Investigating Effective Social Marketing Campaigns: The Direct and Indirect Impacts of Fear, Challenge, and Fear Mixed with Challenge Appeals on Help-Seeking Intentions

by

Svetlana de Vos

Major Thesis submitted to the Business School, The University of Adelaide
As part of the requirements for the degree of DOCTOR OF PHILOSOPHY
Date of submission: August 2015
Statement of Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying, subject to the provisions of the Copyright Act 1968.

I also give permission for the digital version of my thesis to be made available on the web, via the University's digital research repository, the Library Search and also through web search engines, unless permission has been granted by the University to restrict access for a period of time.

____________________

de Vos Svetlana

August 25, 2015
Abstract

The primary aim of the current study is to empirically test a novel conceptual framework which united the Cognitive Phenomenological Theory of Emotions (Lazarus, Kanner and Folkman, 1980), the Revised Protection Motivation Model (Arthur and Quester, 2004), and the Heuristic Systematic Model (Eagly and Chaiken, 1993) to investigate the impact of various emotions on help-seeking intentions (BI). In particular, this research was undertaken to investigate the persuasive power of emotional advertising eliciting fear, challenge and fear mixed with challenge in consumers to induce help-seeking behavioural intentions in social marketing context. The study seeks to evaluate the direct and indirect impact of fear, challenge and fear mixed with challenge on behavioural intentions via systematic mode and depth of information processing (SMIP/DP) and attitudes towards the advertisement (AT). The study also strive to determine whether respective influence of fear mixed with challenge emotional advertising serves as a conditioning stimulus to enhance systematic mode and depth of information processing, and indirectly, through attitudes towards the advertisement, influence the strongest intentions to seek professional help in comparison to fear or challenge appeals. Since marketing communication is progressing to an era of tailored messages targeted at individuals, this study investigates a-priori individual differences such as tolerance of ambiguity, tolerance of negative emotions, involvement with the advertisement, response efficacy and self-accountability to unveil the unique information processing patterns among consumers exposed to the emotional advertising.

The study is based on mixed research design and comprised of qualitative (thematic analysis) and quantitative stages (quasi–experiment with web-based survey). Results of the study empirically confirm that emotional blend of fear mixed with challenge indirectly via cognitive mediators of SMIP/DP and AT exerted the strongest positive impact on help-seeking intentions in comparison to fear or challenge appeals in at-risk population. Across all emotional appeals, heuristically proceeded messages resulted in non-significant impact on behavioural intentions. Additionally, the empirical results of the current research suggest that market segmentation should be effectively applied when using fear mixed with challenge in advertising, since a-priori individual characteristic such as tolerance of ambiguity weakens the relationship between attitude towards the advertisement and help-seeking behavioural intentions in at-risk population. The moderating role of involvement with the advertisement was also supported to strengthen the direct relationship between SMIP/DP and AT regardless of felt emotion/s. The research provides important information to social marketers seeking to exploit the persuasive impacts of emotional advertising on inducing help-seeking intentions in at-risk consumers.
Acknowledgements

I would like to express my deepest gratitude to people whose involvement made this research project possible. I was blessed to be guided throughout my doctorate candidature by three highly professional academics. They have been a source of knowledge, encouragement, and inspiration. I am grateful for the research insight, expertise, mentorship, and support of Professor Roberta Crouch, my primary supervisor. Professor Pascale Quester provided invaluable advice and direction during this PhD journey, sharing her wisdom and experience in the marketing and advertising fields. Doctor Jasmina Ilicic has been instrumental in obtaining the funding for this project. Her support and advice in any academic or personal matters during my PhD candidature was priceless. I appreciate the time they made for me in their very busy lives.

