A STUDY OF COMMUNITY RESPONSES TO CREATIVE OBJECTS
WITH PARTICULAR REFERENCE TO THE DESIGN OF PUBLIC
SEATING IN SELECTED UNIVERSITY ENVIRONMENTS

MOHAMMAD AZROLL BIN AHMAD
B.A. (Industrial Design) Universiti Teknologi MARA (UiTM), MALAYSIA
MA Furniture Design and Technology, Buckinghamshire Chilterns University
College (BCUC), U.K

A THESIS SUBMITTED TO THE UNIVERSITY OF CANBERRA
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN
ENVIRONMENTAL DESIGN

FACULTY OF ARTS AND DESIGN
UNIVERSITY OF CANBERRA
AUSTRALIA
DECEMBER 2013
A STUDY OF COMMUNITY RESPONSES TO CREATIVE OBJECTS WITH PARTICULAR REFERENCE TO THE DESIGN OF PUBLIC SEATING IN SELECTED UNIVERSITY ENVIRONMENTS

ABSTRACT

This thesis reports on a theoretical and empirical investigation concerning the design, fabrication and use of creative objects as seating furniture for selected public spaces in two, cross-cultural university contexts. The main theoretical work, in terms of developing design concepts for three creative seating objects, has been undertaken at the University of Canberra (UC), Australia, while the construction of the respective object prototypes and the empirical investigations have been carried out on the UC campus as well as on the campus of the Universiti of Teknologi, MARA, Shah Alam, Malaysia (UiTM). This research has been undertaken in three main parts: Firstly, a critical review of the literature has identified the socially important features of public spaces and the notable design characteristics and role of seating furniture in such spaces. While a number of useful studies have been published about seating furniture in public spaces, no empirical investigations were detected in the literature with respect to how people may respond to the use of creative seating objects in these spaces, especially in different cultural contexts. Hence, further research has been found necessary. Secondly, as informed by the literature review, three creative objects were designed, constructed, peer reviewed and placed in the respective university campus spaces in order to serve as vehicles to test the responses of users, mindful of a participatory design approach in the respective contexts. A survey questionnaire and open-ended interviews were then conducted with participants on the UC and UiTM campuses, respectively, in keeping with a mixed-methods research plan and with due regard to temporal, geographic and environmental constraints. Thirdly, the associated participant responses found on both campuses were analyzed using SPSS quantitative analysis software—to better inform the future design and use of such creative objects as seating in such spaces. In a related partial triangulation study, a separate group of participants, based primarily on the UiTM campus, were also interviewed with a set of open-ended questions and their responses analysed by means of a thematic parsing technique.
It is found that studying the needs and reactions of these different University participants is important for gaining understanding and insights into how public spaces can be enhanced with particular respect to the use of creative seating objects. An underlying objective has been to provide furniture designers with new knowledge related to the potential use of creative seating objects. Interesting contextual data have been found and analysed which indicate that design awareness, creative knowledge and environmental/climatic aspects, as well as an appreciation of functionality and practicality, all play a part in how people respond to creative seating objects in selected cultural contexts. These finding are supported by recommendations for future research, a supporting bibliography and an extensive data base of original empirical information.
ACKNOWLEDGEMENTS

The author thanks and is very grateful to God to bless all his efforts in this study. The author wishes to dedicate this thesis to his parents and family who provided encouragement and continuous support to their son. To “Mak and in loving memory of Abah (17th October 1945 – 9th March 2011) I love you with all my heart and may ALLAH SWT grant you and bless both of you with happiness”

The author also would like to express deepest appreciation to his primary Supervisor, Emeritus Professor Dr. Elivio Bonollo, for his invaluable and inspiring guidance, encouragement and enduring patience, for his practical advice and suggestions, and for his generous contribution, encouragement and support of time during all stages of this research project.

The author is grateful to the University of Canberra and the Universiti Teknologi MARA, Malaysia for the Postgraduate Award Scholarship to undertake and complete this doctoral research and thesis. In addition, the author would like to express his gratitude to his academic advisors from the University of Canberra, Associate Professor Dr. Carlos Montana Hoyos, Dr. Stephen Trathen, Dr. Chris Klimek, Dr. Thawon Niyompanitpatana, Dr. Joelle Vandermensbrugghe, Mr Julio Romero, Mr. Bill Shelley, Mrs. Debra Hippisley and all the other academic and administrative staff members for sharing their teaching, feedback, advice and support. The author is also grateful to the staff and academic advisors and students from Universiti Teknologi MARA, Malaysia, especially to Prof. Dr. Mustaffa Halabi b. Azahari, Assoc. Prof. Anuar Hj. Sirat, Mr. Muhammad Yusof Shaharudin and Mr. Mohd Alhafiz Albalkhis, Miss Wan Norfaizah Wan Omar and staff of Industrial Design workshop for their valuable collaboration and advice in carrying out this research. Too many persons to name individually here provided useful information and insight.

