots. It was decided to retain the outliers which were spotted in the Q-Q plot. The result showed a moderate correlation between the two subscales, $r(98) = 0.337$, $p < 0.0005$ with the dimension quest for meaning of the MSIS-1 explaining 11 percent of variability in the search for meaning in the MLQ (see Table 7.9). Therefore, the null hypothesis was rejected and the alternative hypothesis was accepted—that is, there is a relationship between the two variables.

Hypothesis 2: The resilience dimension of the MSIS-1 is correlated with the Connor-Davidson Resilience scale.

The check for assumption violations was first carried out for the concerned variables. The resilience dimension of the MSIS-1 and the CD-RISC had a linear relationship. Both were normally distributed according to the visual output of the Q-Q plot. The outliers were visible and kept in the data. The Pearson's product-moment correlation coefficient was $r(98) = 0.805$, $p < 0.0005$, indicating that there was a strong correlation between the resilience dimension of the MSIS-1 and the CD-RISC (refer to table 7.9). The null hypothesis was rejected in favour of the alternative hypothesis.

Hypothesis 3: There is a significant correlation between the PSC subscale and the self-awareness dimension of the MSIS-1.

An analysis of the PSC and self-awareness constructs revealed a linear relationship between them. A normal distribution was also observed in the normal Q-Q plot. Outliers were

present and untouched in the data. The Pearson's product-moment correlation was $r(98) = 0.628$, $p < 0.0005$, which indicated a strong association between the PSC and the self-awareness dimension (refer to table 7.9). The null hypothesis was rejected and the alternative hypothesis was accepted.

Hypothesis 4: The MSIS-1 is expected to correlate strongly with the NIRO.

The first analysis demonstrated a linear relationship between the MSIS-1 and the NIRO. While the MSIS-1 was a non-normal distribution, the NIRO scale was normally distributed from the visual inspection of the normal Q-Q plot. The presence of outliers was detected and retained in the data. The Pearson's product-moment correlation coefficient was strong $r(98) = 0.538$, $p < 0.0005$ as shown in table 7.9. The null hypothesis was rejected and the alternative hypothesis was accepted.

Hypothesis 5: The BIDR is expected to correlate poorly with the MSIS-1

The Pearson's product-moment correlation between the MSIS-1 and the BIDR was weak: $r(90) = 0.072$, $p = 0.021$ as shown in table 7.9. Furthermore, the correlation between the subscales of the MSIS-1 and the subscales of the BIDR was also assessed, as shown in Table 7.6. All the subscales of the MSIS-1 had low correlation with the BIDR and its subscales. The null hypothesis was therefore accepted—that is, there was no relationship between the MSIS-1 and the BIDR.

7.2 Study Two

A second sample ($N = 303$) responded to the shorter version, namely the 29-item MSIS-2. Descriptive statistics and response distributions were assessed for the 29 items (as shown in Table 7.10). The mean response of all items was higher than 2.2, which was equivalent to the response of 'moderately true of me'. The z-score for skewness and kurtosis was ± 2.58 , at a 0.01 significance level. All items were significant in terms of skewness and kurtosis except item 5,

which had slight negative skewness, and items 12, 13, 21 and 22, which were negatively kurtosed. However, all items were retained for further analysis. The Cronbach's alpha value for the 29-item set was 0.687 (standardised alpha = 0.686), indicating a good but lower internal consistency and reliability for the whole item pool. The inter-item correlation matrix indicated a correlation coefficient within the range of 0.15 and 0.50 (Clark & Watson, 1995, as cited in King, 2008) with the exception of items 1, 15, 17, and 18.

Table 7.10

Descriptive statistics for the MSIS-2 29-item pool (N = 303)

Items	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Qu. 1	2.40	.974	-.019	.140	-.668	.279
Qu. 2	2.44	.896	-.038	.140	-.395	.279
Qu. 3	2.59	.848	-.166	.140	-.083	.279
Qu. 4	2.57	.854	-.132	.140	-.438	.279
Qu. 5	2.63	.881	-.373	.140	-.137	.279
Qu. 6	2.29	.939	-.070	.140	-.273	.279
Qu. 7	2.33	.839	.101	.140	-.429	.279
Qu. 8	2.39	.899	.060	.140	-.399	.279
Qu. 9	2.30	.895	-.042	.140	-.548	.279
Qu. 10	2.48	.876	.046	.140	-.680	.279
Qu. 11	2.45	.859	.075	.140	-.474	.279
Qu. 12	2.57	.899	-.045	.140	-.761	.279
Qu. 13	2.63	.939	-.151	.140	-.857	.279
Qu. 14	2.79	.858	-.275	.140	-.567	.279
Qu. 15	2.55	.832	-.031	.140	-.548	.279
Qu. 16	2.41	.908	-.101	.140	-.619	.279
Qu. 17	2.50	.872	.080	.140	-.672	.279
Qu. 18	2.40	.874	-.053	.140	-.464	.279
Qu. 19	2.43	.865	-.047	.140	-.398	.279
Qu. 20	2.49	.920	-.110	.140	-.377	.279
Qu. 21	2.45	1.021	-.057	.140	-.836	.279
Qu. 22	2.43	.928	.046	.140	-.741	.279

Items	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Qu. 23	2.60	.929	-.187	.140	-.696	.279
Qu. 24	2.55	.890	-.145	.140	-.445	.279
Qu. 25	2.54	.905	-.043	.140	-.651	.279
Qu. 26	2.69	.929	-.201	.140	-.598	.279
Qu. 27	2.67	.961	-.253	.140	-.582	.279
Qu. 28	2.61	.921	-.114	.140	-.700	.279
Qu. 29	2.63	.896	-.296	.140	-.129	.279

7.2.1 Confirmatory factor analysis

Structural equation modelling (SEM), also referred to as Confirmatory Factor Analysis (CFA), involves a set of statistical techniques which permit the assessment of relationships between dependent and independent variables (Ullman, 2013). The Analysis of Moment Structures (AMOS) graphics program version 22 was used for the CFA, which enabled the confirmation or rejection of the factor structure detected in the PCA (IBM SPSS, 2013). In the hypothesised model, the five factors of the MSIS-2 (self-mastery, transcendental awareness, spiritual sensitivity, resilience, and existential quest) were the latent variables, and the 29 items were the measured variables. Items 1 to 7 served as indicators of the self-mastery subscale; items 8 to 11 were indicators of the transcendental awareness subscale; items 12, 17, 18, and 19 functioned as indicators of spiritual sensitivity; items 13, 14, 15, and 23 operated as indicators of the resilience subscale; and items 16, 20, 21, 22, 24, 25, 26, 27, 28, and 29 served as indicators of the existential quest subscale (see Appendix). The five factors were assumed to co-vary with each other. The assumptions for SEM were evaluated through both IBM SPSS version 22 and AMOS version 22. The dataset covered responses from 303 participants (149 males and 154 females), and there were no missing data in the set. The new MSIS-2 scores were normally distributed for both males, with a skewness of -0.101 (SE = 0.199) and kurtosis of -0.881 (SE = 0.395), and females, with a skewness of -0.098 (SE = 0.195) and kurtosis of -0.684 (SE = 0.389), as shown in Table 7.11. The normal distribution of MSIS-2 was viewed using a Q-Q plot and through an inspection of

histograms. However, Shapiro-Wilk's test showed a normal distribution for females but not for males ($p < 0.05$). There was evidence of univariate normality in all five subscales.

Table 7.11

Skewness and kurtosis for males and females for each dimension (N = 303)

Measures	Males				Females			
	Skewness	S.E.	Kurtosis	S.E.	Skewness	S.E.	Kurtosis	S.E.
MSIS-2	-0.101	0.199	-0.881	0.395	-0.098	0.195	-0.684	0.389
Self-mastery	0.205	0.199	0.412	0.395	-0.050	0.195	0.241	0.389
Transcendental awareness	-0.116	0.199	-0.395	0.395	-0.002	0.195	0.268	0.389
Spiritual sensitivity	0.158	0.199	-0.105	0.395	-0.032	0.195	-0.422	0.389
Resilience	-0.309	0.199	0.111	0.395	-0.232	0.195	-0.231	0.389
Existential quest	-0.040	0.199	-0.506	0.395	-0.106	0.195	-0.237	0.389

The univariate outliers were 6, 34, 35, 43, 45, 73, 78, 86, 90, 92, 94, 96, 114, 164, 205, 238, and 280, and these were removed from the dataset. The maximum Mahalanobis distance was 17.369 for the five dependent variables, which was lower than the critical value of 20.52 (Chen, 2012). Therefore, the requirements for multivariate normality and the absence of multivariate outliers were met for this sample. A visual inspection of scatter plots showed a linear relationship between the variables, and thus the linearity assumption was met. There was no multicollinearity, as examined by the Pearson correlation (see Table 7.12). There was a medium correlation among the variables. The Maximum correlation was $r = 0.400$, $p < 0.0005$. There were 29 measured variables, and therefore $29(29+1)/2 = 435$ data points or sample moments and 102 parameters to be estimated in the hypothesised model. Thus, the model was identified.