I also would like to express my appreciation to sponsors and practitioners who contributed extensively to this study. The qualitative data collection stage of this research would not be possible without Mrs. Rosemary Hambledon and Mrs. Corinna Freytag from RASA. Mr. Petko Petkov from “Empowered Communications” was very helpful during main data collection. I am thankful to Mr. Scott Carslake and his team from “Voice” for being creative and designing the advertising stimuli for this study. Also, I wish to thank Dana Thomsen, who provided editorial advice on my thesis. I would like to thank numerous participants who took part in this research during focus group discussions, pilot-tests, and web-based survey.

This research would not have been possible without the endless support of my family, friends, and colleagues. Most important, I am forever indebted to my husband Professor Gerrit de Vos and our son Leon, who gave me their loving support and encouragement throughout this journey, putting up with my odd working hours, and lost weekends. I could not have accomplished this research endeavour without Gerrit, who has been my greatest supporter and inspired me to broaden horizons and seek knowledge. Also, I am grateful to my mother Antonina Goptarenko and father Leonid Goptarenko, who fostered that ‘never give up’ attitude in me and always shared the faith in my abilities. To my family I dedicate this thesis.

Funding

The study was funded by the International Postgraduate Research Scholarship provided by the University of Adelaide, the Research Fund of School of Marketing & Management, and the Eco Entertainment Group LTD.
Abbreviations

AT – Attitude towards the Advertisement
AVE – Average Variance Extracted
BI – Help-Seeking Behavioural Intention
CFA - Confirmatory Factor Analysis
CH – Challenge
CPHTE - The Cognitive-Phenomenological Theory of Emotions
CR – Construct Reliability
EFA - Exploratory factor analysis
ELM - The Elaboration Likelihood Model
F – Fear
HSM - The Heuristic-Systematic Model
INV – Involvement with the Advertisement
LMS – Latent Moderated Structural Equations
LR - Log-likelihood Ratio Test
MLR - Robust Maximum Likelihood Estimator
CPGI - The Canadian Problem Gambling Index
PGI – Problem Gambling Index
PMT - The Protection Motivation Theory
PB - Perceived Help-Seeking Benefits
PSA - Public Service Announcement
PS - Perceived Susceptibility
RE – Response Efficacy
RPMM - the Revised Protection Motivation Model
SA – Self - Accountability
SEM – Structural Equation Modelling
SMIP – Systematic Mode and Depth of Information Processing
TA – Tolerance of Ambiguity
TNE – Tolerance of Negative Emotions
Table of Contents

Chapter                                      Page

Statement of Declaration................................................................. ii
Abstract ................................................................................................. iii
Acknowledgements .............................................................................. iv
Funding ................................................................................................... iv
Abbreviations ....................................................................................... v

1. Introduction

1.1. Background to the Research and Research Justification ....................... 1
1.2. Objectives and Contribution of the Research ......................................... 4
1.3. Research Stages of the Current Study ................................................... 5
1.4. Thesis Outline .................................................................................. 8
1.5 Summary ............................................................................................ 9

2. Theoretical and Empirical Findings Regarding Fear, Challenge and Fear Mixed with Challenge Appeals

2.1. Introduction ....................................................................................... 10
2.2. Emotions: Origins, Features, and Functions ........................................... 10
2.2.1 Emotions and Cognition ................................................................... 11
2.2.2 Approaches and Theoretical Traditions to Understanding Emotions and Their Development ................................................................. 12
2.2.3 Different Types of Emotions ............................................................. 13
2.3. Emotion Fear ..................................................................................... 14
2.3.1. Fear Appeals: Selected Theoretical Models with the Focus on the Revised Protection Motivation Model ....................................................... 15
2.3.2. Fear Appeals and Information Processing: Inconclusive Empirical Evidence .......... 20
2.4. Mixed Emotional Appeals: A Notion Derived From Psychology ........................................23

2.4.1. Mixed Emotional Appeals: Accumulated Empirical Evidence from the Consumer Research and Advertising Domains ................................................................. 24