Finally, a very special thank you is owed to my dear wife, Haszlin Shaharudin for her unstinting love, support, encouragement and enduring belief over many years that this task will be accomplished. “Dear, may ALLAH SWT bless you and reward for your effort and may ALLAH SWT bless out marriage”.
CONTENTS

Abstract i
Certificate of Authorship iii
Acknowledgements iv
List of Figure ix
List of Table xiii

CHAPTER 1: INTRODUCTION
  1.1 Background 1
  1.2 Context and Scope of the Research 3
  1.3 Aims and Research Questions 3
  1.4 Research Plan and Layout of the Thesis 4

CHAPTER 2: LITERATURE REVIEW AND TASK CLARIFICATION
  2.1 Preamble 7
  2.2 Creative Objects as Furniture in Public Spaces 8
    2.2.1 Creative furniture 8
    2.2.2 Public Art 10
  2.3 The Significance of Public Spaces 18
    2.3.1 General space considerations 18
    2.3.2 The role of seating in public spaces 20
    2.3.3 Characteristics of good public seating 22
  2.4 Participatory Design 23
    2.4.1 The role of designers and users 23
    2.4.2 The participatory design approach 26
  2.5: The Malaysian and Australian contexts 27
    2.5.1 Cultural and environmental factors 27
    2.5.2 Globalization of culture 29
  2.6 Summary of findings 30
CHAPTER 3: CONCEPTUAL DEVELOPMENT, RESEARCH METHODS AND EXPERIMENTAL PLAN

3.1 Preamble 33

3.2 Conceptual Design and Fabrication of Creative Objects 34
  3.2.1 Design of creative object Concept 1 36
  3.2.2 Design of creative object Concept 2 38
  3.2.3 Design of Creative object Concept 3 39

3.3: Design and Prototype Fabrication Details 40

3.4 Research Methods and Experimental Plan 40
  3.4.1 Underlying theory and methods 40
  3.4.2 Selection of locations and participants 42
    1) Selection of locations 42
    2) Selection of participants and experimental procedure 43

3.5 Questionnaire Design 43

3.6 Data Collection and Methods of Analysis 47
  3.6.1 UiTM and UC campus 47

CHAPTER 4: EXPERIMENTAL RESULTS

4.1 Preamble 52

CHAPTER 4: PART 1

4.2 Quantitative and Qualitative Data Analyses—Survey Questionnaire 52
  4.2.1 Questionnaire (Part 2): Perceptions about the surrounding Area 56
  4.2.2 Questionnaire Part 2: Brief summary of findings 63
  4.2.3 Questionnaire (Part 3): Public seating-design awareness 65
  4.2.4 Questionnaire Part 3: Brief summary of findings 70
  4.2.5 Questionnaire (Part 4): Evaluation of creative objects 71
  4.2.6 Questionnaire Part 4: Brief summary of findings 77
  4.2.7 Questionnaire (Part 5.1): Evaluation of public seating based on creative objects 77
    4.2.7.1 Questionnaire Part 5A- Evaluation of existing designs of public seating 78
CONTENTS

4.2.8  Questionnaire (Part 5.1): Evaluation of Existing Designs of Public Seating - Brief summary of findings  83

CHAPTER 4: PART 2
4.3 Quantitative and Qualitative Data Analyses
Evaluation of Prototype Designs
  4.3.1  Questionnaire (Parts 5.2, 5.3 & 5.4): Evaluation of Designs 1, 2 and 3  84
  4.3.2  Questionnaire Part 5.2, 5.3 & 5.4: Brief summary of Findings  102

CHAPTER 4: PART 3
4.4 Qualitative Data Analyses—Sections 1 and 2  105
  4.4.1  Section 1—Responses to Questionnaire Part 4  106
  4.4.2  Section 1—Responses to Questionnaire Part 5  108
    Q.5.2: Evaluation on Design 1
    Q.5.3: Evaluation on Design 2
    Q.5.4: Evaluation on Design 3
  4.4.3  Section 2 (of Chapter 4 Part 3)
    Responses to one-on-one interviews  114

