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**Women's decision styles and decision satisfaction related
to their choice of surgical treatment for early breast
cancer: Implications for a systematic decision support role
for nurses.**

by

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DEDICATION

Firstly, the research study outlined in this thesis is dedicated to my “greatest achievements”, my children *Jessica* and *Hayden*, and husband *David* for his support and patience for the study. Secondly, and certainly not least, this work is dedicated to the exceptional generosity of the women who participated in the study to help other women diagnosed with breast cancer.

“Nothing is more difficult, and therefore more precious, than being able to decide”

Napoleon Bonaparte (Maxims, 1804)

And finally to my parents *Charlie* and *Norma*, and my brother *Gregory* who have always given me unconditional love and support, I have been truly blessed.

“There are ways of thinking that we don’t know about. Nothing could be more important or precious than the knowledge, however unborn. The sense of urgency, the spiritual restlessness it engenders, cannot be appeased”

Sussan Sontag (1933) US writer and critic

ABSTRACT

Background: Over 13,000 Australian women are diagnosed with breast cancer each year. Women diagnosed with early breast cancer are generally asked by their doctor to choose between either mastectomy or breast conservation surgery with radiation therapy as initial treatment. Following a breast cancer diagnosis, women's cognitive resources and abilities are often overloaded; subsequently they often feel distressed and confused about making the treatment choice between the surgical options offered to them. Women frequently turn to nurses for decision support and information at this time. Recently developed decision aids are available but these are not evidence-based nor do they assess women's decision styles to profile individual decision support interventions. Research shows that women's process for making decisions are affected not only by their decision styles but also by their levels of distress. This initial decision-making process and treatment decision ultimately affect women's decision satisfaction and psychological outcomes. No published studies, nationally or internationally, have investigated the relationships between these variables.

Research design and methods: The purpose of this prospective, longitudinal exploratory cohort study was to investigate the relationship between Queensland women's decision styles and decision satisfaction, three to four months *after* their initial surgical treatment for early breast cancer. The non-probability sample of women (N = 132) were recruited from three locations in Queensland *after* women were diagnosed with early breast cancer and *before* treatment commenced. Data were collected using the *Michigan Assessment of Decision Styles (MADS)*, (Pierce 1995), and the *Patient Treatment Decision Satisfaction* questionnaire (*PTDS*) developed by the researcher (Budden & Pierce, 2001). The *MADS* questionnaire consists of 16 items

describing patients' pre-decision behaviours under the following four factors: *Deferring Responsibility* ($\alpha= 0.76$); *Avoidance* ($\alpha= 0.63$); *Information Seeking* ($\alpha= 0.80$); and *Deliberation* ($\alpha= 0.85$). The *Patient Treatment Decision* (TDS) questionnaire contains 16 items divided into three dimensions namely: *Decision Process Satisfaction* ($\alpha= 0.91$); *Decision Outcome Satisfaction* ($\alpha= 0.95$); and *Global Decision Satisfaction* ($\alpha= 0.95$).

Results: Data were analysed using descriptive and inferential statistics, which included stepwise multiple linear regression techniques. Specifically, a statistically significant positive relationship was identified between women's decision styles and their decision satisfaction at three to four months ($n = 104$) following their initial surgery. A positive relationship was identified between women's *Information Seeking* and *Decision Process Satisfaction*; *Deliberation* and *Decision Outcome Satisfaction*; *Deferring Responsibility* and *Decision Outcome Satisfaction*; and *Deferring Responsibility* and *Global Decision Satisfaction*. In contrast, a significant negative relationship was found between women's *Avoidance* and *Global Decision Satisfaction*. The majority of women agreed, or strongly agreed, with all the *Deliberation* items (75.1%) and *Deferring Responsibility* items (84.8%). A smaller proportion (2.3%) of women agreed, or strongly agreed, with all the *Avoidance* items and the *Information Seeking* items (37.8%). Over half (53.7%) of the women agreed, or strongly agreed, with all the *Decision Process Satisfaction* items; 67.8% of women agreed, or strongly agreed, with all the *Decision Outcome Satisfaction* items; and 55.9% agreed, or strongly agreed, with all the *Global Decision Satisfaction* items.

Conclusions: The major outcome of this research was the clear relationship between women's decision styles to their decision satisfaction at three to four months following early breast cancer treatment. Nurses caring for women with breast cancer do not currently have any evidence-based assessment tools to guide decision support interventions based on women's decision styles. The *MADS* instrument is an efficient and feasible assessment instrument that can be used by nurses to profile women's decision styles to direct evidence-based decision support interventions. Thus, the delivery of individual decision support interventions by nurses using the *MADS* instrument can increase women's post-treatment decision satisfaction following early breast cancer treatment.