Table 7.12

Correlations among latent variables for study 2 (N = 286)

Correlations among the dimensions					
	Self Awareness	Transcendental Awareness	Spiritual Sensitivity	Resilience	Existential Quest
Self Awareness	1	.286**	.201**	.279**	.348**
Transcendental Awareness	.286**	1	.283**	.212**	.390**
Spiritual Sensitivity	.201**	.283**	1	.110	.373**
Resilience	.279**	.212**	.110	1	.400**
Existential Quest	.348**	.390**	.373**	.400**	1

**.Correlation was significant at the 0.01 level (2-tailed).

7.2.2 Measurement and structural invariances of the MSIS-2 across Hindu, Creole and Muslim groups

The two types of invariances required for model comparisons in CFA are measurement invariance and structural invariance (Templin, 2012). In a multicultural study, it is important to fulfill three levels of measurement invariances (Comşa, 2010). These are configural invariance, metric invariance and scalar invariance. Configural invariance requires the same factor structure for the three ethnic groups (Comşa, 2010). To measure if the factor structure of the MSIS-2 worked equivalently across the three ethnic groups, namely the Hindu-Mauritians, the Creole-Mauritians and the Muslim-Mauritians, the structure coefficients were constrained to be equal to each other for measurement weights, intercepts, structural covariances and residuals. This process resulted into a hierarchy of nested model comparisons. Each model were constrained with the previous model, for example, the hypothesis testing of scalar invariance assumed that the metric model was correct. A chi square difference test was used to test whether the equality constraints were upheld. A good modal fit also means that the model is approximately equivalent to all the factor structures. The parameter estimation maximum likelihood was used in AMOS for the

measurement of invariances. The chi square test for differences suggested that the factor structure was not invariant among the three ethnic groups, $\chi^2(1101, N = 279) = 1248.29, p = 0.001$. This indicated that the interpretation of the dimensions of SQ was not the same among the ethnic groups. Other fit indexes supplemented the chi square test (Hu & Bentler, 1999). The RMSEA reported a value of 0.022, indicating a good fit. The CMIN/DF had a value of 1.134, supporting the model. The Pclose value was 1.000, suggesting a good fit (Comşa, 2010). The metric invariance requires configural invariance and that the factor loadings are invariant for the three ethnic group (Comşa, 2010). The author noted that metric and scalar invariances were needed for a minimum of two items per dimensions for meaningful mean comparison. Based on this principle, only self-mastery, transcendental awareness and existential quest met the criteria. An item analysis of spiritual sensitivity and resilience did not yield metric invariance. The fit indices indicated that the metric invariance model should not be rejected (RMSEA = 0.024, Pclose = 1.000 and the CMIN/DF = 1.162) as shown in table 7.13. Scalar invariance requires metric invariance and that the three samples have invariant intercept scores. A model comparison revealed nonsignificant scalar invariance, $\chi^2(58, N = 279) = 63.978, p > 0.005$. The model fit also suggested that the scalar invariance model should not be rejected (RMSEA= 0.024, Pclose = 1.000 and the CMIN/DF = 1.159) as shown in table 7.14.

Table 7.13

Comparing the dimensions of MSIS-2 (N = 279) for the three ethnic groups for metric invariance

Dimensions	CMIN	df	P value	Requirement p > 0.05 for metric invariance
Self-mastery	24.193	14	0.043	Close to invariance
Transcendental awareness	10.434	8	0.236	Yes
Spiritual sensitivity	20.548	8	0.008	No
Resilience	27.071	8	0.001	No
Existential quest	30.569	20	0.061	Yes

Table 7.14

Goodness-of-fit statistics for measurement invariance among the three ethnic groups (N = 279)

Invariance type	CMIN/DF	CFI	RMSEA	PCLOSE	AIC
Criteria	< 2	> 0.95	< 0.08	> 0.5	-
Configural	1.134	0.673	0.022	1.000	1831.715
Metric	1.162	0.584	0.024	1.000	1820.511
Scalar	1.159	0.574	0.024	1.000	1768.488

The test for residual invariance is the final step in examining measurement invariance. There was a nonsignificant difference in item residual variances among groups, χ^2 (58, N = 279) = 40.338, $p > 0.005$, see table 7.15. The three ethnic groups had the same item residual variances. Structural invariance relates to how the dimensions of the MSIS-2 are distributed and related in the separate populations such as the three ethnic groups (Templin, 2012). The test for the structural invariance was to determine if the causal relationships functioned the same way across the three ethnic groups. As shown in table 7.15, nonsignificant difference was observed across the three ethnic groups, χ^2 (10, N = 279) = 11.319, $p > 0.005$.

Table 7.15

Model comparisons for measurement and structural invariances across the three ethnic groups (N = 279)

	CMIN	DF	P value	Requirement for invariance ($p > 0.05$)
Metric	80.796	46	0.001	No
Scalar	63.978	58	0.275	Yes
Residual	40.338	58	0.962	Yes
Structural	11.319	10	0.333	Yes

7.2.3 Modal fit measures for the factor model of the MSIS-2

Ullman (2013) cited the study of Hu, Bentler, and Kano (1992), who suggested Generalised Least Squares (GLS) as the most appropriate estimation method when the normality assumption was respected and the sample size was less than 500. The parameter estimation GLS was used in the AMOS. Hu and Bentler (1999) proposed two types of fit indices: the SRMR and the comparative fit index (as cited in Ullman, 2013). However, the hypothesised model was assessed by seven fit measures: (a) the chi square and the relative chi-square; (b) the normed fit index (NFI); (c) the comparative fit index (CFI); (d) the goodness-of-fit index (GFI); (e) the adjusted goodness-of-fit index (AGFI); (f) the standardised root mean square residual (SRMR); and (g) the root mean square error of approximation (RMSEA). Table 7.18 displays all the fit measures. Reporting multiple indices was imperative in the case of variations (Ullman, 2013). The criterion for the minimum discrepancy (chi square) was $p < 0.05$ for χ^2 to be non-significant and a maximum χ^2/df ratio of 2.0 (King, 2008). For the other fit measures, the criterion for good fit was as follows: NFI, CFI, and GFI values should be greater than 0.95 (Meyers et al., 2006; Ullman, 2013). It was recommended that AGFI should be a minimum value of 0.85 (King, 2008). A value of less than 0.08 for the RMSEA reflected a good fit (Meyers et al., 2006). Hu and Bentler (1999) noted that good models had small root mean square residual (RMR) and small standardised root mean square residual (SRMR) values, and that a value of less than 0.08 was acceptable (as cited in Ullman, 2013). Furthermore, the path coefficients were examined for statistical significance at $p < 0.05$. Table 7.16 shows the parameter estimate or path coefficients for each measured variable for the five-factor model. Only 14 measured variables reached significance ($p < 0.001$ or $p < 0.05$). Items 2, 5, 8, 12, and 13 were significant predictors of their respective factors, as they reached practical significance—that is, they exceeded the 0.3 criterion (Meyers et al., 2006). Items 3 and 7 were both 0.30, which could be accepted as having practical significance. Although many fit measures reported an acceptable model, this could be because some measured paths had very high coefficients (Meyers et al., 2006).

Table 7.16

Parameter estimate for five-factor model (N = 286)

Measured variables	Latent variables	Parameter estimate	Measured variables	Latent variables	Parameter estimate
Qu1	SM	.033	Qu13	R	.557
Qu2	SM	.398	Qu14	R	.296**
Qu3	SM	.268	Qu15	R	.123
Qu4	SM	.225	Qu23	R	.355**
Qu5	SM	.439	Qu16	EQT	.188
Qu6	SM	.237	Qu20	EQT	.357*
Qu7	SM	.278	Qu21	EQT	.350*
Qu8	TA	.378	Qu22	EQT	.133
Qu9	TA	.386**	Qu24	EQT	.218*
Qu10	TA	.402**	Qu25	EQT	.085
Qu11	TA	.422**	Qu26	EQT	.175*
Qu12	SS	0.490	Qu27	EQT	.303*
Qu17	SS	0.071	Qu28	EQT	.206*
Qu18	SS	0.213*	Qu29	EQT	.224*
Qu19	SS	0.529**			

SM = self-mastery; TA= Transcendental awareness; SS = spiritual sensitivity; R = resilience; EQT = Existential quest.* p < 0.05, ** p < 0.001

Meyers et al. (2006) advocated the computation of variance to gauge the precision of the prediction in the structural equations. The squared multiple correlations (R^2) were also calculated, as shown in Table 7.17. Only a moderate proportion of variance was found for the factors. Measured variables Qu2 and Qu5 had 15.8 percent and 19.3 percent of their variance and were respectively accounted for by self-mastery. Variables Qu8, Qu9, Qu10, and Qu11 had 14.3, 14.9, 16.1, and 17.8 percent of their variance respectively, and were accounted for by transcendental awareness. Qu12 and Qu19 had a higher proportion of variance, with 24 and 27.9 percent respectively, accounted for by spiritual sensitivity. Furthermore, variables Qu13 and Qu23 had 31 and 12.6 percent respectively, which was explained by the resilience factor. As for the existential quest factor, only Qu20 and Qu21 had moderate variances of 12.7 and 12.2 percent respectively. The other measured variables had weak variances, such as variable 29, which accounted for only 5 percent of its variance.