2.4.2. Fear Appeals Mixed With Challenge: Limited Empirical Evidence ......................... 28

2.4.3. The Cognitive-Phenomenological Perspectives’ on Fear, Challenge and Fear Mixed with Challenge: Theory and Empirical Evidence ................................................. 30

2.4.4. Challenge and Perceived Benefits .............................................................................. 32

2.5. Self-Accountability: Empirical Evidence from Various Domains ............................... 34

2.6. Information Processing: Stages and Levels of Cognitive Effort ................................ 36


2.6.2. The HSM and Fear Appeals ...................................................................................... 39

2.6.3. The HSM and Positive Affect .................................................................................. 40

2.6.4. The HSM and Mixed Emotional Appeals ............................................................... 41

2.6.5 Involvement with the Advertisement ........................................................................ 42

2.7. Personality Factors and Information Processing of Emotional Appeals .................. 44


2.7.2. Tolerance of Ambiguity .......................................................................................... 48


3. Conceptual Framework, Hypothesis Development, and Research Design of the Study

3.1. Introduction ................................................................................................................. 54

3.2. Research Framework ................................................................................................. 54

3.2.1 Testing the Power of Emotions to Influence Help – Seeking Behavioral Intentions through Mediating Variables of Systematic Mode and Depth of Information Processing and Attitudes towards Advertisement .......................................................... 54

3.2.2. Testing the Moderating Influence of Individual Consumer Characteristics on Information Processing ........................................................................................................... 55
3.3. Development of Empirical Model and Hypothesis .................................................. 57
3.3.1. Hypothesis ........................................................................................................... 59
3.4. Research Paradigm ................................................................................................. 65
3.5. Justification for the Model ....................................................................................... 67
3.6. Adopted Measurement Instruments and Stimuli Used for the Study ...................... 68
3.6.1. Fear Stimuli ......................................................................................................... 68
3.6.2. Challenge Stimuli ................................................................................................ 69
3.6.3. Fear Mixed with Challenge Stimuli ...................................................................... 69
3.7. Research Context .................................................................................................... 70
3.8. Summary ................................................................................................................. 71
4. Qualitative Insights from Focus Group Discussions

4.1 Introduction................................................................................................................ 72
4.2 Focus Group Objectives ............................................................................................ 72
4.3. Sampling Procedure ............................................................................................... 73
4.4. Data Collection and Advertising Stimuli Description .............................................. 74
4.5 Data Analysis ............................................................................................................ 76
4.6. Findings .................................................................................................................. 77
4.6.1. Responses to Fear Appeals .................................................................................. 76
4.6.2. Responses to Challenge Appeals .......................................................................... 79
4.6.3. Experiencing and Constructing Mixed Emotional Message Conditions .......... 81
4.6.3.1. Relevant Threats in the Gambling Context ....................................................... 81
4.6.3.2. Positive Expectations and Benefits from Help-Seeking in Gambling Context ..... 82
4.6.3.3. Self-Accountability and Response Efficacy ....................................................... 83
4.7. Summary of Qualitative Findings on Face Validity of Constructs Incorporated into Proposed Conceptual Model.................................................................................................................. 84
4.8. Advertising Stimuli Adjustments Based on the Focus Groups Discussions’ ..........86

4.8.1. Fear Appeals Adjustments .................................................................................86

4.8.2. Challenge Appeals Adjustments ........................................................................87

4.8.3 Fear Mixed with Challenge Appeals ....................................................................88

4.9. Summary .............................................................................................................89

5. Quantitative Pre-Tests of Advertising Stimuli and Development of Research Instruments for Data Collection

5.1. Introduction .........................................................................................................90

5.2. Pilot Test One: Advertising Stimuli Pre-Test .......................................................90

5.2.1. Sampling and Procedures ................................................................................90

5.2.2. Reliability of Likert Items Measuring Emotions ............................................92

5.2.3. Manipulation Checks .......................................................................................93

5.3. Pilot Test Two: Advertising Stimuli and Full Questionnaire Pre-test ..................95

5.3.1. Description of Research Instruments ..............................................................95

5.3.2. Sample Characteristics ....................................................................................99

5.3.3. Scales’ Reliability and Validity ........................................................................100


5.5. Manipulation Checks .........................................................................................110

5.6. Summary .............................................................................................................111

