Integrating the green consumption dimension:
Consumer Styles Inventory scale development and validation

Fred Angels Amulike Musika

Thesis submitted in fulfilment of the requirements for the
Degree of Doctor of Philosophy

School of Communication Marketing and Journalism

Massey University Business School
May 2018
ABSTRACT

Organisations are increasingly seeking to understand green consumer decision-making and cater for these consumers accordingly. Despite significant practitioner interest, scholarly inquiry into the Green Consumption Styles (i.e., GCS) concept has transpired only relatively recently, resulting in a limited understanding of the concept, and its measurement to-date.

Employing an integrative multimethod approach, this thesis addresses this literature gap by developing a measurement instrument for the ‘green consumption scale’ (i.e., GCS) in the context of Tanzania and New Zealand.

This thesis is presented in three parts. Part I reports on a literature review and preliminary qualitative research (see Chapters 1-2) conducted to explore/define GCS, and develop an initial GCS item pool. GCS is looked at as “the ways consumers steer their green buying-decision process regarding information searching, evaluation, selection, and purchases.”

Part II (Chapter 3-4) provides a theoretical rationale for adopting scale development research in this thesis as well as an overview of the proposed mixed methods research methodology (Chapter 3). It further provides specifications for data-analytical techniques and procedures adopted in this research. Key qualitative research findings were documented in section 3.6, which included the development of the proposed GCS definition, antecedents, and consequences.

Chapter 4 dealt with the quantitative analysis of the thesis. A series of EFA and CFA procedures were consecutively undertaken to further assess the GCS scale in study 1 and 2. To explore the scale’s dimensionality, Study 1 an exploratory factor analysis (EFA) results revealed and substantiated a nine-factor, 31-item GCS structure (i.e., green consumption, brand conscious, Recreational, Perfectionistic, Impulsiveness, confused by over-choice, Habitual/brand-loyal, Novelty-fashion-conscious, and Price Conscious) (Table 4.12) using a sample of n=448. Finally, the results suggest a combined (original CSI scale by Sproles and Kendall (1986) plus green scale 9-factor solution with 31-items (see Chapter 4). Using the reduced, 31- item scale and a new sample of n=225 Tanzania and New Zealand-based consumers, confirmatory factor analysis (CFA) is undertaken in study 2 to confirm the nine-factor, 31-item GCS scale (section 4.3). This analysis also facilitated the assessments for the model construct validity (Chapter 4). CFA was also conducted, which served to confirm the nine-factor, 31-item GCS scale. Further, regression analyses have been done to provide predictive validity of the newly developed GCS measure was undertaken. The findings indicated the attainment of high GCS items scores across the two samples; thus, providing evidence for the robustness of the GCS scale across samples and cultures. Furthermore, adequate Cronbach’s alphas were reported for each of the proposed GCS factors, in addition to the overall GCS scale.

Part III provides the contributions, limitations and future research directions arising from this thesis (Chapter 5). The chapter commenced with an overview of key contributions of this research, followed by an overview of the key research limitations and directions for future research.

Keywords: Green consumption scale, structural equation modelling, scale development.
Acknowledgments

First and foremost, I thank my supervisors Professor Valentyna Melnyk, Dr. Andrew Murphy, and Dr. Alexandra Hess for their support on the journey that this project has represented over the last few years. Your contribution is beyond the words of mouth can comprehend. I am very thankful for invaluable support you rendered me. I really Appreciate. Indeed, I am grateful for the invaluable lessons and opportunities, and hope to make you proud. I am also thankful for the fun, intellectual stimulation and ongoing encouragement, which have helped me see this project through to completion.

Thanks also to Florida and Frida for the good times, and for helping me keep a good balance during my candidacy; for providing invaluable friendship and support over the years, each in your own unique way. I hope our friendship will last for many years to come.

Thank you to my family for being part of my journey.
# Table of Contents

ABSTRACT ........................................................................................................................................... ii

Acknowledgments ............................................................................................................................. iii

List of Tables ........................................................................................................................................ vii

List of Figures ....................................................................................................................................... vi

List of Appendices .............................................................................................................................. xi

PART I: PREFACE, LITERATURE REVIEW & CONCEPTUAL DEVELOPMENT ............................. 1

CHAPTER 1  INTRODUCTION ............................................................................................................. 2

1.1 Background of the Study .............................................................................................................. 2

1.2 Consumer Decision-Making Styles (CDMS) Concept ............................................................... 2

1.3 Culture and CSI .............................................................................................................................. 4