CHAPTER 5: SUMMARY OF FINDINGS AND CONCLUSIONS
5.1 Preamble  119
5.2 Findings of the Literature Review and Task Clarification  119
5.3 Theoretical Development and Research Methods  121
5.4 Experiment Results  122
5.5 Review of Findings in Relation to the Original Aims  125
5.6 Recommendations for Future Research  126
A detailed Bibliography and supporting Appendices are enclosed  128
APPENDICES

Appendix 1
1-A: The writer’s motivation. 137

Appendix 2
2-A: Documentation of observations on people’s activities at University of Canberra and parks around Canberra. 148
2-B: Documentation of sculptures around Canberra. 154
2-C: Documentation of existing outdoor seating in Universiti Teknologi MARA. 158

Appendix 3
3-A: The design development and fabrication of Design 1, Design 2 and Design 3 165

Appendix 4
4-A: Cover letter to conduct research. 212
4-B: Ethic on Human Research, approval letter from University of Canberra to conduct a survey. 214
4-C: Safety guide: Work and Safety Act 2008 from University of Canberra. 215
4-D: Inform consent form. 217
4-E: Participant information form. 218
4-F: Permission to conduct a survey from Universiti Teknologi MARA (UiTM). 222
4-G: Permission to use the workshop of Industrial Design Department, Faculty of Art & Design, UiTM. 223

Appendix 5
5-A: Samples of email: Invitations to participate in design survey for UiTM and UC. 225
5-B: Sample of posters: Invitations to participate in design survey for UiTM and UC. 226
5-C: Experimental plan: Documentation of survey at UiTM and UC. 228

Appendix 6
6-A: Copy of questionnaire used in the survey for UiTM and UC. 250
6-B: Copy of one-on-one interview questions used for the survey at UiTM and UC. 266

Appendix 7
7-A: Details of general characteristic of the participants from UiTM and UC. 268
7-B: Quantitative analyses results: SPSS output for UiTMg and UCg. 269
   • Percentage frequency table.
   • Percentage frequency bar chart.
   • Descriptive statistics mean score.
   • Results from Mann-Whitney U test.
7-C: Qualitative analyses results: Thematic parsing. 314
   • Responses from open-ended questions from the questionnaire in UiTM and UC
   • Responses from open-ended interview from UiTM and UC participants.
   • List of drawing responded by participants from UiTM and UC.
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Graphic of Research Design (plan) adopted in this investigation.</td>
<td>5</td>
</tr>
<tr>
<td>1.1a</td>
<td>Phase 1 research plan graphic as extracted from Figure 1.1, Chapter 1, outlining the activities reported in this Chapter of the thesis.</td>
<td>33</td>
</tr>
<tr>
<td>1.1b</td>
<td>Extracted from the noted research plan in Figure 1.1 in Chapter 1: Graphic outlining the experimental and empirical activities carried out in Phase 2 of this research project.</td>
<td>53</td>
</tr>
<tr>
<td>2.2a</td>
<td>Street furniture in Courtney Place, Wellington, New Zealand and 2.2b (right) – ‘New wave’ by Shigeru Uchida.</td>
<td>9</td>
</tr>
<tr>
<td>2.3</td>
<td>Conventional bench located at Regatta Point, Canberra (Photo: Mohamad Azroll Ahmad – MAA, 12.04.2011).</td>
<td>10</td>
</tr>
<tr>
<td>2.4</td>
<td><em>The Table of Silence</em> (1916) by Constantine Brancusi located in the city of Targu Jiu in Romania [<a href="http://www.romaniatourism.com/targu-jiu.html">http://www.romaniatourism.com/targu-jiu.html</a>].</td>
<td>11</td>
</tr>
<tr>
<td>2.5a</td>
<td>Bronx Elementary School, Playground Communal Drum designed by Bill and Mary Buchen (Sonic Architecture, 1993), and commissioned by the New York City Art Program [<a href="http://www.nyc.gov/html/dcla/html/panyc/buchen.shtml">www.nyc.gov/html/dcla/html/panyc/buchen.shtml</a>].</td>
<td>12</td>
</tr>
<tr>
<td>2.5b</td>
<td>(left and right): Bronx Elementary School Playground designed by Bill and Mary Buchen (Sonic Architecture, 1993), and commissioned by the New York City Art Program [<a href="http://www.nyc.gov/html/dcla/html/panyc/buchen.shtml">http://www.nyc.gov/html/dcla/html/panyc/buchen.shtml</a>].</td>
<td>12</td>
</tr>
<tr>
<td>2.7a</td>
<td>(left) and 2.7b (right): Sculptures found in Canberra: (a) ‘Virginia’ (1970) by Clement Meadmore located in the Sculpture Garden of the National Gallery of Australia; and (b) ‘Fire and Water’ (2007) by Julie Watson, located near the National Library of Australia.</td>
<td>16</td>
</tr>
<tr>
<td>2.8</td>
<td>Hyperbolic Coral III by Patrick Stein located at the New Acton precinct as part of the Canberra Lab for ‘Not Apart’ Art event, during the ‘Canberra - You Are Here Festival’, March 2012.</td>
<td>16</td>
</tr>
</tbody>
</table>
Figure 2.9a (left) and 2.9b (right): Grassy sections of University of Canberra campus (Photo taken by MAA, 2.3.2011).