6. Methodology of the Main Study

6.1. Introduction .........................................................................................................112

6.2. Research Design and Data Collection Method ....................................................112

6.3. Sample Size Determination .................................................................................113

6.4. Sampling, Procedures, and Questionnaire Content .............................................114
6.4.1. Sample Characteristics ................................................................. 116
6.4.2. Validity and Reliability ................................................................. 117
6.4.3. Convergent and Discriminant Validity ........................................... 120
6.4.4. Assessment of Data Normality ....................................................... 121
6.4.5. Manipulation Checks ................................................................. 121
6.5. Summary .................................................................................... 124

7. Quantitative Analysis and Results

7.1. Introduction .................................................................................... 125
7.2. Statistical Techniques Selected for Data Analysis ............................. 125
7.3. Model Specification and Fit Assessment ............................................ 127
7.4. Testing of Mediation Effects ............................................................ 132
7.5. Testing of Latent Variable Interactions (LMS Models) ..................... 132

7.6. Description of the Models Derived from the Conceptual Framework: SEM and LMS Models ................................................................. 134

7.6.1. SEM Models ................................................................................. 134
7.6.2. LMS Models ................................................................................. 137

7.7. Assessing Measurement Validity ......................................................... 138

7.8. SEM Models: Investigating Direct and Indirect Impacts of Emotions via SMIP/DP and AT on Help-Seeking Behavioural Intentions .................. 140

7.8.1. SEM Model 1 .............................................................................. 140
7.8.2. SEM Model 2 .............................................................................. 142
7.8.3. SEM Model 3 .............................................................................. 143

7.9. The Kruskal Wallis Test .................................................................... 146

7.10. Testing Interactions: Latent Moderated Structural Equations (LMS Models) ......................................................... 147

7.10.1. LMS Model 1 ............................................................................. 147
7.10.2. LMS Model 2 ............................................................................. 150
8. Discussion and Conclusions

8.1. Introduction .................................................................................................................. 163

8.2. Contributions ............................................................................................................... 163

8.2.1. Theoretical Contributions ...................................................................................... 163

8.2.2. Methodological Contributions .............................................................................. 166

8.2.3. Empirical Contributions ......................................................................................... 168

8.2.3.1. The Effectiveness of Mild Fear Appeals to Enhance Help-seeking Intentions in the Gambling Context ................................................................. 168

8.2.3.2. Positive Affective State of Challenge and Its Impact on Systematic Mode and Depths of Information Processing and Help-seeking Intentions .................. 169

8.2.3.3. Fear Mixed with Challenge as a Conditioning Stimulus for Systematic Mode and Depth of Information Processing .......................................................... 170

8.2.3.4. The Moderating Impact of Tolerance of Ambiguity and Tolerance of Negative Emotions on the Direct Relationships between Attitudes towards the Advertisement and Help-seeking Behavioural Intentions ......................... 171

8.2.3.5. The Moderating Impact of Involvement with the Advertisement, Response Efficacy and Self-accountability on the Direct Relationships between Systematic Mode and Depth of Information Processing and Attitudes towards the Advertisement ......................................................... 172

8.3. Practical Contributions and Implications for Social Marketing Practitioners in the Context of Gambling .................................................................................. 174

8.4. Limitations of the Study .............................................................................................. 177

8.4.1. Research Design and Validity Issues ...................................................................... 177

8.4.2. Measures .................................................................................................................. 179

8.5. Additional Directions for Future Research ................................................................. 181

8.5.1. Critical Population Segments in Social Marketing Advertising in Gambling Context .................................................................................................................. 181