Clinical Implications: This study contributes to the discipline of nursing science by building evidence for best practice guidelines in the delivery of decision support interventions pre-treatment. The application of these guidelines will increase women's decision satisfaction post-treatment after a diagnosis of early breast cancer. The ultimate goal of evidence-based decision support interventions provided by nurses is to improve women's informed decision-making processes; minimise their psychological distress; and increase their decision satisfaction in selecting and following treatment for early breast cancer.

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(Date)

STATEMENT OF SOURCES

DECLARATION

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution or tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

(Lea Budden)

(Date)

STATEMENT OF OTHER CONTRIBUTIONS

I was privileged to be awarded five consecutive (2000-2004) competitive Merit Research Grants from James Cook University. This funding allowed me to access women in three coastal locations in Queensland. However, I could not have completed this study without the enthusiasm, mentoring, knowledge, wisdom and unwavering support from my supervisors. Firstly, Professor Barbara Ann Hayes the Foundation Professor of Nursing Science at James Cook University, who travelled with me up and down the Queensland coast to discuss and gain support for the project from doctors and nurses. Her unwavering support and professionalism provided me with many opportunities and opened doors for data collection in the study.

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Penny Fay Pierce my supervisor in decision science at University of Michigan, USA. Penny generously invited me to build on her work and develop new knowledge. Her beneficial knowledge and encouragement to my study are deeply appreciated. The time I spent with her at the University of Michigan was endlessly, inspiring and special.

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This journey as a part-time doctoral student has had many challenges, with twists and turns along the way. However, I have been fortunate to be surrounded by very talented people. My sincere thanks to Janese, Rosemary and Margo for their meticulous editorial comments and to Tara for her amazing computer processing skills (throughout the whole journey).

TABLE OF CONTENTS

CHAPTER 1- OVERVIEW OF STUDY	1
INTRODUCTION	1
BACKGROUND	1
RESEARCH PROBLEM.....	4
HYPOTHESES AND QUESTIONS.....	6
<i>Hypotheses</i>	6
<i>Research questions</i>	6
SIGNIFICANCE OF RESEARCH STUDY	7
CONCEPTUAL MODEL.....	9
<i>Decision Styles</i>	9
Deferrer	11
Delayer	11
Deliberator	12
MICHIGAN ASSESSMENT OF DECISION STYLES (<i>MADS</i>)	12
ETHICAL CONSIDERATIONS.....	13
METHODOLOGY	13
STATISTICAL DATA ANALYSIS	14
CHAPTER 2- LITERATURE REVIEW.....	21
INTRODUCTION	21
SCOPE AND LIMITATIONS OF REVIEW.....	21
INCIDENCE OF BREAST CANCER IN AUSTRALIA	21
OVERVIEW OF EARLY BREAST CANCER TREATMENT.....	23
PSYCHOLOGICAL IMPACT OF BREAST CANCER.....	28
THEORETICAL APPROACHES TO DECISION SCIENCE	40
<i>Historical Background</i>	40
<i>Normative Decision-making</i>	43
<i>Prescriptive Decision-making</i>	44
<i>Descriptive Decision-making</i>	46
<i>Naturalistic Decision-making</i>	50
BREAST CANCER TREATMENT DECISION-MAKING	53
TREATMENT DECISION SATISFACTION	71
CHAPTER 3-METHODS	84
OVERVIEW OF STUDY	84
PARTICIPANTS	85
<i>Setting</i>	85
Health Region A.....	85

Health Region B.....	86
Health Region C.....	86
SAMPLING AND RECRUITMENT.....	86
<i>Selection Criteria of Study</i>	88
Inclusion Criteria.....	89
Exclusion Criteria.....	89
ETHICAL CONSIDERATIONS.....	90
<i>Autonomy and Non-Maleficence</i>	90
<i>Confidentiality and Anonymity</i>	91
<i>Data Protection and Storage</i>	92
INSTRUMENTS -BASELINE DATA COLLECTION.....	92
<i>Independent Variable: Decision Styles Instrument At Baseline (MADS)</i>	94
MADS Instrument Original Development.....	94
<i>Psychological Distress at Baseline Data Collection (BSI-18)</i>	97
<i>Decision Treatment Process</i>	99
INSTRUMENTS-FOLLOW-UP DATA COLLECTION AT THREE TO FOUR MONTHS.....	100
<i>Dependent Variable: Decision Satisfaction At Three to Four Months (PTDS)</i>	102
<i>Psychological Distress At Three to Four Months (BSI-18)</i>	103
<i>Support Satisfaction</i>	103
DATA COLLECTION PROCEDURE.....	104
<i>Public Health System</i>	105
<i>Private Health System</i>	105
STATISTICAL ANALYSIS.....	107
HYPOTHESIS TESTING.....	108
BASELINE DATA COLLECTION STATISTICAL ANALYSES.....	113
<i>Socio-Demographic Statistical Analyses</i>	113
<i>Decision Styles (MADS) Statistical Analyses</i>	115
<i>Dependent Variable- Decision Satisfaction (PTDS) Statistical Analyses</i>	118
<i>Psychological Distress (BSI-18) Statistical Analyses</i>	120
<i>Decision Treatment Process</i>	123
FOLLOW-UP DATA COLLECTION.....	125
<i>Dependent Variable- Patient Treatment Decision Satisfaction (PTDS)</i>	125
<i>Support Satisfaction</i>	129
HYPOTHESES TESTING.....	129
CHAPTER 4- RESULTS	131
INTRODUCTION.....	131
DESCRIPTION OF SAMPLE.....	131
BASELINE DATA COLLECTION.....	135
<i>Psychological Distress Levels (BSI-18)</i>	135