Table 7.17

Squared multiple correlations for the measured variables (N = 286)

Variables	R ²	Variables	R ²	Variables	R ²	Variables	R ²
<i>QU29</i>	.050	<i>QU16</i>	.035	<i>QU11</i>	.178	<i>QU2</i>	.158
<i>QU28</i>	.042	<i>QU23</i>	.126	<i>QU10</i>	.161	<i>QU1</i>	.001
<i>QU27</i>	.092	<i>QU15</i>	.015	<i>QU9</i>	.149		
<i>QU26</i>	.031	<i>QU14</i>	.088	<i>QU8</i>	.143		
<i>QU25</i>	.007	<i>QU13</i>	.310	<i>QU7</i>	.077		
<i>QU24</i>	.048	<i>QU19</i>	.279	<i>QU6</i>	.056		
<i>QU22</i>	.018	<i>QU18</i>	.045	<i>QU5</i>	.193		
<i>QU21</i>	.122	<i>QU17</i>	.005	<i>QU4</i>	.051		
<i>QU20</i>	.127	<i>QU12</i>	.240	<i>QU3</i>	.072		

R² = squared multiple correlations

Research question 1 for Study Two: Does a six-factor model with a simple structure fit the data?

Initially, the research questions for Study Two were based on the propositions in Study One—that is, on confirming the six factors of spiritual intelligence. However, five factors were observed in Study One, which changed the research question set in Chapter 1 to look at a five-factor model. The chi square, or CMIN in the AMOS, had a value of 430.222 (367, N = 286), p = 0.013, which was significant and indicated an improper fit between the proposed model and the observed data. Meyers et al. (2006) cited Jöreskog and Sörbom (1996) and Bentler (1990) to warn against the use of the chi square as the only way of examining the overall fit of a model, because chi squares are sensitive to sample size. The chi square test can be used to spot small discrepancies between the observed and the predicted covariances and to identify an unacceptable match between a hypothesised model and observed data (Meyers et al., 2006). Because the chi square was limited and sensitive to sample size, an alternative had to be explored, namely the relative chi-square or χ^2/df ratio (King, 2008; Moss, 2009). In this study, the normed chi-square was $430.222/367 = 1.17$, which was below the maximum value of 2.0 for good fit. The CFI and the NFI were measures of relative fit, contrasting the hypothesised model with the null model by using suitable values of 0.95 (Hu & Bentler, 1999, as cited in Meyers et al., 2006). Both the CFI and NFI produced values

of 0.549 and 0.212 respectively, which were both below 0.95 and thus suggested a poor fit for the model. The GFI was 0.896 below the cut-off value, while the AGFI was 0.877 above the minimum value. The SRMR was 0.0586, which indicated a good fit. The RMSEA measured the inconsistency between the sample coefficients and the population coefficients with values close to zero, indicating a well-fitting model (Meyers et al., 2006). The RMSEA was 0.025, showing good fit.

The comparative fit indices for five-factor, four-factor, and three-factor models are shown in Table 7.18. In the four-factor model, the first three factors were self-mastery, transcendental awareness, and the existential quest, while the spiritual sensitivity subscale encompassed the resilience scale. In the three-factor model, self-mastery and transcendental awareness were combined into one factor named self-mastery, and spiritual sensitivity and resilience were similarly united in one factor called spiritual sensitivity; the third factor remained the existential quest. There was no substantial difference in terms of fit measures for the three models. Therefore, the five-factor model was chosen as the best fit model of the data.

Table 7.18

Comparative fit indices for the five-factor, four-factor, and three-factor models (N = 286)

	χ^2	χ^2/df	CFI ratio	NFI	GFI	AGFI	SRM	RMSEA	df
Criteria set	-	< 2	> 0.95	> 0.95	> 0.95	> 0.85	< 0.08	< 0.08	-
		p > 0.05							
Value for	430.222,	1.172	0.549	0.212	0.896	0.877	0.0586	0.025	367
(a) 5-factor model	p = 0.013								
(b) 4-factor model	445.365,	1.200	0.469	0.184	0.892	0.874	0.0598	0.027	371
		p = 0.005							
(c) 3-factor model	445.518,	1.19	0.490	0.184	0.892	0.875	0.0598	0.026	374
		p = 0.006							

Research question 2 of Study Two: Is there significant covariance among self-mastery, transcendental awareness, spiritual sensitivity, resilience, and existential quest?

The path diagram for the hypothesised five-factor model is shown in Figure 7.9: circles denote latent variables and rectangles signify measured variables. The absence of a line linking variables suggests a lack of a hypothesised direct effect (Ullman, 2013). The covariance between transcendental awareness and spiritual sensitivity was 0.121, which was significantly different from zero at the 0.001 level, as shown in Table 7.19. The computation of P presumed that parameter estimates were normally distributed, which is correct only in large samples (Arbuckle, 2013). Respective significant differences from zero were found between transcendental awareness and resilience and between transcendental awareness and the existential quest. Furthermore, covariances between spiritual sensitivity and resilience and between spiritual sensitivity and existential quest were significantly different from zero at the 0.01 level. Resilience and the existential quest were significantly different from zero at the 0.01 level (two-tailed). The covariances between self-mastery dimension and each of the other dimensions were not significantly different from zero at the 0.05 level. It can be assumed that self-mastery, as a dimension of SQ, was independent from the other dimensions.

Table 7.19

Covariances among variables (N = 286)

			Estimate	S.E.	C.R.	P
Transcendental awareness	<-->	Spiritual sensitivity	.121	.033	3.692	***
Transcendental awareness	<-->	Resilience	.073	.026	2.750	.006
Transcendental awareness	<-->	Existential quest	.054	.021	2.632	.008
Spiritual sensitivity	<-->	Resilience	.089	.033	2.695	.007
Spiritual sensitivity	<-->	Existential quest	.058	.022	2.613	.009
Resilience	<-->	Existential quest	.093	.032	2.900	.004
Self_mastery	<-->	Transcendental Awareness	.008	.018	.446	.656
Self_mastery	<-->	Spiritual_sensitivity	.009	.019	.446	.656
Self_mastery	<-->	Resilience	.011	.025	.447	.655
Self_mastery	<-->	Existential_quest	.006	.013	.445	.656