8.5.2. A-priori Individual Characteristics and Message Information Processing ............ 182
Appendices

Appendix 4.1A: Human Ethics Research Committee Approval for Exploratory and Confirmatory Studies ................................................................. 187
Appendix 4.1A: Human Ethics Research Committee Approval for Exploratory and Confirmatory Studies (Continued) ............................................................. 188
Appendix 4.1B: Human Ethics Research Committee Approval Adjusted for Confirmatory Study ............................................................................................. 189
Appendix 4.1.C: Human Ethics Approval for Focus Group Discussions with at-risk Gamblers .............................................................................................. 190
Appendix 4.2.A: Consent Form for Focus Group Participants ......................................................... 191
Appendix 4.2.B: Information Sheet for Focus Group Participants ................................................... 192
Appendix 4.2.C: Independent Complaints Form for Focus Group Participants ......................... 193
Appendix 4.3: Qualitative Discussion Guide (Focus Groups) ............................................................. 194
Appendix 4.3: Qualitative Discussion Guide (Continued) .............................................................. 195
Appendix 4.3: Qualitative Discussion Guide (Continued) .............................................................. 196
Appendix 4.4.A: Negative Emotional Appeals in Texting and Driving and Smoking Contexts (Focus Groups) ................................................................. 197
Appendix 4.4.A: Negative Emotional Appeals in Texting and Driving and Smoking Contexts (Continued) ........................................................................... 198
Appendix 4.4.A: Negative Emotional Appeals in Obesity Context (Continued) ....................... 199
Appendix 4.4.B: Positive Emotional Appeals in Smoking Context (Focus Groups) ................. 200
Appendix 4.4.B: Positive Emotional Appeals in Smoking and Obesity Context (Continued) ............................................................... 201
Appendix 4.4.C: Examples of Advertising Stimuli Designed for the Gambling Context (Focus Groups) .................................................................................. 202
Appendix 4.4.C: Examples of Advertising Stimuli Designed for the Gambling Context (Continued) .................................................................................. 203
Appendix 4.4.C: Examples of Advertising Stimuli Designed for the Gambling Context (Continued) .................................................................................. 204
Appendix 4.4.C: Examples of Advertising Stimuli Designed for the Gambling Context (Continued) .................................................................................. 205
Appendix 4.4.C: Examples of Advertising Stimuli Designed for the Gambling Context (Continued) ................................................................. 206
Appendix 4.5.A: Fear Appeal Designed for the Current Study (Male Respondents) ... 207
Appendix 4.5.B: Fear Appeal Designed for the Current Study (Female Respondents) ... 208
Appendix 4.5.C: Challenge Appeal Designed for the Current Study .......................... 209
Appendix 4.5.D: Fear Mixed with Challenge Appeal Designed for the Current Study (Male Respondents) ............................................. 210
Appendix 4.5.E: Fear Mixed with Challenge Appeal Designed for the Study (Female Respondents) .................................................................................................................. 211
Appendix 5.1: Pilot Test One – An Example of Web – based Qualtrics Survey Layout ...... 212
Appendix 5.2.A: Pilot Test One - Descriptive Statistics for Emotional Indicator Items ...... 220
Appendix 5.2.B: Tests of Normality for All Emotional Items ........................................ 220
Appendices 5.3: Pilot Test One - Exploratory Factor Analysis ..................................... 221
Appendix 5.4.A: Pilot Test One - Wilcoxon Signed-Rank Test .................................... 222
Appendix 5.4.B: Pilot Test One - Wilcoxon Signed-Rank Test with Gender Split ............ 222
Appendix 5.5.A: Pilot-Test One- Frequencies and Histograms of Fear and Challenge indices, Split by Appeal Type (Fear Mixed with Challenge) ............................... 223
Appendix 5.5.B: Pilot-Test One - Frequencies and Histograms of Fear and Challenge Indices, Split by Appeal Type (Fear Appeal) ................................................................. 224
Appendix 5.5.C: Pilot-Test One - Frequencies and Histograms of Fear and Challenge Indices, Split by Appeal Type (Challenge Appeal) .................................................... 225
Appendix 5.6: Pilot Test Two - Web – based Qualtrics Survey Layout ................................ 226
Appendix 5.7.A: Respondents’ Demographic and Socio-economic Characteristics ...... 239
Appendix 5.8: Pilot Test Two - the Shapiro Wilk and Kolmogorov-Smirnov Tests of Normality .................................................................................................................. 240
Appendix 5.8: Pilot Test Two - the Shapiro Wilk and Kolmogorov-Smirnov Tests of Normality (Continued) ............................................................................................. 241
Appendix 5.9: Pilot Test Two - Exploratory Factor Analysis ........................................ 242
Appendix 5.10: Pilot Test Two - Wilcoxon Signed-Rank Test ........................................ 243
Appendix 5.11.A: Pilot Test Two - Frequencies and Histograms of Fear and Challenge Indices Split by Appeal Type (Fear Appeal) ................................................................. 244
Appendix 5.11.B: Pilot Test Two - Frequencies and Histograms of Fear and Challenge Indices Split by Appeal Type (Fear Mixed with Challenge Appeal) .............................. 245
Appendix 5.11.C: Pilot-Test Two-Frequencies and Histograms of Fear and Challenge Indices Split by Appeal Type (Challenge Appeal) ................................................................. 246