<i>Decision Treatment Process</i>	167
<i>Michigan Assessment of Decision Styles (MADS)</i>	183
<i>Qualitative Dimensions at Baseline</i>	198
FOLLOW-UP AT THREE TO FOUR MONTHS.....	201
<i>Psychological Distress at Three to Four Months (BSI-18)</i>	204
<i>Qualitative Dimensions</i>	233
<i>Decision Satisfaction (PTDS)</i>	236
COMPARISON ACROSS PRE- AND POST- TREATMENT.....	259
<i>Michigan Assessment of Decision Styles</i>	259
<i>Decision Satisfaction</i>	262
HYPOTHESES TESTING.....	264
CHAPTER 5-DISCUSSION	276
INTRODUCTION.....	276
MICHIGAN ASSESSMENT OF DECISION STYLES (MADS)	277
<i>MADS Factors</i>	280
Avoidance	280
Deferring Responsibility	283
Information Seeking	287
Deliberation.....	292
DECISION SATISFACTION	294
LIMITATIONS	297
CLINICAL IMPLICATIONS	300
FUTURE RESEARCH	303
CONTRIBUTION TO THE DISCIPLINE OF NURSING	303
CONCLUSIONS	305
REFERENCES.....	308
APPENDICES	308

LIST OF TABLES

Table 1 Summary of empirical indicators of three decision styles	10
Table 2 Definitions of key terms.	16
Table 3 Studies using the BSI-53	38
Table 4 Studies using the Control Preference Scale	59
Table 5 Studies measuring breast cancer satisfaction.	73
Table 6 Reliability internal consistency coefficients for the BSI-18 instrument.....	99
Table 7 Statistical data analysis principles.	111
Table 8 Re-coding of socio-demographic profile variables.....	113
Table 9 MADS items recoded into decision style factors.....	116
Table 10 Patient Treatment Decision Satisfaction items re-coded variables.....	118
Table 11 BSI-18 dimension items re-coded variables.....	122
Table 12 Decision Treatment Process items re-coded variables.	124
Table 13 Patient Treatment Decision Satisfaction Items Re-coded.....	126
Table 14 Women’s highest level (%) of completed education and employment status at baseline	133
Table 15 Women’s occupation and total annual household income (%) at baseline	134
Table 16 Women’s reported (%) previous history or contact with cancer at baseline.....	135
Table 17 Women’s responses (%) to the baseline BSI-18 items at baseline	136
Table 18 Positive cases and descriptive analyses of women on the BSI-18 at baseline	140
Table 19 BSI-18 Somatization median standardised scores and positive cases of women correlated with their socio-demographic characteristics at baseline	141
Table 20.... BSI-18 Depression median standardised scores and positive cases of women correlated with their socio-demographic characteristics at baseline	148
Table 21. BSI-18 Anxiety median standardised scores and positive cases of women correlated with their socio-demographic characteristics at baseline	155
Table 22 BSI-18 Global Severity Index (GSI) median standardised scores and positive cases of women correlated with their socio-demographic characteristics	162
Table 23 Women’s responses (%) to the Decision Treatment Process statements regarding factors considered important when making the treatment decision.....	168
Table 24 Median of standardised scores of Decision Treatment Process dimensions relating to the patient-doctor relationship, the quality and quantity of information received, the control about treatment options, and the support mechanisms correlated with socio-demographic characteristics of the participating women.....	175
Table 25 Women’s agreement (%) to Michigan Assessment of Decision Styles (MADS) factor items	184
Table 26 Percentage of women who agreed or strongly agreed with all the items in each MADS factors	188
Table 27 Michigan Assessment of Decision Styles (MADS) median values and interquartile ranges stratified by the women’s socio-demographic characteristics at baseline	190