S.E = Standard Error; C.R. = Critical Ratio *** significance at 0.001

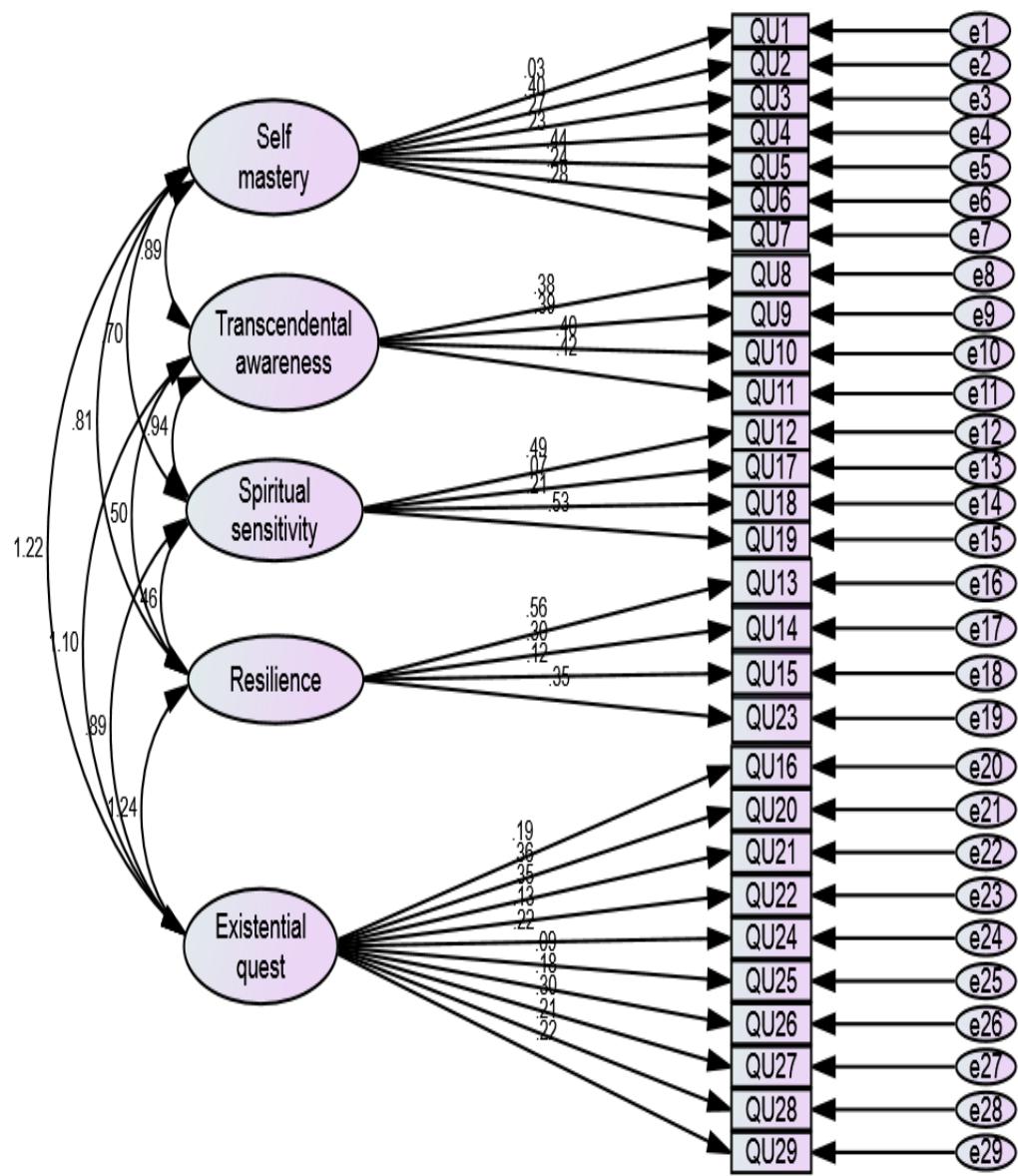


Figure 7.9 Path diagram for the hypothesised five-factor model.

7.3 Conclusion

This thesis addresses ethnic identity with regard to spiritual intelligence. Two studies were conducted for this purpose. Study One investigated the factor structure and reliability of the proposed measure of spiritual intelligence, namely, the Multicultural Spiritual Intelligence Scale (MSIS). Study One also addressed the main research questions of the thesis. In summary, ethnic groups differed with regard to SQ; a most significant difference was between Hindu-Mauritians and Creole-Mauritians. Ethnic identity was significantly correlated with SQ. The various ethnic groups were also found to differ in their ethnic identification in terms of exploration and commitment. Compared to the commitment dimension of the MEIM, the exploration dimension was more strongly correlated with the subscales of the MSIS. However, there were no statistical significant differences among the religious groups in terms of SQ. Concerning the positive relationship between the level of ethnic identity and spiritual intelligence, gender did not play a moderating role. Study Two confirmed the factor structure observed in Study One, and a five-factor model was chosen as the model which best fit the data.

Chapter 8: Discussion of results

The current literature describes spiritual intelligence (SQ) in populations which do not reflect the Mauritian reality. This dearth of knowledge on SQ in a population marked by ethnic lines motivated this research. The main ethnic groups which were the focus of this study were Hindu-Mauritians, Muslim-Mauritians, and Creole-Mauritians. The primary purpose of the present study was to examine the nature of SQ and its link to ethnic identification in multi-ethnic Mauritius. The first research question addressed the differences in SQ among the three ethnic groups. Study One necessitated a fast, easy, and comprehensive way of obtaining data, so the research method involved a questionnaire which was both administered online and mailed to prospective participants, for better reach. In line with this, the questionnaire, the Multicultural Spiritual Intelligence Scale (MSIS), was developed from an extensive literature review. The MSIS had a large pool of 106 items, and 1,177 participants responded. The scale had good psychometric properties: the Cronbach's alpha value was 0.99 for the MSIS as a whole, and all subscales had a reliability coefficient of 0.9 (correct to one decimal point). The MSIS had good construct validity when compared to similar scales such as the Meaning in Life Questionnaire (MLQ), the Connor-Davidson Resilience Scale (CD-RISC), the Private Self-Consciousness (PSC) subscale, and the New Indices of Religious Orientation (NIRO) questionnaires. The Balanced Inventory of Desirable Responding (BIDR) provided evidence of the discriminant validity of the MSIS-1. Before analysis, items were grouped into six main dimensions: resilience, quest for meaning, self-awareness, transcendental awareness, level of consciousness, and sensitivity. Study Two involved a shorter version of the MSIS; 303 participants responded to this study. The aim was to confirm the factor structure of spiritual intelligence observed in Study One using CFA. Item distribution was investigated using EFA. Five factors met the criteria for retention. A qualitative interpretation of the clusters of items necessitated re-labelling of the five factors as resilience, the existential quest, self-mastery, transcendental awareness, and spiritual sensitivity. In terms of the primary research question, the three ethnic groups differed significantly with regard to SQ, with Hindu-Mauritians obtaining the highest MSIS score. The relationship between ethnic identification and SQ was statistically significant, but gender did not contribute significantly to the relationship.

between ethnic identification and SQ. The findings also revealed that the three ethnic groups differed in terms of their sense of ethnic identification. Results showed that Muslim-Mauritians scored highest on both ethnic exploration and ethnic commitment. However, no statistically significant difference in SQ was found among the religious groups. Buddhism obtained the highest MSIS score. These results are discussed in the next section and compared with the current literature on the subject.

8.1 The validity and reliability of the Multicultural Spiritual Intelligence Scale (MSIS)

8.1.1 The MSIS compared to other measures (the NIRO, PSC, and BIDR)

Although an average correlation was found between spiritual intelligence and a religious orientation scale (NIRO: extrinsic), the subscales had a low correlation with SQ, which confirmed MSIS's construct validity. The MSIS did not gauge religiosity or spirituality, which were distinct from spiritual intelligence (Joseph & Sailakshmi, 2011). The differences between religion, spirituality, and spiritual intelligence have been highlighted in the literature. Spiritual intelligence is the assumed ability to transcend several spiritually related dimensions, while religion is the encompassing concept which encloses all of these (Nelson, 2009). However, the particularity of the Mauritian population's tendency to treat religion and spirituality as equivalent could explain the same propensity with spiritual intelligence in general, and therefore the moderate correlation between them. Strong positive relationships between spiritual intelligence and private self-consciousness also highlight this convergent validity. Findings by Kumari and Sharma (2011) confirmed the relationship between the two variables, and indicated that private self-consciousness is a high predictor of SQ. The low correlation between the MSIS and the social desirability scale (BIDR) and its subscales confirmed their discriminant validity. This low correlation also means that the MSIS measured a different construct. Social desirability is respondents' propensity to favour items in response to normative demands (Ellingson, Smith & Sackett, 2001, as cited in Li & Bagger, 2007). The BIDR measured the conscious and unconscious exaggerations that distort responses. A low correlation was also observed between BIDR and all other measures.

8.1.2 Dimensions of the MSIS

The comparison between the MSIS and the meaning in life questionnaire (MLQ) (Steger et al. 2006) showed a very good relationship, validating the MSIS's construct. The correlation between the presence of meaning and SQ was stronger than the correlation between the search for meaning and SQ. Similar findings were observed by King and DeCicco (2009), who claimed that presence of meaning was a consequence of the ability to create meaning, and thus concurrent validity was supported. The meaning dimension as related to SQ implied that the quest phase preceded the achievement of meaning in life. Therefore, the presence of meaning indicated a more advanced ability to generate meaning. The items included in the MSIS were meant to measure this advanced ability. The existential quest dimension was similar to Gardner's (1999) existential intelligence, described as capacity to engage in a quest, develop meaning, and feel love. It also paralleled King and DeCicco's (2009) personal meaning production component of SQ. Thus, it validated the existential quest construct both as an ability and a component of spiritual intelligence.

Resilience, the capacity of persons to cope with traumatic events, was revealed as a component of spiritual intelligence (Scali et al., 2012). Resilience was an umbrella term comprising the ability people have to surmount risk or adversity and to experience positive outcomes (Connor & Davidson, 2003, as cited in Coates et al. 2013). The strong link between spiritual intelligence and resilience supported convergent validity. Shahbakhsh and Moallemi (2013) confirmed a positive link between SQ and resilience using King's SQ inventory and CD-RISC to assess resilience. Their work also confirmed Zohar and Marshall's (2004) initial proposition to include resilience as a potential component of SQ. Findings on a medium correlation between the existential quest and resilience supported this measure. As Peres et al. (2007) put it, meaning in life was part of Antonovsky's (1979) sense of coherence model, which explained the process behind resilience. An individual who embarks on a spiritual path goes through a journey comprising a quest for meaning in life and death, and unconditional love. The quest is a slippery and increasingly difficult task that can be profound, arduous, challenging, and complex. It is similar to the moratorium phase in identity development proposed by Marcia (1966, as cited in Bosma & Kunnen, 2001). Individuals who move forward are more equipped to deal with adverse

situations. However, individuals who are stuck in the quest are left with inadequate tools to deal with hostile life situations. Coping is a skill which is developed through the quest, and involves experiences of success as well as failure. If one considers the spiritual intelligence model on a continuum, with the existential quest preceding resilience, this concept implies that resilience is a component of SQ. Resilience being an outcome of the quest ability supports its concurrent validity. Khoshtinat's (2012) study on spiritual intelligence and religious coping styles found no significant relationship between the two variables; furthermore, it confirmed the resilience factor, as Khoshtinat included the negative coping style and used the composite score as an indicator of religious coping. Other studies also reported a direct link between resilience and spirituality, which strengthened the relevance of resilience in spiritual intelligence (Narayanan & Jose, 2011; Tasharrofi, Hatami & Asgharnejad, 2013).