Appendix 6.2: Main Data Collection - Web – based Qualtrics Survey Layout .................. 248

Appendix 6.3: Respondents’ Demographic and Socio-economic Characteristics ......... 259

Appendix 6.4: Main Data Collection - Exploratory Factor Analysis ......................... 260

Appendix 6.5.A: Detailed Descriptive Statistics of the Variables ................................ 261

Appendix 6.5.B: Assessment of Data Normality .................................................... 262

Appendix 6.6: Main Data Collection - Wilcoxon Signed-Rank Test ......................... 263

Appendix 6.7: Ambivalence Index - Results of One-way Between Groups ANOVA .... 264

Appendix 6.8.A: Main Data Collection - Frequencies and Histograms of Fear and Challenge Indices Split by Appeal Type (Fear Appeal) ........................................ 265

Appendix 6.8.B: Main Data Collection - Frequencies and Histograms of Fear and Challenge Indices Split by Appeal Type (Fear Mixed with Challenge Appeal) .......... 266

Appendix 6.8.C: Main Data Collection - Frequencies and Histograms of Fear and Challenge Indices Split by Appeal Type (Challenge Appeal) .............................. 267

Appendix 7.1.A: Confirmatory Factor Analysis: Convergent Validity Issues .......... 268

Appendix 7.1.B: Confirmatory Factor Analysis - Convergent Validity Issues .......... 268

Appendix 7.1.C: Confirmatory Factor Analysis – Convergent Validity Issues .......... 268

Appendix 7.2: Multivariate Normality Test ............................................................ 269

Appendix 7.3: Standardised Factor Loadings, Average Variance Extracted (AVE), Reliability Estimates (CR) of Latent Constructs in SEM and LMS Models ............... 270

Appendix 7.4.A: Discriminant Validity of Latent Constructs in SEM Model 1 ........ 273

Appendix 7.4 B: Discriminant Validity of Latent Constructs in SEM Model 2 ........ 273

Appendix 7.4 C: Discriminant Validity of Latent Constructs in SEM Model 3 ........ 273

Appendix 7.4 D: Discriminant Validity of Latent Constructs in LMS Model 1 ........ 274

Appendix 7.4 E: Discriminant Validity of Latent Constructs in LMS Model 2 ........ 274

Appendix 7.4 F: Discriminant Validity of Latent Constructs in LMS Model 3 ........ 274