Figure 2.10: ‘MIM’ sculpture by Ramlan Abdullah located at the Chancellery building, UiTM Shah Alam (Photo taken by MAA, 20.12.12).

Figure 3.1: Operational model of the design process [after Cross 1984; Hales 1987; Lewis; & Bonollo 2002].

Figure 3.2a (left): Design Concept 1 shown in final prototype form (the details of the design and fabrication tasks for all concepts are given in Appendix 3), Figure 3.2b (right): Design Concept 1 developed by the writer using 3D Studio Max software.

Figure 3.3: Location map - the National Gallery of Australia Sculpture Garden, Canberra (courtesy of Google maps).

Figure 3.4a: Hill Arches by Henry Moore (1972-73), at the NGA Sculpture Garden.

Figure 3.4b: An installation of sculpture located in UiTM by Ramlan Abdullah (Photo taken by MAA, 20.12.12).

Figure 3.5a (left): Design concept 02 prototype inspired by the aesthetics and form of a Ducati motorcycle; Figure 3.5b (right): Design Concept 2 developed by the writer using 3D Studio Max software.

Figure 3.6: Ducati motorcycle; model ‘monster’ [Fallon 2011].

Figure 3.7a (left): Design concept 3 prototype as inspired by observations of people sitting on grassy sections of the University of Canberra Campus; Figure 3.7b (right): Sample sketch of Design Concept 3 developed by the writer.

Figure 3.8: Examples of grassed surrounds on the UC campus.

Figure 3.9: Concurrent mixed-methods research design [after Cresswell, 2009].

Figure: 3.10a (left) “Dataran Ilmu” the university concourse in UiTM; and Figure 3.10b (right) the university concourse in UC.

Figure 3.11: Percentage frequency bar chart of participant responses to Question 2.1; UiTM campus.

Figure 4.1: Percentage frequency bar chart of UiTMg and UCg responses to Q.2.1

Figure 4.2: Percentage frequency bar chart of UiTMg and UCg for responses to Q.2.2
Figure 4.3: Percentage frequency bar chart of UiTMg and UCg routine activities on campus space.

Figure 4.4: Summary percentage frequency bar chart of the most important elements for UiTMg and UCg

Figure 4.5: Summary percentage frequency bar chart of UiTMg and UCg for the most important factor on the survey sites.

Figure 4.6: Summary percentage frequency bar chart for the responses to Q.3.4 (SPSS software).

Figure 4.7: A set of creative objects as posed in Part 4 of the survey questionnaire.

Figure 4.8: Percentage frequency bar chart for responses to Q.4.1 (SPSS format).

Figure 4.9: Percentage frequency bar chart for Q.4.2 (SPSS format)

Figure 4.10: Percentage frequency bar chart for responses to Q.4.3 (SPSS format)

Figure 4.11: Percentage frequency bar chart for Q.4.4 (SPSS format).

Figure 4.12: Percentage frequency bar chart for responses to Q.4.5 (SPSS format).

Figure 4.13: Percentage frequency bar chart for responses to Q.4.6 (SPSS format).

Figure 4.14: A set of existing public furniture design posed in Part 5 of the survey questionnaire. Design A, ‘New wave’ by Shigeru Uchida [www.designboom.com/eng/funclub/roppongi.html], Design B, street furniture in Courtney Place, Wellington, New Zealand, Design C, S-shape bench from a company catalogue and Design D, conventional bench at Regatta Point, Canberra (Photo: Mohamad Azroll Ahmad – MAA, 12.04.2011).