King and DeCicco's (2009) study also revealed an equivalent transcendental awareness construct that validated the transcendental awareness component in the MSIS. Fry and Wigglesworth (2010) advocated four quadrants of SQ: ego-self/higher self-awareness, universal awareness, ego-self/higher self-mastery, and social mastery/spiritual presence. The first quadrant, which pertains to the individual's inner state of self-awareness, is similar to the self-mastery dimension. However, self-mastery goes beyond higher awareness, encompassing the ability to situate the self in such awareness, to live consciously, and to understand one's limitations. The second quadrant includes an understanding of one's own and others' worldviews and of altering of one's perception of reality through transcendence, among other things (Fry & Wigglesworth, 2010). The third quadrant is a continuation of the first and second quadrants, involving an outward display of acquired skills such as resilience and a sense of meaning in life. The fourth quadrant has to do with being a spiritual leader. The first three quadrants validate self-mastery, the existential quest, transcendental awareness, and resilience as dimensions of spiritual intelligence.

Tirri and Nokelainen (2011) researched the inclusion of SQ in Gardner's MI theory and compiled a spiritual sensitivity scale which measures awareness-sensing, mystery-sensing, value-sensing, and community-sensing. The notion of spiritual sensitivity presented by Tirri and Nokelainen (2011) corresponds to some components in the MSIS. Awareness-sensing and mystery-sensing were reflected in a few items, such as those associated with the self-awareness

construct in MSIS-1 and self-mastery in MSIS-2. Value-sensing and community-sensing were similar to the quest for meaning dimension in the MSIS-1 and the existential quest in the MSIS-2. Conversely, Tirri and Nokelainen's (2011) merged value-laden items measured the dichotomy between good and bad that concerned personal judgement rather than an ability. The difference between the MSIS and the spiritual sensitivity scale supported the validity of the MSIS as a measure of spiritual intelligence as an ability. The spiritual sensitivity construct involved measuring affect, which was gauged using a four-item subscale in the MSIS-2.

8.1.3 The implications of a five-factor model of spiritual intelligence

The research question of Study Two—whether a six-factor model with a simple structure would fit the data—could not be examined, because only five dimensions were revealed by EFA in Study One. Only one item was retained from the level of consciousness dimension and included in the self-awareness dimension, renamed as self-mastery. Study Two investigated a five-factor model of spiritual intelligence which covered self-mastery, transcendental awareness, spiritual sensitivity, resilience, and the existential quest. A moderate correlation was observed among the five dimensions, which was a criterion in determining SQ as an intelligence (Gardner, 1983; Mayer et al., 2000, as cited in King & DeCicco, 2009). Comparative fit indices for the five-factor, four-factor, and three-factor models indicated no substantial differences. The five-factor model was chosen as the best fit, because it also encompasses dimensions proposed by several authors (King, 2009; Wigglesworth, 2012; Zohar & Marshall, 2005). However, not all the 29 items functioned as strong indicators. From an analysis of the parameter estimate, only seven items had practical significance. The analysis of the variance revealed only 12 items with moderate variance. The small sample was one limitation of Study Two.

8.2 Ethnic differences in spiritual intelligence

Among the three ethnic groups concerned, the Hindu-Mauritians attained the highest score in SQ. The only significant difference in spiritual intelligence observed was between the Hindu-Mauritians and the Creole-Mauritians. The Hindu Mauritians include Hindus, Tamils, Telugus,

and Marathis (Eriksen, 1999) who share the common thread of Hindu philosophy but differ in terms of language, temple structure, presiding divinity, and culinary culture. The Eastern perspective emphasises transcendence to rediscover a higher level of awareness and consciousness, which were major themes of the MSIS-1 as initially constructed (Wilber, 1993). Furthermore, the goal of self-realisation, which corresponded to the liberation of the soul in Hinduism, involved the complete transformation of the person for the experience of the real self (Viljoen, 2003). This transformation in turn concerned a quest for meaning for a higher purpose that intersected with the development of a spiritually intelligent individual. Knowledge of the self and the absolute are prerequisites for moksha, the ultimate deliverance, which is also gained through a search for meaning (Rambachan, 2000). The expansion of these qualities and spiritual evolution provides a foundation for the development of spiritual intelligence. The MSIS was not developed for a particular ethnic group, but was the outcome of a thorough survey of the accumulated literature on SQ. The ethnic differences observed supported the validity of the MSIS questionnaire. However, the present study focused only on three ethnic groups in the Mauritian context. Data from minority groups such as the Sino-Mauritians and the Franco-Mauritians were negligible and not examined in this research. Further research on local minority groups' perceptions of SQ and their ethnic status would add to research on the subject. Juang and Syed (2008) mentioned that religion could be noteworthy in the construction of one's ethnic self, but argued that it was not relevant in SQ. The MSIS-1 is meant to be useful as a universal measure in a multicultural context, irrespective of religious affiliation. Religion was considered to be different from spiritual intelligence, and as the MSIS is not meant to measure any religious aspect, the results provide support for the construct validity of this measure. Besides, it would be unethical to suppose that only Sino-Mauritians follow Buddhism or only Hindu-Mauritians adhere to Hinduism. Only 64 participants stated that they believed in Buddhism, but this religious group had the highest MSIS score (a composite score that integrates all subscores on the six dimensions). The fact that the Buddhist group obtained the highest score could indicate the pertinence of the dimensions as measured among those adhering to Eastern views, as discussed previously.

The differences in SQ among the ethnic groups can be easily misinterpreted and nurture stereotypes and social discrimination, which are not intended in this research. The theories of SQ can serve as a foundation for a critical interpretation of the findings in this study. Studies reported the benefits of spiritual intelligence in the workplace in terms of greater personal improvement and greater sense of service (Hawley, 1993); team work and employee commitment (Hawley, 1993, Brown, 1992, Rosen, 1992, as cited in Neck & Milliman, 1994). Workplace spirituality enhanced workplace behaviour and organisational outcomes (McGhee & Grant, 2008). A low spiritual intelligence could impede the relational aspect at work and work performance. Moreover, if the hierarchy model of intelligences proposed by Wigglesworth (2006) is followed, the deprivation felt by the Creole-Mauritians in terms of materials (PQ), job opportunities (PQ) and stability (EQ) impeded the SQ development.

Ethnic identification showed a significant yet moderate relationship with spiritual intelligence. This validates the MSIS, as both ethnic identity and spiritual intelligence development necessitate a search and an inner quest that culminates in an understanding or sense of self. MacDonald (2011) backed the argument in his observation that spirituality and identity were closely connected in spiritual and religious works. The influence of ethnic identification, actively developed from a time of search and questioning, is substantial in safeguarding oneself from mere adherence to a group and manipulation by others, in ensuring a confident constructive sense of one's identity as part of a group, and in fostering tolerance of other groups (Phinney, 1996). Chae et al. (2004) studied the connection between ethnic identity and spiritual development, observing that most studies on spirituality and ethnic group affiliation focused on African Americans. Although spirituality and SQ were theoretically different, their commonalities in terms of qualities and their spiritual origin connected both concepts. Their research confirmed the link between intrinsic and extrinsic spirituality and ethnic identity, which provides support for the link between SQ and ethnic identity in the present study (Chae et al., 2004). Phinney (1990) described ethnic identity formation from a developmental framework that involved the process of exploration and commitment. Chae et al. (2004) formulated three stages: the unexamined ethnic identity, the ethnic identity search or moratorium, and the achieved ethnic identity. Grounded on Marcia's (1966) ego identity statuses, four ethnic identity statuses were observed: the diffused, foreclosed, moratorium,

and achieved (Phinney, Jacoby & Silva, 2007; Schwartz et al., 2014). Unlike an ethnic identity, SQ involves a continuous quest for meaning and development in the several areas of SQ. It is a herculean task in the real world which climaxes in a state which is comparable to Maslow's (1943) self-realisation theory. Further research on the developmental process of SQ to the achievement of a spiritual identity would deepen understanding and analysis. The exploration dimension was found to have a stronger significant link with SQ than the commitment component: the element of exploration or quest was present in both building an ethnic identity and the spiritual quest. The moratorium, a period of uncertainty, self-questioning, and 'ambivalence' (Phinney et al., 2007, p. 479) forges character and builds the SQ of the individual.