Appendix 7.5: Measurement and Structural Portions of SEM Model 1 ................. 275

Appendix 7.6: Measurement and Structural Portions of SEM Model 2 ................. 276

Appendix 7.7: Measurement and Structural Portions of SEM Model 3 ................. 277

Appendix 7.7.A: Estimated Correlation Matrix for the Latent Variables in SEM Model 3 .................................................................................................................. 277
Appendix 7.8: Invariance Testing of Configural, Metric and Scalar Measurement Models .........................................................................................................................278

Appendix 7.9: Comparing Indirect Impact of Fear Mixed with Challenge, Fear and Challenge Appeals on BI: Measurement and Structural Portions ..............................................279

Appendix 7.10.A: Wald Test Results (Fear Mixed with Challenge vs Fear) .................................................................................................................................281

Appendix 7.10.B: Wald Test Results (Fear mixed with Challenge vs Challenge) .........................................................................................................................282

Appendix 7.10.C: Wald Test Results (Challenge vs Fear) .........................................................................................................................................................283

Appendix 7.11.A: Results of Kruskal Wallis Test .................................................................................................................................................................284

Appendix 7.11.B: Results of Kruskal Wallis Test with PGI Split .........................................................................................................................................285

Appendix 7.12.A: Measurement and Structural Portions of LMS Model 1 without TA x AT Interaction ........................................................................................................286

Appendix 7.12.B: Measurement and Structural Portions of LMS Model 1 with TA x AT Interaction ........................................................................................................287

Appendix 7.13.A: Measurement and Structural Portions of LMS Model 2 without TNE x SMIP/DP Interaction ................................................................................................288

Appendix 7.13.B: Measurement and Structural Portions of LMS Model 2 with TNE x SMIP/DP Interaction ................................................................................................289


Appendix 7.15.A: Measurement and Structural Portions of LMS Model 3 without RE x SMIP/DP Interaction ................................................................................................292

Appendix 7.15.B: Measurement and Structural Portions of LMS Model 3 with a Single RE x SMIP/DP Interaction ................................................................................................293

Appendix 7.16.A: Measurement and Structural Portions of LMS Model 3 without INV x SMIP/DP Interaction ................................................................................................294

Appendix 7.16.B: Measurement and Structural Portions of LMS Model 3 with a Single INV x SMIP/DP Interaction ................................................................................................295

Appendix 7.17.A: Measurement and Structural Portions of LMS Model 3 without SA x SMIP/DP, RE x SMIP/DP, and INV x SMIP/DP Simultaneous Interactions ................................................................................................296

Appendix 7.17.B: Measurement and Structural Portions of LMS Model 3 with Simultaneous SA x SMIP/DP, RE x SMIP/DP, INV x SMIP/DP Interactions ................................................................................................297
Appendix 7.17.C: Plot of INV x SMIP/DP Interaction and Its Impact on SMIP/DP→AT Relationship

References

List of Tables

Table 2.1: Approaches and Theoretical Traditions to Understanding Emotions

Table 2.2: Summary of Selected Fear Appeals Theoretical Models

Table 3.1: Summary of Hypostatised Relationships

Table 4.1: Focus Groups Sample Composition

Table 5.1: EFA for Fear and Challenge Items

Table 5.2: Cronbach Alpha for Fear and Challenge Indices

Table 5.3: Sampling Characteristics: Types and Frequencies of Gambling Activities

Table 5.4: EFA for F, Ch, PS, PB, BI, RE, SMIP, SA, AT, INV, TNE, and TA Items

Table 5.5: Cronbach Alpha for Likert Items

Table 5.6: Multivariate Normality Test

Table 5.7: Calculations of Scaled Difference in $\chi^2$ Test for Nested Comparison Using Robust Estimator (MLR)

Table 5.8: (Un)Standardised Factor Loadings, Average Variance Extracted (AVE) and Reliability Estimates (CR) of F, Ch, PB and PS Variables