Figure 4.15: Percentage frequency bar chart for responses to Q.5.1.1 (SPSS format).

Figure 4.16: Percentage frequency bar chart for responses to Q.5.1.2 (SPSS format).

Figure 4.17: Percentage frequency bar chart for responses to Q.5.1.3 (SPSS format).

Figure 4.18: Percentage frequency bar chart for responses to Q.5.1.4 (SPSS format).

Figure 4.19: Percentage frequency bar chart for responses to Q.5.1.5 (SPSS format).

Figure 4.20: Percentage frequency bar chart for responses to Q.5.1.7 (SPSS format).
Figure 4.21: Images of prototype designs developed by the writer, placed in the UiTM and UC campuses and used in the survey questionnaire.

Figure 4.22: Percentage frequency bar chart for responses to Q.5.2.1 (SPSS format).

Figure 4.23: Percentage frequency bar chart for responses to Q.5.3.1 (SPSS format).

Figure 4.24: Percentage frequency bar chart for responses to Q.5.4.1 (SPSS format).

Figure 4.25: Percentage frequency bar chart for responses to Q.5.2.2 (SPSS format).

Figure 4.26: Percentage frequency bar chart for responses to Q.5.3.2 (SPSS format).

Figure 4.27: Percentage frequency bar chart for responses to Q.5.4.2 (SPSS format).

Figure 4.28: Percentage frequency bar chart for responses to Q.5.2.3 (SPSS format).

Figure 4.29: Percentage frequency bar chart for responses to Q.5.3.3 (SPSS format).

Figure 4.30: Percentage frequency bar chart for responses to Q.5.4.3 (SPSS format).

Figure 4.31: Percentage frequency bar chart for responses to Q.5.3.4 (SPSS format).

Figure 4.32: Percentage frequency bar chart for responses to Q.5.4.4 (SPSS format).

Figure 4.33: Percentage frequency bar chart for responses to Q.5.3.5 (SPSS format).

Figure 4.34: Percentage frequency bar chart for responses to Q.5.4.5 (SPSS format).

Figure 4.35: Percentage frequency bar chart for responses to Q.5.3.6 (SPSS format).

Figure 4.36: Percentage frequency bar chart for responses to Q.5.4.6 (SPSS format).
Table 3.1: Showing numbers of UiTM and UC participants in the various groups for the survey questionnaire.

Table 3.2: Example of the output from a ranking type question, as extracted from Chapter 4 and Appendix 7-B (UiTM participants; SPSS output)

Table 3.3: Example of a Likert scale type output (using SPSS software) for UiTM and UC

Table 3.4: Example of the Mann Whitney test applied to UiTM and UC response data for question 5.2.1 (SPSS output)

Table 4.1a: Summary and order of analyzing the questions in Part 2 of the survey questionnaire

Table 4.1b: Summary and order of analyzing the questions in Part 3 of the survey questionnaire

Table 4.1c: Summary and order of analyzing the question in Part 4 of the survey questionnaire

Table 4.1d: Summary and order of analyzing the questions in Part 5 of the survey questionnaire

Table 4.2: Percentage frequency summary table of UiTMg and UCg responses to Q.2.1

Table 4.3: Percentage frequency summary table of UiTMg and UCg responses to Q.2.2

Table 4.4: Percentage frequency summary table of UiTMg and UCg daily activities on site

Table 4.5: Summary percentage frequency table of most important elements and the least important element from UiTMg and UCg

Table 4.6: Percentage frequency summary table of UiTMg and UCg for most important and least important factor on survey sites

Table 4.7: Descriptive statistics for Q.2.6 regarding the importance of public seating in the noted campuses

Table 4.8: Mann-Whitney U test results for the group responses to the individual questions listed in Table 4.7 (SPSS output format)
Table 4.9: Likert scale descriptive statistics for responses to Q.2.7 (SPSS output format)

Table 4.10: Mann-Whitney U test for the group responses to the individual questions listed in

Table 4.11: Likert scale descriptive statistics for responses to questions 3.1a to 3.1g (SPSS output format)

Table 4.12: Mann-Whitney U test for the group responses to the individual questions 3.1a and 3.1g, respectively, as listed in Table 4.11 (SPSS output format)

Table 4.13: Likert scale descriptive statistics for responses to questions 3.2a to 3.1d (SPSS output format)

Table 4.14: Mann-Whitney U test for the group responses to the individual questions 3.2a and 3.2d, respectively, as listed in Table 4.11 (SPSS output format)

Table 4.15: Likert scale descriptive statistics for responses to Q.3.3 (SPSS format)

Table 4.16: Mann-Whitney U test for the group responses to the individual questions 3.3a to 3.3e, respectively, as listed in Table 4.15 (SPSS output format)

Table 4.17: Percentage frequency table for the responses to Q.3.4 (SPSS software format)

Table 4.18: Percentage frequency table for UiTMg and UCg to Q.4.1 (SPSS output format)

Table 4.19: Percentage frequency table for Q.4.2 (SPSS format) (which of these objects is the least creative from design point of view?)