1.4 Green Consumption ....................................................................................................................... 4

1.5 Statement of the Problem and Research Questions .................................................................... 5

1.6 Objectives of the Study .................................................................................................................. 5

1.7 Significance of the Study .............................................................................................................. 6

1.8 Theoretical Framework .................................................................................................................. 6

1.9 Research design ............................................................................................................................. 7

1.10 Thesis Structure ........................................................................................................................... 7

CHAPTER 2  LITERATURE REVIEW ............................................................................................... 8

2.1 Introduction and overview ............................................................................................................. 8

2.2 Consumer Decision-Making Styles (CDMS): Definition and an overview ............................... 8

2.3 CSI validity, reliability, generalizability, and applicability .......................................................... 9

2.4 CSI profiles and dimensions ......................................................................................................... 17

   2.4.1 Perfectionism .......................................................................................................................... 17

   2.4.2 Brand consciousness ............................................................................................................. 20

   2.4.3 Novelty-fashion consciousness ............................................................................................ 21

   2.4.4 Recreational, hedonistic-shopping consciousness ................................................................. 23

   2.4.5 Price and value-for-money consciousness ............................................................................. 26

   2.4.6 Impulsiveness ....................................................................................................................... 28

   2.4.7 Confusion from over-choice .................................................................................................. 30
List of Tables

Table 1.1: Consumer Decision-Making Styles: dimension description ......................................................... 3
Table 2.1 CSI validity, reliability, generalizability and applicability results (Cronbach Alpha) ................. 10
Table 2.2a Sample, instrument, analysis, and Cronbach Alpha ........................................................................ 12
Table 2.2b: Researchers concluding remarks on the CSI’s validity, reliability, applicability, and generalisability ................................................................................................................................ 14
Table 2.3 Studies that do not support Perfectionism ..................................................................................... 18
Table 2.4 The Wickliffe study summary ........................................................................................................ 19
Table 2.5 Studies that do not support Novelty-Fashion consciousness ....................................................... 23
Table 2.6 Studies that do not support the recreational, hedonistic shopping consciousness ...................... 25
Table 2.7: Studies that do not support the price-value consciousness factor ............................................. 28
Table 2.8: Studies that do not support impulsiveness factor ......................................................................... 30
Table 2.9 Studies that do not support confusion from overchoice ............................................................... 34
Table 2.10. Studies that do not support the habitual, brand loyal factor ...................................................... 36
Table 2.11 The CSI trend in the US .............................................................................................................. 37
Table 2.12: Culture and sample structure influence .................................................................................... 38
Table 2.13 Studies with Multi-cultural samples ............................................................................................ 40
Table 2.14 The CSI trend in China .............................................................................................................. 41
Table 2.15 The German CSI ........................................................................................................................ 43
Table 2.16 The CSI in the United Kingdom ................................................................................................. 44
Table 2.17 CSI trends among student consumers ......................................................................................... 47
Table 2.18 CSI trends in general public samples .......................................................................................... 50
Table 2.19: CSI Trends Influencers ............................................................................................................. 52
Table: 2.20 Time-energy conserving ............................................................................................................ 54
Table 2.21 Time conscious .......................................................................................................................... 55
Table 2.22 Time restricted ........................................................................................................................... 55
List of Figures

Figure 1.1: Consumer Decision-Making Styles........................................................................... 3
Figure 1.2 Green - Consumption CSI Framework ..................................................................... 6
Figure: 3.1 Churchill’s Procedure for Scale Development ......................................................... 73
Figure 4.1: Age distribution........................................................................................................ 84
Figure 4.2. Scree Plot - New Zealand – 9 items ...................................................................... 88
Figure 4.3. Scree Plot – New Zealand – 9 items ....................................................................... 89
Figure 4.4. Scree Plot – 33 items ............................................................................................. 92
Figure 4.6: Structural Model ..................................................................................................... 102
Figure 4.7. Standardised regression weights ........................................................................... 104
List of Appendices

Appendix 1. Summary table for this study’s CSI literature ................................................................. 138
Appendix 3: Tanzania & Tanzania Survey - II .................................................................................... 144
Appendix 3: Regression Summary ........................................................................................................ 150
Appendix 4: ANOVA ............................................................................................................................ 151
Appendix 5: Independent Variables that have impact on two or more variables .............................. 152
Appendix 6: Coefficients ..................................................................................................................... 153
Appendix 7: Independent Variables that affected only one DV ...................................................... 154
Appendix 8: GREEN Independent Variables .................................................................................... 155