8.3 Gender and spiritual intelligence

Regarding the positive correlation between the level of ethnic identity and spiritual intelligence, gender was not a moderating variable in this relationship; rather, it was found that SQ and ethnic identity were positively linked irrespective of gender. The more spiritually intelligent a person is, the higher their level of ethnic identification and vice versa. Male participants scored slightly higher on the MEIM than females, confirming the results of previous investigations of gender differences in ethnic identity (Phinney, 1992). On the MSIS scale, females slightly outscored males, which was also supported by the results of several other studies (Allah Du, Mazdarani & Ghasemian, 2013; Azizi & Zamaniyan, 2013). While Allah Du et al. (2013) did not provide any details regarding the assessment tool they used in their research, Azizi and Zamaniyan (2013) used King's (2008) spiritual intelligence inventory in their study. Conversely, Nazam's (2014) small-sample study of adolescents in India found males outperformed females in SQ. Nazam (2014) also used King's (2008) scale, which considered critical existential thinking, personal meaning production, transcendental awareness, and conscious state expansion as components of spiritual intelligence. Though the two authors used the same measure, the different results could mean a difference in the sample or participants in the study. However, the fact that Nazam's (2014) study used a small sample (only 60 participants) could also explain the divergent results. Azizi and Zamaniyan (2013) and Allah Du et al. (2013) each used 120 participants, which

was also insufficient to generalise the results. Differences in how the components of SQ were measured could also explain the gender differences. King's (2008) measure had similar components to the MSIS. However, the MSIS had more dimensions, such as sensitivity, self-awareness, and resilience, which could explain the amplified difference.

8.4 Ethnic identifications of the major ethnic groups

The difference in ethnic identification was significant between Muslim-Mauritians and Hindu-Mauritians and between Muslim-Mauritians and Creole-Mauritians. In short, the substantial difference between Muslim identity and the others validates the MEIM measure. Muslim-Mauritians had the highest score in both the ethnic exploration and ethnic commitment subscales, which meant that they obtained the highest score with regard to both the affective and cognitive aspects. The Indo-Mauritian Muslims, a minority group who represent 17 percent of the Mauritian population (Eisenlohr, 2006; Eriksen, 1999), are perceived as successful traders, due in part to their prosperous ancestral Gujarati origins. On one hand there are the noticeably wealthy and influential Memon and Surtee Muslims, while on the other hand, there are the other Muslim groups from modest, unskilled backgrounds, the descendants of indentured servants (Eisenlohr, 2006). Social identity theory hints that group membership becomes salient in circumstances where people are part of a minority group and perceive some degree of threat (Syed & Juang, 2014). The conflicts within the Muslim group, which have given rise to subgroups, could have reinforced the subgroup identification, which could also explain the stronger degree of identification reported in the present study. Juang and Syed (2010) related similar findings—that is, ethnic minorities described a stronger sense of ethnic identity than the White participants. Bronfenbrenner's (1989, as cited in Umaña-Taylor et al., 2013) ecological theory posited that human growth is the outcome of an interactive process between a person and the environment. Research by Umaña-Taylor et al. (2013) highlighted the relationship between family ethnic socialisation and enhanced ethnic identity with regard to both ethnic exploration and commitment. Further in-depth research on the family dynamics of this ethnic group using Bronfenbrenner's ecological theory (Umaña-Taylor,

Alfaro, Bámaca & Guimond, 2009) to check for family ethnic socialisation would be interesting¹⁶ (Umaña-Taylor, Zeiders & Updegraff, 2013).

The Creole-Mauritians obtained the lowest score. Ng Tseung-Wong and Verkuyten's (2010) study also described Creoles' relatively negative evaluation of their own group. Phinney (1991, as cited in Mossakowski, 2003) claimed that ethnic identification was a 'sense of pride' (p. 318) and included participation in ethnic rituals and cultural adherence to the ethnic group, but this was not found to be the case for the Creole-Mauritian group. The constructivist perspective paints ethnicity as flexible and conditional upon many variants (Isaacs-Martin, 2014; see also Anderson, 2001), so it could be assumed that Creole-Mauritians refer to their identity as a 'creolization' (Erasmus, 2001 as cited in Isaacs-Martin, 2014, p. 57) moulded by slavery and discrimination in the absence of a history prior to colonialism (see also Eriksen, 1999). The Creole-Mauritians' low score on ethnic identity questions the established ethnic groups in Mauritius. Furthermore, the constructivist viewpoint is inadequate in this instance and should be taken with other perspectives. Although the socio-historical commonalities exist, the Creole-Mauritians do not identify themselves as an ethnic group but harbour a subjective view of their ethnic statuses. From an instrumentalist outlook, being the least privileged and marginalized group can also be a reason behind the lack of enthusiasm to identify with a disadvantaged group. A circumstantialist approach would look at the 1999 riots, that reawakened the ethnic Creole bonds, as a reaction to the felt oppressive treatment. This perspective explains how structured inequality can contribute to the temporary phase of ethnic group formation. Boswell (2006) described the Creole-Mauritians as a marginalised group who were deprived of an ethnic identity and lacked an 'ancestral culture' (p. 693), being conscious instead of their descent from slaves and the legacy thereof (Ng Tseung-Wong & Verkuyten, 2015). The Creole community is afflicted by low educational attainment, acute unemployment, constant poverty, a low standard of living, social issues, 'political marginalisation', and an absence of solidarity among themselves which is called *le malaise créole* (Boswell, 2006, p. 2; see also Jeffery, 2007, 2010). Proponents of pluralism propose that recognition of and consideration for valued subgroup identities will have a unifying impact on the

¹⁶ Family ethnic socialisation refers to family members' attempts to acquaint the younger generation with the values and behaviours of their ethnic culture (Umaña-Taylor et al., 2009; see also Umaña-Taylor et al., 2013).

social system, and would make people of different backgrounds feel accepted (Huo & Molina, 2006; see also Molina, Phillips & Sidanius, 2015).

8.5 Limitations of the study

The study did not consider the minority groups or dual identities like the Sino-Mauritians and the Franco-Mauritians. Furthermore, the research overlooked participants who had no ethnic identifications. The Creole-Mauritians' low score on ethnic identification questioned the group as an ethnic one, from a constructivist perspective. This research could be a ground work for a more in-depth qualitative survey on the ascribed Creole-Mauritian.

8.6 Recommendations

The present research study centred on three main ethnic groups: Hindus, Muslims, and Creoles. Further studies on ethnic minorities such as Sino-Mauritians and Franco-Mauritians with regard to spiritual intelligence would not only add to the knowledge on the subject but also help in the better understanding of ethnic differences in SQ. Moreover, for generalisation purposes, the MSIS could be used on different populations (such as a South African population, for example) to confirm its psychometric properties.

The MSIS should be used in relation to other constructs. For example, the relationship between spiritual intelligence and academic accomplishment could be of interest in the educational sector. In the sport sector, further research could be conducted on the impact of spiritual intelligence on team spirit or on fair competition. More studies could be carried out on perceived mental health and spiritual intelligence. Organisations could measure spiritual intelligence with job effectiveness and job satisfaction. Upadhyay et al. (2015) mentioned that spiritual intelligence was related to increased organisational effectiveness, but the extent to which this applies to the Mauritian population remains an open question.

Adolescence is a time of questing for and forming an identity in relation to one's ethnic group membership (Pahl & Way, 2006, as cited in Tummala-Narra, 2015). More research is needed on the processes of spiritual intelligence development in the Mauritian context. As previous research has shown that the development of SQ is tied to positive outcomes and that ethnic differences have been found with regard to SQ growth, it would be beneficial for individuals (ranging from high school students to employees) to be trained in the various dimensions of SQ, such as self-mastery for better self-control, resilience to overcome failures, spiritual sensitivity, and embracing a human approach. Furthermore, schools could provide a space and a designated psychologist to discuss the processes of spiritual intelligence development that would be secular and beneficial for youths.

Cultural diversity is the cultural richness of a country and multicultural countries working to encourage cordial intergroup relations. However, it is also a delicate issue which in some instances has given rise to tensions regarding social cohesion (Mähönen, Jasinskaja-Lahti & Liebkind, 2010). Based on the findings of the present study, it would be in the nation's interest to work on a more inclusive multicultural policy for the historically marginalised Creole-Mauritians (Huo & Molina, 2006).

8.7 Conclusion

This study focused on the study of spiritual intelligence among three main ethnic groups in Mauritius. A Multicultural Spiritual Intelligence Scale (MSIS) was developed, taking into consideration the African and Eastern perspective in a broad item distribution for a universal and comprehensive spiritual intelligence scale. The MSIS was used to explore ethnic identification and ethnic differences in Mauritius. The investigation was led from a positivist paradigm and used a quantitative approach to answer several questions that were generated in the research. The study adds to the literature on spiritual intelligence in the Mauritian diversity context by considering ethnic, gender, and religious differences. The findings indicated a relationship between ethnic identity and spiritual intelligence, as well as an ethnic difference in spiritual intelligence, which were both constructive in understanding the local cultural background.