Table 28.....Spearman rank correlation coefficients and p-values for correlations between women’s psychological distress levels as measured with BSI-18 and women’s decision styles as assessed by MADS scores at baseline	198
Table 29 Women’s responses to the question “What nurses should know to help women make decisions	199
Table 30 Women’s responses to the questions “What advice do you have for other women who are facing this decision?”	200
Table 31.....Type of treatment received (%) by women at 3 to 4 months (n = 103).	202
Table 32 Percentage of treatment across each Health Region at 3 to 4 months (n = 104).....	203
Table 33 Women’s levels of psychological distress (%) as measured by BSI-18 scores (%) at 3 to 4 months after initial surgery	205
Table 34 Positive cases of women on the BSI-18 scores at follow-up 3 to 4 months after initial surgery	208
Table 35 Relationships between women’s BSI-18 Somatization scores at 3 to 4 months after initial surgery and their socio-demographic characteristics.....	210
Table 36.....	
Relationships between women’s BSI-18 Depression scores at 3 to 4 months after initial surgery and their socio-demographic characteristics	216
Table 37 Relationships between women’s BSI-18 Anxiety scores at 3 to 4 months after initial surgery and their socio-demographic characteristics	222
Table 38 Relationships between women’s BSI-18 Global Severity Index (GSI) scores at 3 to 4 months after initial surgery and their socio-demographic characteristics	228
Table 39 Women’s responses (%) to the question” What nurses should know to help women make decisions?”	233
Table 40 Women’s responses (%) to “What advice do you have for other women who are facing this decision?”	235
Table 41 Women’s agreement (%) with Patient Treatment Decision Satisfaction (PTDS) items 3 to 4 months after initial surgery	237
Table 42 Percentage of women who agreed or strongly agreed with all the items of decision satisfaction (PTDS) dimensions at 3-4 months	241
Table 43 Descriptive statistics of women’s Patient Treatment Decision Satisfaction (PTDS) scores at 3 to 4 months after initial surgery	242
Table 44 Relationships between women’s decision satisfaction (PTDS) scores at 3 to 4 months after initial surgery and their breast cancer treatment.....	243
Table 45 Median values and interquartile ranges of Patient Treatment Decision Satisfaction (PTDS) (process, outcome, and global satisfaction) scores and relationships with women’s socio-demographic characteristics at 3 to 4 months	246

Table 46 Relationships between women’s psychological distress levels as assessed with BSI-18 and their satisfaction as assessed with the Patient Treatment Decision Satisfaction (PTDS) score 3 to 4 months after initial surgery	254
Table 47 Women’s reported satisfaction (%) with the types of support they received (%) 3 to 4 months after the initial surgery	255
Table 48 Correlations between women’s perceived satisfaction with the support they received and their Patient Treatment Decision Perceived satisfaction (PTDS) score assessed 3 to 4 months after initial surgery	258
Table 49.....	260
Correlations between women’s decision styles (MADS) scores (as assessed at baseline) and their standardized psychological distress scores (BSI–18) assessed at 3 to 4 months after initial surgery.	260
Table 50.....	261
Correlations between perceived satisfaction with types of support received assessed at 3 to 4 months after initial surgery and decision styles (MADS) scores as assessed at baseline	261
Table 51 Percentage of women identified as positive cases for BSI at baseline and 3-4 months.	262
Table 52 Women’s BSI-18 scores at baseline with PTDS at 3 to 4 months after initial treatment. Spearman rank correlation coefficients of standardized BSI scores at baseline with decision satisfaction scores at 3 to 4 months.....	264
Table 53.....	266
Correlations between women’s decisions styles (MADS) at baseline and their decision satisfaction (PTDS) scores at 3 to 4 months after initial surgery	266
Table 54 Model 1: Deferring Responsibility (MADS) and women’s Decision Outcome Satisfaction (PTDS). Result of multiple linear regression analysis at 3 to 4 months.....	268
Table 55 Model 2: Deferring Responsibility (MADS) and women’s Global Decision Satisfaction (PTDS). Result of multiple linear regression analysis at 3 to 4 months.....	269
Table 56.....	270
Model 3: Avoidance (MADS) and women’s Global Decision Satisfaction (PTDS). Result of multiple linear regression analysis at 3 to months.....	270
Table 57 Model 4: Information Seeking (MADS) and women’s Decision Process Satisfaction (PTDS). Result of multiple linear regression analysis at 3 to 4 months.	271
Table 58.....	272
Model 5: Deliberation (MADS) and women’s Decision Outcome Satisfaction (PTDS). Result of multiple linear regression analysis at 3 to 4 months	272
Table 59 Model 6: Avoidance (MADS) and women’s Decision Outcome Satisfaction (PTDS). Result of multiple linear regression analysis at 3 to 4 months	274

LIST OF FIGURES

Figure 1 Diagram of data collection sites	88
Figure 2 Instruments contained in the baseline data collection.	93
Figure 3 Instruments contained in the follow-up data collection questionnaire at three to four months.	101
Figure 4 Outline of the data collection times.....	105
Figure 5 Overview of study	107
Figure 6 Histogram (%) of age of participants (years)	132