Table 4.20: Percentage frequency table for responses to Q.4.3 (SPSS format)

Table 4.21: Percentage frequency table for Q.4.4 (SPSS format)

Table 4.22: Percentage frequency table for responses to Q.4.5 (SPSS format)

Table 4.23: Percentage frequency table for responses to Q.4.6 (SPSS format)

Table 4.24: Percentage frequency table for responses to Q.5.1.1 (SPSS format)

Table 4.25: Percentage frequency table for responses to Q.5.1.2 (SPSS format)
Table 4.26: Percentage frequency table for responses to Q.5.1.3 (SPSS format)  80
Table 4.27: Percentage frequency table for responses to Q.5.1.4 (SPSS format)  81
Table 4.28: Percentage frequency table for responses to Q.5.1.5 (SPSS format)  81
Table 4.29: Percentage frequency table for responses to Q.5.1.7 (SPSS format)  82
Table 4.30: Likert scale descriptive statistics for responses to Q.5.2.1 (SPSS format)  85
Table 4.31: Mann-Whitney U test result for the group responses to Q.5.2.1 (SPSS output format)  85
Table 4.32: Likert scale descriptive statistics for responses to Q.5.3.1 (SPSS format)  86
Table 4.33: Mann-Whitney U test result for the group responses to Q.5.3.1 (SPSS output format)  86
Table 4.34: Likert scale descriptive statistics for responses to Q.5.4.1 (SPSS format)  87
Table 4.35: Mann-Whitney U test result for the group responses to Q.5.4.1 (SPSS output format)  87
Table 4.36: Likert scale descriptive statistics for responses to Q.5.2.2 (SPSS format)  88
Table 4.37: Mann-Whitney U test result for the group responses to Q.5.2.2 (SPSS output format)  89
Table 4.38: Likert scale descriptive statistics for responses to Q.5.3.2 (SPSS format)  89
Table 4.39: Mann-Whitney U test result for the group responses to Q.5.3.2 (SPSS output format)  90
Table 4.40: Likert scale descriptive statistics for responses to Q.5.4.2 (SPSS format)  90
Table 4.41: Mann-Whitney U test result for the group responses to Q.5.4.2 (SPSS output format)  90
Table 4.42: Likert scale descriptive statistics for responses to Q.5.2.3 (SPSS format)  91
Table 4.43: Mann-Whitney U test result for the group responses to Q.5.2.3 (SPSS output format)  92
Table 4.44: Likert scale descriptive statistics for responses to Q.5.3.3 (SPSS format)  92
Table 4.63: Mann-Whitney U test result for the group responses to Q.5.4.6 (SPSS output format) 101

Table 4.64: Q.4.7: Other Suggestions (by writing or verbal - about creative seating objects). 106

Table 4.65: Q.5.2.7: Can you suggest any modifications to improve the creative aspects of this design– by writing, drawing or by verbal means? 108

Table 4.66: Q.5.3.7: Can you suggest any modifications to improve the creative aspects of this design– by writing, drawing or by verbal means. 110

Table 4.67: Q.5.4.7: Can you suggest any modifications to improve the creative aspects of this design (Refer to Design 3) – by writing, drawing or by verbal means. 112

Table 4.68: Q.1: Which of these designs (Design 1, Design 2 and Design 3 of the noted prototypes) do you think is suitable in this area? Why? – 21 UiTMg 114

Table 4.69: Q.2: Are there any suggestions to improve the (selected) design? 116

Table 4.70: Q.3: Do you agree or not, to give a hundred percent job of designing public furniture to designer? (Yes/No) Why? 116

Table 4.71: Q.4: In future, would you like to participate in the design of public seating? 117

Table 4.72: Q.1: Which of these designs (Design concept 1, Design 2 and Design 3 of the noted design prototypes) do you think is suitable in this area? Why? – UCg 118