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Appendices

1. INFORMED CONSENT FOR STUDY ONE (PAPER VERSION)

Dear *Participant*,

Thank you for taking time to participate in this research. This study is part of the requirement for the fulfilment of a doctoral study in psychology at the University of South Africa (UNISA). You will find enclosed a Spiritual Intelligence Scale (MSIS-1), a short biographical survey, a Multi-group Ethnic Identity Measure- Revised (MEIM-R), a Meaning in Life Questionnaire (MLQ), a Connor-Davidson Resilience Scale (CD-RISC), a Private Self-Consciousness scale (PSC), a New Indices of Religious Orientation-Extrinsic scale (NIRO) and a balanced inventory for desirable responses (BIDR). The purpose of the survey is, firstly, to build a relevant spiritual intelligence scale for the Mauritian population. Secondly, this study will look at the ethnic profile of Mauritians along the SQ test. The results of the survey will be available on UNISA website in the library section under the thesis heading after it is accepted by the university.

We ensure you that all information collected is for research purpose only and will be treated in confidentiality. This survey is anonymous, please do not write your name on the pages. By participating, you stand a chance at winning one of the prizes, namely vouchers of Rs. 1000, Rs. 500 and Rs. 200 for the first, second and third winner respectively. For lottery participation, you may add your email address in the space provided. If you do not wish to participate in the lottery, please do not add your email address.

Please note that it is a voluntary participation. You have the right of not participating or to withdraw anytime you wish. Please put your signature below as a sign of acceptance of participation.

If you require any more information, please feel free to email us on 42062306@mylife.unisa.ac.za.

We thank you for your time!

Email address:

I hereby declare that I am at least 18 years old, that I have read the above information and that I have understood it, and I accept voluntarily to participate in this research. I indemnify UNISA or any UNISA staff or student against any liability that I may incur during the time of participation.

Signature of participant:

2. INFORMED CONSENT FOR STUDY TWO (PAPER VERSION)

Dear *Participant*,

Thank you for taking time to participate in this research. This study is part of the requirement for the fulfilment of a doctoral study in psychology at the University of South Africa (UNISA). The general purpose of this research is, firstly, to build a relevant spiritual intelligence scale for the Mauritian population and, secondly, to look at the ethnic profile of the Mauritian participants along the SQ test. You will find enclosed a Multicultural Spiritual Intelligence Scale (MSIS-2) and a short biographical survey. A first survey was previously conducted using the Multicultural Spiritual Intelligence Scale (MSIS-1). The MSIS-2 is a shorter version of the MSIS-1. The purpose of this second study is to validate the MSIS-2. The results of the survey will be available on UNISA website in the library section under the thesis heading after it is accepted by the university.

We ensure you that all information collected is for research purpose only and will be treated in confidentiality. This survey is anonymous, please do not write your name on the pages.

Please note that it is a voluntary participation. You have the right of not participating or to withdraw anytime you wish. Please put your signature below as a sign of acceptance of participation.

If you require any more information, please feel free to email us on 42062306@mylife.unisa.ac.za.

We thank you for your time!

Email address:

I hereby declare that I am at least 18 years old, that I have read the above information and that I have understood it, and I accept voluntarily to participate in this research. I indemnify UNISA or any UNISA staff or student against any liability that I may incur during the time of participation.

Signature of participant:

3. THE MULTICULTURAL SPIRITUAL INTELLIGENCE SCALE I (MSIS-1)

Instructions

Read each statement clearly and respond by drawing a circle around your answer to the right of the statement. You can choose one of the five possible responses that best reflects you rather than what you think your experience should be. Your answers will remain confidential. Please answer all questions.

- 0= Not at all true of me
- 1= Slightly true of me
- 2= Moderately true of me
- 3= Very true of me
- 4= Completely true of me

Example:



The statement indicates that it is "Completely true of me"

S/N		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
1	I have a sense of an inner or spiritual life	0	1	2	3	4
2	At the end of the day, I tend to reflect on the events that occurred	0	1	2	3	4
3	I have a strong feeling of the presence of a Higher Consciousness ¹⁷	0	1	2	3	4
4	I am at ease with silence	0	1	2	3	4
5	I can face uncomfortable truths about myself.	0	1	2	3	4
6	I am aware of my life purpose	0	1	2	3	4

¹⁷ Higher Consciousness/Higher Being/Higher Self/Higher Power/God as you defined it.

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		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
7	I am little aware of the values most important to me	0	1	2	3	4
8	I do not pay attention to my own thoughts	0	1	2	3	4
9	I rarely listen to my little voice that guides me	0	1	2	3	4
10	I am aware of my weaknesses	0	1	2	3	4
11	I draw on my strength to help others	0	1	2	3	4
12	I recognise the voice of the Higher Self speaking to me	0	1	2	3	4
13	I am aware when a malignant or non-malignant spirit takes possession of me	0	1	2	3	4
14	Inner quietness is important for me	0	1	2	3	4
15	I am aware of my true nature	0	1	2	3	4
16	I can recognise the voice of my ancestors addressing me	0	1	2	3	4
17	I always follow my intuition or gut feeling	0	1	2	3	4
18	I allow myself to be open and vulnerable with others	0	1	2	3	4
19	I take time to play with young children	0	1	2	3	4
20	I feel the presence of a Higher Consciousness very real	0	1	2	3	4
21	I am aware of the direction in which a Higher Consciousness is guiding me	0	1	2	3	4

		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
22	I consider my dreams useful in gaining insight/clear perception of my life	0	1	2	3	4
23	I listen deeply to the unspoken words in a conversation	0	1	2	3	4
24	I do not pay attention to what others have to say	0	1	2	3	4
25	I remember to consider what is hidden in a discussion	0	1	2	3	4
26	I am able to see things from the other person's perspectives	0	1	2	3	4
27	I live and act with consciousness of my mortality	0	1	2	3	4
28	In meetings or gatherings, I tend to pause several times to reassess the situation	0	1	2	3	4
29	I frequently monitor and notice my thoughts and emotions	0	1	2	3	4
30	In times of conflict, I tend to look at a common ground	0	1	2	3	4
31	I can hold as true and integrated contradictory points of view.	0	1	2	3	4
32	It is difficult for me to enter higher states of consciousness¹⁸	0	1	2	3	4
33	I move freely from different states of awareness	0	1	2	3	4
34	I decide when to enter different states of consciousness	0	1	2	3	4

¹⁸ Higher states of consciousness or feeling of oneness/unity that is felt in for example meditation or other spiritual practices

		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
35	Higher states of awareness brings clarity to issues	0	1	2	3	4
36	I am highly aware of a profound connection between me and other people	0	1	2	3	4
37	I tend to look for the relationship among different things	0	1	2	3	4
38	I strive/try hard to look at problems from a wide perspective	0	1	2	3	4
39	I feel that issues coming in my way are all interconnected	0	1	2	3	4
40	I have experiences of knowing the unspoken thoughts of others	0	1	2	3	4
41	I am aware that all life are interconnected	0	1	2	3	4
42	I experienced transcendental oneness with all living things (Transcendental- to go beyond the material or physical)	0	1	2	3	4
43	I am highly aware that a Higher Consciousness is guiding me	0	1	2	3	4
44	My faith in life helps me meet daily challenges	0	1	2	3	4
45	I am aware of a Higher Self speaking to me for decision making	0	1	2	3	4
46	My daily spiritual practice helps me to address stressful situations	0	1	2	3	4
47	Spiritual places help me to align with the sacred	0	1	2	3	4

		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
48	I am committed to spending time in spiritual practices	0	1	2	3	4
49	I am aware when I am in the presence of a malignant or non-malignant Spirit	0	1	2	3	4
50	I am able to manifest the Higher Self in my physical body	0	1	2	3	4
51	I prefer natural healing methods¹⁹	0	1	2	3	4
52	Natural healing method is not at all helpful compared to medication in times of personal difficulties	0	1	2	3	4
53	Rites and rituals help me connect with the nonmaterial world	0	1	2	3	4
54	Objects that remind of the spiritual help me feel centred	0	1	2	3	4
55	Ceremonies and rituals are part of my spiritual practice when something important happens to me	0	1	2	3	4
56	Prayer helps me cope with personal difficulties	0	1	2	3	4
57	I usually empathise with others (Emphasise-feel compassion)	0	1	2	3	4
58	I have an overwhelming experience of nurturing love	0	1	2	3	4
59	I cannot emphasise with the pain of someone who disagrees with me	0	1	2	3	4

¹⁹ Natural healing methods for example healing by prayer/meditation/yoga etc.