Table 5.9: Discriminant Validity of the F, Ch, PB and PS Latent Variables

Table 5.10: Measurement and Structural Portions of the Model

Table 6.1: Gambling Status and Gambling Activities of the Respondents

Table 6.2: EFA for Items Designated for SEM

Table 6.3: Cronbach Alpha Coefficients for Likert Items: TNE, CH, F, BI, RE, SMIP, AT, INV, SA

Table 6.4: Factor Correlation Matrix

Table 7.1: Confidence Intervals of Standardised Total, Specific Indirect and Direct Effects of Fear Mixed with Challenge on BI
Table 7.2: Confidence Intervals of Standardised Total, Specific Indirect and Direct Effects of Fear on BI ................................................................. 143

Table 7.3: Confidence Intervals of Standardised Total, Specific Indirect and Direct Effects of Fear on BI ................................................................. 145

Table 7.4: Configural, Metric and Scalar Measurement Models Comparisons .......... 146

Table 7.5: Summary of Confirmed and Disconfirmed Hypothesis Based on Empirical Results of the Current Study ................................................................. 162

List of Figures

Figure 1.1: Research Stages of the Current Study ......................................................... 6

Figure 2.1: Revised Protection Motivation Model ............................................................. 18

Figure 2.2: Information Processing Model ......................................................................... 36

Figure 2.3: Global Experience Distress(In)Tolerance ......................................................... 46

Figure 2.4: Conceptual Framework .................................................................................. 53

Figure 3.1: Conceptual Framework with Specified Hypothesis ......................................... 59

Figure 3.2: Research Design of This Study ...................................................................... 65

Figure 5.1: Perceived Susceptibility and Perceived Help-Seeking Benefits as Antecedents of Fear and Challenge in Advertising Stimuli Designed for the Study ....... 104

Figure 7.1: SEM Model 1 Estimating Fear mixed with Challenge Appeals ..................... 134

Figure 7.2: SEM Model 2 Estimating Fear Appeals ........................................................... 135

Figure 7.3: SEM Model 3 Estimating Challenge Appeals .................................................. 135

Figure 7.4: LMS Model 1 Estimating TA x AT Interaction ................................................. 137

Figure 7.5: LMS Model 2 Estimating TNE x SMIP/DP Interaction ................................. 138

Figure 7.6: LMS Model 3 Estimating Concurrent SA x SMIP/DP, RE x SMIP/DP, INV x SMIP/DP Interactions ................................................................. 138

Figure 7.7: Hypothesised SEM Model 1 ......................................................................... 140

Figure 7.8: Hypothesised SEM Model 2 ......................................................................... 143

Figure 7.9: Hypothesised SEM Model 3 ......................................................................... 144
Figure 7.10: LMS Model 1 with TA x AT Interaction .................................................... 149

Figure 7.11: Plot of TA x AT Interaction and Its Impact on AT → BI Relationship...... 149

Figure 7.12: LMS Model 2 with TNE x SMIP/DP Interaction ................................. 150

Figure 7.13: LMS Model 3 with Single SA x SMIP/DP ............................................. 152

Figure 7.14: Plot of SA x SMIP/DP Interaction and Its Impact on SMIP/DP → AT Relationship .......................................................... 153

Figure 7.15: LMS Model 3 with Single RE x SMIP/DP Interaction......................... 154

Figure 7.16: Plot of RE x SMIP/DP Interaction and Its Impact on SMIP/DP → AT Relationship .......................................................... 154

Figure 7.17: LMS Models 3 with a Single INV x SMIP/DP Interaction ................. 156

Figure 7.18: Plot of INV x SMIP/DP Interaction and Its Impact on SMIP/DP → AT Relationship .......................................................... 156

Figure 7.19: LMS Model 3 with Simultaneous SA x SMIP/DP, RE x SMIP/DP, and INV x SMIP/DP Interactions .................................................. 158