		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
60	I have experienced a sense of reverence/respect for all living beings	0	1	2	3	4
61	I am able to feel the joy of others	0	1	2	3	4
62	I am able to sit with the pain of others	0	1	2	3	4
63	I am indifferent to others' feelings	0	1	2	3	4
64	It is difficult for me to acknowledge that I made a mistake	0	1	2	3	4
65	I am open to the suggestion of others	0	1	2	3	4
66	I recognise that I have limitations	0	1	2	3	4
67	I have the strong impression that a higher power is guiding me	0	1	2	3	4
68	I am able to admit my mistakes gracefully	0	1	2	3	4
69	It is difficult for me to feel compassion for people I meet	0	1	2	3	4
70	My ability to connect with others help me to be more effective	0	1	2	3	4
71	I am committed to work towards the increased in others awareness	0	1	2	3	4
72	My connection with others helps me to be more compassionate	0	1	2	3	4
73	In times of stress, aligning my actions with my values are helpful	0	1	2	3	4

		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
74	I tend to blame others for my failures	0	1	2	3	4
75	My ability to find meaning and purpose in life helps me adapt to adverse situations	0	1	2	3	4
76	I tend to learn from my mistakes	0	1	2	3	4
77	It is difficult for me to bounce back after a failure	0	1	2	3	4
78	Despite pressures from outside, I still cling to my ideals	0	1	2	3	4
79	My faith tends to quiver after a period of uncertainties	0	1	2	3	4
80	In periods of darkness/despair, I draw on my energy from my spiritual values	0	1	2	3	4
81	Attending to the nonmaterial aspects of my life remains important despite failures	0	1	2	3	4
82	I tend to lose faith quickly in hard times	0	1	2	3	4
83	Relying on religious or spiritual leaders to overcome adverse situations is important for me	0	1	2	3	4
84	My faith in the higher consciousness strengthens after hard times	0	1	2	3	4
85	Attending to spiritual ceremonies is helpful in times personal difficulties	0	1	2	3	4
86	My ability to bounce back is strengthened by my spiritual practices	0	1	2	3	4

		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
87	My connection with the Higher Self helps me to see clearly in hard times	0	1	2	3	4
88	My spiritual practices help me to recover after tough times	0	1	2	3	4
89	I have a clear purpose in life	0	1	2	3	4
90	My life has no meaning	0	1	2	3	4
91	I am seeking meaning in my life	0	1	2	3	4
92	I tend to find meaning in everything I do	0	1	2	3	4
93	I am able to find every opportunities as a blessing	0	1	2	3	4
94	My life purpose is still unclear	0	1	2	3	4
95	I feel that each of us contributes to something greater	0	1	2	3	4
96	I am aware that my life has a sense of direction that I should follow	0	1	2	3	4
97	I feel a sense of vocation to help others	0	1	2	3	4
98	I feel grateful for the gifts of life	0	1	2	3	4
99	I have spent time reflecting on how I could contribute to my community in a meaningful way	0	1	2	3	4
100	I am unlikely to commit myself for the good of others	0	1	2	3	4

		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
101	Finding meaning in situations helps me to cope with it.	0	1	2	3	4
102	Looking for meanings in times of conflict help me to calm down	0	1	2	3	4
103	It is important for me to help others	0	1	2	3	4
104	I rarely follow my moral values	0	1	2	3	4
105	I am inspired by great leader(s)	0	1	2	3	4
106	I have often reflected upon the purpose or meaning of my existence	0	1	2	3	4

Demographic information

Please tick (✓) as appropriate. Remember not to write your name anywhere on the paper.

1. Are you :

Male Female ?

2. How old are you? (Please write on the line below)

3. How would you define your relationship status?

Single Committed Married

Divorced Separated others, please specify on the line below

4. What is your level of education?

Primary

- a. Below CPE b. CPE

Secondary

- a. Below SC b. SC c. HSC

Post-secondary

- a. Vocational b. Short courses

Tertiary

- a. Diploma b. Bachelor degree c. Post Graduate Diploma

- d. Masters Degree e. PhD

f. Others, please specify on the line _____

5. What is your occupational background? (Please write on the line below)

6. How would you define your religion?

Christianity Hinduism Others, please specify on the line below

Buddhism Islam _____

7. How would you define your ethnic cultural background?

Hindu Chinese Muslim Marathi

Telegu Tamil Mauritian-Creole (general population)

Others, please specify on the line _____

8. Spirituality is defined as the “ultimate belonging or connection to the transcendental grounds of being” (Vaughan 2003, p. 16).

How would you define your level of spirituality on a scale of 1 to 5? (1 is not at all and 5 is very spiritual)

Not at all Slightly Moderately Substantially Very Spiritual

1 2 3 4 5

9. Religion is “an adherence to the beliefs and practices of an organised church or institution” (Shafranske & Malony 1990, as cited by Chae et al. 2004, p. 17)

How would you define your degree of belongingness to your religion on a scale of 1 to 5? (1 is not at all and 5 is very spiritual)

Not at all Slightly Moderately Substantially Very Spiritual

1 2 3 4 5

10. Are you affiliated to any religious/spiritual group?

Yes No

If yes, please specify on this line _____

Thank you for participating! ☺

4. THE MULTICULTURAL SPIRITUAL INTELLIGENCE SCALE II (MSIS-2)

Instructions

Read each statement clearly and respond by drawing a circle around your answer to the right of the statement. You can choose one of the five possible responses that best reflects you rather than what you think your experience should be. Your answers will remain confidential. Please answer all questions and do not write your name on the pages.

0= Not at all true of me

1= Slightly true of me

2= Moderately true of me

3= Very true of me

4= Completely true of me

Example:

2. I get embarrassed very easily

0 1 2 3 4

The statement indicates that it is "Completely true of me"

S/N	Items	Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
1	I am at ease with silence	0	1	2	3	4
2	I can face uncomfortable truths about myself.	0	1	2	3	4
3	I am aware of my weaknesses	0	1	2	3	4
4	I draw on my strength to help others	0	1	2	3	4
5	Inner quietness is important for me	0	1	2	3	4

		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
6	I take time to play with young children	0	1	2	3	4
7	I am able to see things from the other person's perspectives	0	1	2	3	4
8	I am highly aware of a profound connection between me and other people	0	1	2	3	4
9	I have experiences of knowing the unspoken thoughts of others	0	1	2	3	4
10	I experienced transcendental oneness with all living things (Transcendental- to go beyond the material or physical)	0	1	2	3	4
11	I am able to manifest the Higher Self in my physical body	0	1	2	3	4
12	Objects that remind of the spiritual help me feel centred	0	1	2	3	4
13	Ceremonies and rituals are part of my spiritual practice when something important happens to me	0	1	2	3	4
14	Prayer helps me cope with personal difficulties	0	1	2	3	4
15	I usually empathise with others (Emphasise-feel compassion)	0	1	2	3	4
16	I have an overwhelming experience of nurturing love	0	1	2	3	4
17	I am able to feel the joy of others	0	1	2	3	4

		Not at all true of me	Slightly true of me	Moderately true of me	Very true of me	Completely true of me
18	I am open to the suggestion of others	0	1	2	3	4
19	I recognise that I have limitations	0	1	2	3	4
20	My ability to connect with others help me to be more effective	0	1	2	3	4
21	I tend to learn from my mistakes	0	1	2	3	4
22	Relying on religious or spiritual leaders to overcome adverse situations is important for me	0	1	2	3	4
23	My ability to bounce back is strengthened by my spiritual practices	0	1	2	3	4
24	I am able to find every opportunities as a blessing	0	1	2	3	4
25	I feel a sense of vocation to help others	0	1	2	3	4
26	I have spent time reflecting on how I could contribute to my community in a meaningful way	0	1	2	3	4
27	Finding meaning in situations helps me to cope with it.	0	1	2	3	4
28	Looking for meanings in times of conflict help me to calm down	0	1	2	3	4
29	I am inspired by great leader(s)	0	1	2	3	4

Demographic information

Please tick (✓) as appropriate. Remember not to write your name anywhere on the paper.

1. Are you :

Male

Female

?

2. How old are you? (Please write on the line below)

3. How would you define your relationship status?

Single

Committed

Married

Divorced

Separated

others, please specify on the line below

4. What is your level of education?

Primary

a. Below CPE b. CPE

Secondary

b. Below SC b. SC c. HSC

Post-secondary

b. Vocational b. Short courses

Tertiary

b. Diploma b. Bachelor degree c. Post Graduate Diploma

d. Masters Degree e. PhD

5. What is your occupational background? (Please write on the line below)

6. How would you define your religion?

Christianity	<input type="checkbox"/>	Hinduism	<input type="checkbox"/>	Others, please specify on the line below
Buddhism	<input type="checkbox"/>	Islam	<input type="checkbox"/>	_____

7. How would you define your ethnic cultural background?

Hindu-Mauritian	<input type="checkbox"/>	Sino-Mauritian	<input type="checkbox"/>	Muslim-Mauritian	<input type="checkbox"/>
Franco-Mauritian	<input type="checkbox"/>	Mauritian-Creole (general population)			<input type="checkbox"/>
None	<input type="checkbox"/>				

Thank you for participating! ☺